



CITY COMMISSION - CITY OF WILDWOOD

Mayor/Commissioner – Ed Wolf – Seat 1

Mayor Pro Tem/Commissioner – Pamala Harrison-Bivins – Seat 2

Joe Elliott – Seat 3

Marcos Flores – Seat 4

Julian Green – Seat 5

Jason McHugh – City Manager

Agenda

Regular Meeting

October 10, 2022 9:00 AM

City Hall Commission Chamber

100 N Main Street

Persons with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk's Department, ADA Coordinator, at 352-330-1330, Ext. 102, forty-eight (48) hours in advance of the meeting.

F.S.S. 286.0105A - If a person decides to appeal any decision made by the Commission with respect to any matter considered at this meeting, they will need a record of the proceedings, and that for such purpose they may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. The City of Wildwood DOES NOT provide this verbatim record.

1. Call to Order

2. Consent Agenda/Informational Items

(A consent agenda may be presented by the Mayor at the beginning of a meeting. Items may be removed from the consent agenda on the request of any one Commissioner. Items not removed may be adopted by general consent without debate. Removed items may be either taken up immediately after the consent agenda or placed later on the agenda at the discretion of the Commission.)

A. *EXPENDITURE REPORT*

B. *SP 2207-006 VOSO PHASE 12 D, E, & F MASTER PLAN*

C. *BUDGETED FINANCIAL ITEMS*

1. *ROOF REPLACEMENT FOR THE FOURTH STREET OUTREACH CENTER IN THE AMOUNT OF \$14,300*
2. *PUBLIC WORKS POLE BARN IN THE AMOUNT OF \$117,400*
3. *PURCHASE OF ONE (1) 2023 FORD F150 FOR THE PUBLIC WORKS DEPARTMENT*
4. *PURCHASE OF ONE (1) 2022 FORD F550 DUMP TRUCK FOR THE PUBLIC WORKS DEPARTMENT*
5. *PURCHASE OF ONE (1) 2023 FORD F150 FOR THE WATER DEPARTMENT*
6. *PURCHASE OF ONE (1) 2022 FORD EXPLORER FOR THE POLICE DEPARTMENT*
7. *PURCHASE OF ONE (1) 2023 UNMARKED FORD EXPLORER INTERCEPTOR FOR THE POLICE DEPARTMENT*
8. *PURCHASE OF EIGHT (8) 2023 FORD EXPLORERS FOR THE POLICE DEPARTMENT*
9. *PURCHASE OF ONE (1) 2023 FORD EXPLORER K9 UNIT FOR THE POLICE DEPARTMENT*
10. *PURCHASE OF ONE (1) FORKLIFT FOR THE FLEET SERVICES DEPARTMENT*

3. **Presentations and/or Proclamations**

- A. *PROCLAIM OCTOBER 15, 2022 AS WHITE CANE SAFETY DAY*
- B. *QUARTERLY TEAM IMPACT AWARD FOR OFFICER GARTH LAYNE*

4. **Public Hearings - Timed**

- A. ***ORDINANCE NO. O2022-88 - AN ORDINANCE OF THE CITY OF WILDWOOD, FLORIDA, ESTABLISHING AND NAMING VILLAGE COMMUNITY DEVELOPMENT DISTRICT NO. 15 IN ACCORDANCE WITH CHAPTER 190 OF THE FLORIDA STATUTES; DESCRIBING THE EXTERNAL BOUNDARIES OF THE DISTRICT; GRANTING SPECIAL POWERS; NAMING THE INITIAL MEMBERS OF THE DISTRICT'S BOARD OF SUPERVISORS; PROVIDING FOR CONFLICT; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.***

CDD 2208-001 Village CDD No. 15

The applicant is seeking approval from the City Commission to establish a Community Development District (CDD) for a portion of The Villages of Southern Oaks, to be referred to as the Village Community Development

District No. 15.

Staff recommends approval.

5. Public Forum - 4 minute time limit

6. Ordinances First Reading Only (No Vote)

- A. ***ORDINANCE NO. O2022-82 - AN ORDINANCE OF THE CITY OF WILDWOOD, FLORIDA, PROPOSING A SMALL SCALE FUTURE LAND USE MAP AMENDMENT TO THE ADOPTED COMPREHENSIVE PLAN AND FUTURE LAND USE MAP IN ACCORDANCE WITH THE COMMUNITY PLANNING ACT OF 2011, AS AMENDED; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLICT; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.***

CP 2207-001 Tillman Villas

PARCEL C36-005

The applicant is seeking approval from the City Commission for a Small Scale Comprehensive Plan Amendment to change the Future Land Use Map designation from Agriculture (Sumter County) to Medium Density Residential (City) for the parcels listed above on 20 acres MOL. This request is accompanied by rezoning request RZ 2207-001.

Special Magistrate recommends approval.

- B. ***ORDINANCE NO. O2022-83 - AN ORDINANCE OF THE CITY OF WILDWOOD, FLORIDA; PROPOSING A ZONING MAP AMENDMENT TO THE OFFICIAL ZONING MAP IN ACCORDANCE WITH SECTIONS 3.2 AND 3.3 OF THE LAND DEVELOPMENT REGULATIONS; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLICT; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.***

RZ 2207-001 Tillman Villas

PARCEL C36-005

The applicant is seeking approval from the City Commission to change the zoning A10C (Sumter County) to R-3 (City) for the parcels listed above on 20 acres MOL. This request is accompanied by a concurrent Small Scale Comprehensive Plan amendment CP 2207-001.

Special Magistrate recommends approval and favorable recommendation of Ordinance Number O2022-83 subject to approval of O2022-82, which establishes a Future Land Use appropriate to the proposed zoning.

- C. ***ORDINANCE NO. O2022-84 - AN ORDINANCE OF THE CITY OF WILDWOOD, FLORIDA, PROPOSING A SMALL SCALE FUTURE LAND USE MAP AMENDMENT TO THE ADOPTED COMPREHENSIVE PLAN AND FUTURE LAND USE MAP IN ACCORDANCE WITH THE COMMUNITY PLANNING ACT OF 2011, AS AMENDED; PROVIDING FOR CODIFICATION;***

PROVIDING FOR CONFLICT; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

CP 2208-001 Commander's Pointe

PARCEL C13-109

The applicant seeks approval from the City Commission for a Small Scale Comprehensive Plan Amendment to change the Future Land Use Map designation from Low Density Residential & Neighborhood Commercial (City) to High Density Residential and Commercial (City) for the parcels listed above on 47.47 acres MOL. This request is accompanied by rezoning request RZ 2208-001.

Special Magistrate recommends approval.

- D. ***ORDINANCE NO. O2022-85 - AN ORDINANCE OF THE CITY OF WILDWOOD, FLORIDA; PROPOSING A ZONING MAP AMENDMENT TO THE OFFICIAL ZONING MAP IN ACCORDANCE WITH SECTIONS 3.2 AND 3.3 OF THE LAND DEVELOPMENT REGULATIONS; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLICT; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.***

RZ 2208-001 Commander's Pointe

PARCEL C13-109

The applicant seeks approval from the City Commission for a Zoning Map Amendment to change the zoning C-2A (City) to R-5 & C-3 (City) for the parcels listed above on 47.47 acres MOL. This request is accompanied by a concurrent Small Scale Comprehensive Plan amendment CP 2208-001.

Special Magistrate recommends approval, subject to approval of O2022-84, which establishes a Future Land Use appropriate to the proposed zoning.

- E. ***ORDINANCE NO. O2022-89 - AN ORDINANCE OF THE CITY OF WILDWOOD, FLORIDA, PROVIDING FOR THE VOLUNTARY ANNEXATION OF CERTAIN REAL PROPERTY CONSISTING OF APPROXIMATELY .99 ACRES LOCATED ALONG CR 509 AND WARM SPRINGS AVE, APPROXIMATELY 1 MILE EAST OF THE INTERSECTION OF WARM SPRINGS AVE AND N US 301, IN SECTION 32, TOWNSHIP 19 SOUTH, RANGE 23 EAST; WHICH IS CONTIGUOUS TO THE CITY LIMITS OF THE CITY OF WILDWOOD AND LOCATED IN THE CITY'S JOINT PLANNING AREA; PROVIDING THAT SECTION 1-14 OF THE CITY OF WILDWOOD CODE OF ORDINANCES IS AMENDED TO INCLUDE THE ANNEXED PROPERTY; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLICT; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.***

AN 2209-003 VPSD #46

Parcels G32-008 & G32-027

The owner/applicant, Village Center Community Development District, seeks approval from the Commission for a voluntary annexation application for the parcel listed above on .99 acres MOL.

Staff recommends approval.

7. Resolutions for Approval

A. *RESOLUTION NO. R2022-28 -*

Wastewater Treatment Plant Conceptual Design Report

Staff recommends approval.

8. Financial & Contracts & Agreements

- A. *CPH SCOPE OF SERVICES FOR THE WWTP EXPANSION IN THE AMOUNT OF \$2,259,354*
- B. *PURCHASE OF 50 MANHOLE RINGS AND COVERS FOR \$24,571.00*
- C. *PAY APP NO. 3 FOR FLORIDA METAL BUILDING SERVICES, LLC IN THE AMOUNT OF \$20,306.00*
- D. *WILDWOOD COUNTRY RESORT LIFT STATION #8 RELOCATION PAY APPLICATIONS #3 AND #4 FOR THE TOTAL AMOUNT OF \$37,418.63*
- E. *PURCHASE OF TEN (10) SANITARY SEWER AIR RELEASE VALVES WITH ENCLOSURES FOR \$15,549.00*
- F. *HOLIDAY LIGHTING CONTRACT IN THE AMOUNT OF \$47,070.00*
- G. *CITY HALL SPEAKER INSTALLATION IN THE AMOUNT OF \$29,622.69*

9. General Items for Consideration/Discussion and Other Business

- A. *ROAD CLOSURE REQUEST FOR SAN PEDRO MALDONADO MISSION EVENT*
- B. *PROPERTY ACQUISITION FOR OAK GROVE VILLAGE DRAINAGE IMPROVEMENTS*

10. Appointments

11. City Manager Reports

- A. *LOCAL CONSTRUCTION PROJECTS UPDATE*

12. Other Department Reports

13. Commission Members Reports

14. City Attorney Reports

15. Adjournment

Upcoming Events

October 14, 2022 - Kid's Night Out at Wildwood Community Center from 6pm to 10pm

October 14, 2022 - Wild Nights in Wildwood at City Hall from 6pm to 10pm

October 15, 2022 - Homecoming at the Baker House from 10am to 2pm

October 24, 2022 - City Commission Meeting at 7pm

October 10, 2022 9:00 AM

CITY OF WILDWOOD
YEAR TO DATE REVENUE-EXPENDITURE REPORT
COMMISSION MEETING OCTOBER 10 2022

Revenue Account Range: First	to Last	Include Non-Anticipated: No	Year To Date As Of: 09/30/22
Expend Account Range: First	to Last	Include Non-Budget: No	Current Period: 09/01/22 to 09/30/22
Print Zero YTD Activity: No			Prior Year As Of: 09/30/22

Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
001-311-1000	AD VALOREM TAXES	7,251,790.86	9,303,110.00	1,836.73	9,433,626.77	130,516.77	101
001-312-1000	9TH CENT FUEL TAX/SUMTER COUNTY	91,008.68	92,000.00	0.00	0.00	92,000.00-	0
001-312-4100	LOCAL OPTION GAS TAX	420,337.90	400,070.00	48,255.00	521,726.98	121,656.98	130
001-312-6000	DISCRETIONARY/LOCAL GOVT. INFRA	1,918,021.21	2,176,080.00	179,379.27	2,772,790.28	596,710.28	127
001-313-1000	FRANCHISE TAX-/PROGRESS ENERGY SVCS	711,121.62	660,000.00	74,573.62	820,174.41	160,174.41	124
001-313-1010	FRANCHISE TAX- SECO	888,028.09	830,000.00	129,061.87	985,096.41	155,096.41	119
001-313-4080	LEESBURG ELECTRIC FRANCHISE FEE	12,924.75	100.00	6,470.87	39,504.63	39,404.63	***
001-313-4160	FRANCHISE TAX- TECO/PEOPLES GAS	198,870.77	200,000.00	18,825.70	208,753.61	8,753.61	104
001-313-4170	FENNEY WATER CONS AUTHORITY-UTILITY TAX	48,111.23	45,000.00	5,122.03	48,568.46	3,568.46	108
001-313-4180	LEESBURG GAS FRANCHISE FEE	4,301.95	5,000.00	4,123.07	42,579.14	37,579.14	852
001-313-4190	SOUTH SUMTER UTILITY COMPANY FRANCHISE	234,142.76	200,000.00	0.00	233,478.40	33,478.40	117
001-313-5000	FRANCHISE TAX- WASTE MGMNT-REFUSE SVCS	167,799.59	145,000.00	29,740.54	188,118.87	43,118.87	130
001-313-5001	TRI-COUNTY SANITATION FRANCHISE FEE	152,597.66	135,000.00	22,580.71	216,817.32	81,817.32	161
001-313-5003	FRANCHISE FEE - SEWWC	150,878.88	100,000.00	25,214.17	207,750.44	107,750.44	208
001-314-1000	UTILITY TAX-PROGRESS ENERGY SVCS.	677,540.13	640,000.00	82,519.42	709,042.04	69,042.04	111
001-314-1010	UTILITY TAX-SUMTER ELECTRIC	900,563.55	870,000.00	121,473.61	932,060.10	62,060.10	107
001-314-3000	UTILITY TAX-WATER SALES	98,319.78	80,000.00	19,893.46	116,647.62	36,647.62	146
001-314-3002	THE VILLAGES-5% WATER UTILITY TAX	245,035.27	240,000.00	4,348.86	209,019.94	30,980.06-	87
001-314-3003	CENTRAL SUMTER UTILIITY CO. LLC	119,798.82	110,000.00	8,105.19-	74,066.87	35,933.13-	67
001-314-4000	UTILITY TAX-SUBURBAN PROPANE	11,768.36	10,000.00	927.55	13,795.71	3,795.71	138
001-314-4030	FERRELLGAS LP	1,116.96	500.00	92.00	1,603.55	1,103.55	321
001-314-4040	CIRCLE K STORES	248.41	500.00	14.50	210.93	289.07-	42
001-314-4080	LEESBURG ELECTRIC UTILITY TAX	16,755.60	100.00	5,434.83	30,350.78	30,250.78	***
001-314-4081	LEESBURG GAS UTILITY TAX	7,066.42	5,500.00	6,207.51	62,769.16	57,269.16	***
001-314-4100	INTERCONN RESOURCES LLC	21,662.59	18,000.00	1,993.28	25,821.93	7,821.93	143
001-314-4120	INFINITE ENERGY	77.21	100.00	0.00	0.00	100.00-	0
001-314-4150	CVS	308.80	500.00	25.50	389.42	110.58-	78
001-314-4151	AMERIGAS PROPANE	7,386.01	6,500.00	754.81	9,120.14	2,620.14	140
001-314-4152	LOWE'S PROPANE TAX	1,549.17	1,000.00	109.79	2,123.63	1,123.63	212
001-314-4160	TECO-PEOPLES GAS	202,743.10	200,000.00	24,221.52	237,853.89	37,853.89	119
001-314-4162	GAS SOUTH UTILITY TAX	364.80	100.00	17.12	335.05	235.05	335
001-314-4190	SOUTH SUMTER UTILITY CO UTILITY TAX	93,300.87	85,000.00	0.00	94,896.01	9,896.01	112
001-314-4191	PUBLIX UTILITY TAX	700.71	500.00	41.19	932.43	432.43	186
001-314-9010	STATE COMMUNICATIONS TAX	333,625.17	380,000.00	42,047.15	499,413.36	119,413.36	131

CITY OF WILDWOOD
YEAR TO DATE REVENUE-EXPENDITURE REPORT
COMMISSION MEETING OCTOBER 10 2022

Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
001-331-5000	FEMA GRANT	8,214.76	0.00	0.00	0.00	0.00	0
001-335-1200	STATE REVENUE SHARING	374,020.55	463,550.00	53,133.33	628,683.58	165,133.58	136
001-335-1400	MOBILE HOME LICENSES	14,062.46	10,000.00	202.25	16,437.90	6,437.90	164
001-335-1600	STATE BEVERAGE LICENSES	7,731.41	8,500.00	0.00	7,462.21	1,037.79-	88
001-335-1800	1/2 CENT SALES TAX	980,006.53	1,078,400.00	115,263.29	1,332,172.60	253,772.60	124
001-339-1000	SOUTH SUMTER UTILITY PILOT FEES	69,905.70	60,000.00	0.00	5,582.80	54,417.20-	9
001-341-2006	COMMUNITY DEVELOPMENT SERVICES	585,795.57	500,000.00	62,100.95	836,876.41	336,876.41	167
001-341-2010	TREE MITIGATION PERMITS	0.00	0.00	25,584.00	25,584.00	25,584.00	0
001-347-5300	BUILDING RENTAL-WILDWOOD COMMUNITY CENTE	44,354.42	50,000.00	8,122.68	75,282.78	25,282.78	151
001-347-5304	COMMUNITY CENTER STAFF FEES	4,320.15	4,500.00	0.00	150.00-	4,650.00-	3-
001-347-5305	BUILDING RENTAL-OXFORD COMMUNITY CENTER	0.00	0.00	451.86	7,747.58	7,747.58	0
001-347-5306	BUILDING RENTAL-MLK JR COMMUNITY CENTER	917.69	1,500.00	1.20-	1,693.87	193.87	113
001-347-5307	OUTDOOR BUILDING RENTALS	18.44	0.00	27.66	46.10	46.10	0
001-347-5308	OPEN SPACE RENTALS	1,069.80	1,500.00	0.00	354.97	1,145.03-	24
001-350-1000	FINES	22,217.58	20,000.00	3,294.25	27,251.97	7,251.97	136
001-351-1002	CODE ENFORCEMENT	12,937.94	3,000.00	500.00	1,825.29	1,174.71-	61
001-351-3000	POLICE-2ND DOLLAR FUND	2,229.14	1,500.00	279.69	2,900.28	1,400.28	193
001-361-0000	INTEREST EARNINGS	2,816.49	5,000.00	18,215.68	63,857.43	58,857.43	***
001-369-0000	OTHER MISCELLANEOUS REVENUE	21,262.55	10,000.00	122.76	6,328.18	3,671.82-	63
001-369-0010	STATE HIGHWAY LIGHTING AGREEMENT	16,745.58	17,250.00	0.00	17,247.78	2.22-	100
001-369-0012	FDOT HIGHWAY MAINTENANCE AGREEMENT	13,441.00	13,440.00	4,202.25	15,500.08	2,060.08	115
001-369-0050	AUCTION PROCEEDS	21,089.88	10,000.00	0.00	9,972.00	28.00-	100
001-369-0052	SPONSORSHIPS	300.00	1,000.00	0.00	1,265.00	265.00	126
001-369-0058	DONATIONS	0.00	0.00	0.00	17,515.70	17,515.70	0
001-369-0075	MULTI-PURPOSE FIELD RENTAL	0.00	100.00	0.00	0.00	100.00-	0
001-369-0076	BASEBALL FIELD RENTAL	843.76	1,000.00	76.97-	3,329.84	2,329.84	333
001-369-0078	FIELD PREPARATION FEES	20.00	100.00	0.00	345.00	245.00	345
001-369-0792	PROGRAM REGISTRATION FEES	22,863.35	15,000.00	310.00	29,002.57	14,002.57	193
001-369-0794	CONCESSION / VENDOR FEES	0.00	100.00	0.00	100.00	0.00	100
001-369-0796	SPECIAL EVENT REGISTRATION FEES	3,050.00	1,500.00	50.00-	1,330.00	170.00-	89
001-369-2100	POLICE DEPT MISCELLANEOUS REVENUE	2,802.14	1,500.00	155.00	4,809.00	3,309.00	321
001-369-3700	MISCELLANEOUS POLICE DONATIONS	2.00	100.00	0.00	0.00	100.00-	0
001-369-3748	MISC. GRANTS/VESTS	2,734.48	0.00	0.00	2,325.00	2,325.00	0
001-369-4000	FUEL TAX REFUND	14,462.22	6,500.00	0.00	7,631.68	1,131.68	117
001-380-1000	OTHR FINANCING SOURCE-INSURANCE PROCEEDS	0.00	0.00	0.00	67,736.50	67,736.50	0
001-380-1001	OTHER FINANCING SOURCE-COUNTY REIMBURSE	0.00	0.00	0.00	90,804.00	90,804.00	0
001-382-1010	TRANSFER FROM INDUSTRIAL PARK	10,000.00	10,000.00	0.00	10,000.00	0.00	100

CITY OF WILDWOOD
YEAR TO DATE REVENUE-EXPENDITURE REPORT
COMMISSION MEETING OCTOBER 10 2022

Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
001-382-1013	TRANSFER FROM LAW ENFORCEMENT IMP FEES	532,080.00	412,800.00	0.00	412,800.00	0.00	100
001-389-5000	NON-OPERATIONAL CASH FORWARD-GEN FUND	0.00	10,869,600.00	0.00	0.00	10,869,600.00-	0
001 GENERAL FUND Revenue Total		17,782,183.27	30,517,100.00	1,139,037.97	22,471,090.38	8,046,009.62-	74
Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
001-511-00-0000	LEGISLATIVE- CITY COMMISSION:	0.00	0.00	0.00	0.00	0.00	0
001-511-10-1200	SALARIES	42,528.84	42,660.00	3,544.07	42,528.84	131.16	100
001-511-10-2100	FICA EXPENSE	3,253.32	3,270.00	271.11	3,253.32	16.68	99
001-511-10-2200	RETIREMENT	21,153.96	21,940.00	2,020.11	22,461.75	521.75-	102
001-511-10-2300	LIFE & HEALTH INSURANCE	375.00	350.00	23.75	285.00	65.00	81
001-511-10-2600	WORKERS COMPENSATION INSURANCE	123.90	150.00	0.00	133.96	16.04	89
001-511-30-3100	PROFESSIONAL SERVICES	2,000.00	6,000.00	0.00	1,240.00	4,760.00	21
001-511-30-4000	TRAVEL & PER DIEM	2,993.84	7,000.00	4,721.50	6,124.02	875.98	87
001-511-30-4100	TELEPHONE EXPENSE	1,104.86	1,600.00	90.70	1,105.38	494.62	69
001-511-30-4110	IT LICENSING / EQUIPMENT	3,859.04	5,200.00	32.13	4,807.20	392.80	92
001-511-30-4600	REPAIR & MAINTENANCE	849.99	500.00	0.00	0.00	500.00	0
001-511-30-4900	MISC. EXPENSE & OTHER CURRENT	41.28	2,500.00	32.63	66.37	2,433.63	3
001-511-30-5100	OFFICE SUPPLIES	0.00	150.00	0.00	39.00	111.00	26
001-511-30-5200	OPERATING SUPPLIES	67.00	400.00	0.00	98.66	301.34	25
001-511-30-5400	SUBSCRIPTIONS/DUES	1,796.25	2,500.00	15.00	2,680.00	180.00-	107
001-511-30-5500	TRAINING	2,590.00	2,500.00	0.00	1,650.00	850.00	66
001-511-60-6200	CAP. IMPROVEMENT-BUILDINGS	6,329.88	0.00	0.00	0.00	0.00	0
001-511-60-6300	CAPITAL IMPROVEMENT-OTHER	0.00	8,000.00	0.00	5,698.00	2,302.00	71
511 LEGISLATIVE- CITY COMMISSION:		89,067.16	104,720.00	10,751.00	92,171.50	12,548.50	88
001-512-00-0000	EXECUTIVE- CITY MANAGER:	0.00	0.00	0.00	0.00	0.00	0
001-512-10-1200	SALARIES	169,832.64	303,430.00	37,613.46	273,116.15	30,313.85	90
001-512-10-1300	OVERTIME	0.00	0.00	69.81	69.81	69.81-	0
001-512-10-1500	SICK LEAVE	519.60	0.00	158.62	6,172.52	6,172.52-	0
001-512-10-1600	VACATION PAY	252.89	0.00	1,486.53	12,418.17	12,418.17-	0
001-512-10-1800	HOLIDAY PAY	6,012.28	0.00	2,094.19	12,853.78	12,853.78-	0
001-512-10-2100	FICA EXPENSE	13,471.37	23,140.00	3,151.61	23,215.10	75.10-	100
001-512-10-2200	RETIREMENT	42,135.16	80,200.00	10,967.55	81,799.65	1,599.65-	102
001-512-10-2210	BENEFIT ADMIN FEES	0.00	0.00	9.00	58.50	58.50-	0
001-512-10-2300	LIFE & HEALTH INSURANCE	14,289.84	23,840.00	2,796.45	24,071.20	231.20-	101

CITY OF WILDWOOD
YEAR TO DATE REVENUE-EXPENDITURE REPORT
COMMISSION MEETING OCTOBER 10 2022

Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
001-512-10-2600	WORKERS COMPENSATION INSURANCE	412.90	500.00	0.00	446.58	53.42	89
001-512-30-3100	PROFESSIONAL SERVICES	130,439.12	102,750.00	0.00	28,740.31	74,009.69	28
001-512-30-3400	OTHER CONTRACTUAL SERVICES	14.41	0.00	0.00	0.00	0.00	0
001-512-30-4000	TRAVEL & PER DIEM	6,818.19	8,750.00	205.79	7,149.43	1,600.57	82
001-512-30-4100	TELEPHONE EXPENSE	3,040.91	3,000.00	340.86	2,451.90	548.10	82
001-512-30-4110	IT LICENSING / EQUIPMENT	1,826.83	4,250.00	12.31	2,823.14	1,426.86	66
001-512-30-4200	POSTAGE/TRANSPORTATION FEES	24.37	200.00	0.00	6.76	193.24	3
001-512-30-4400	RENTAL & LEASING	0.00	100.00	0.00	0.00	100.00	0
001-512-30-4600	REPAIR & MAINTENANCE	885.08	2,000.00	0.00	783.94	1,216.06	39
001-512-30-4900	MISC. EXPENSE & OTHER CURRENT	485.62	500.00	0.00	501.71	1.71-	100
001-512-30-5100	OFFICE SUPPLIES	567.38	1,000.00	0.00	338.18	661.82	34
001-512-30-5200	OPERATING SUPPLIES	118.09	750.00	176.07	593.17	156.83	79
001-512-30-5400	SUBSCRIPTIONS/DUES	3,263.33	4,500.00	30.00	3,846.24	653.76	85
001-512-30-5500	TRAINING	1,547.96	4,250.00	641.58	2,137.51	2,112.49	50
001-512-60-6200	CAP. IMPROVEMENT-BUILDINGS	281,940.76	0.00	0.00	0.00	0.00	0
512 EXECUTIVE- CITY MANAGER:		677,898.73	563,160.00	59,753.83	483,593.75	79,566.25	86
001-513-00-0000	CLERK/FINANCE DEPARTMENT:	0.00	0.00	0.00	0.00	0.00	0
001-513-10-1200	SALARIES	289,774.33	288,080.00	32,074.16	217,658.11	70,421.89	76
001-513-10-1300	OVERTIME	0.00	500.00	24.88	24.88	475.12	5
001-513-10-1500	SICK LEAVE	6,909.29	0.00	1,041.22	6,549.71	6,549.71-	0
001-513-10-1600	VACATION PAY	10,986.74	0.00	773.29	16,092.88	16,092.88-	0
001-513-10-1800	HOLIDAY PAY	12,939.33	0.00	1,485.70	10,401.00	10,401.00-	0
001-513-10-2100	FICA EXPENSE	24,456.54	22,080.00	2,708.04	19,180.82	2,899.18	87
001-513-10-2200	RETIREMENT	36,914.82	31,230.00	4,671.02	32,312.84	1,082.84-	103
001-513-10-2210	BENEFIT ADMIN FEES	0.00	0.00	4.50	54.00	54.00-	0
001-513-10-2300	LIFE & HEALTH INSURANCE	38,992.66	41,910.00	3,172.41	35,524.88	6,385.12	85
001-513-10-2500	UNEMPLOYMENT COMPENSATION	0.00	500.00	0.00	0.00	500.00	0
001-513-10-2600	WORKERS COMPENSATION INSURANCE	825.71	1,000.00	0.00	893.14	106.86	89
001-513-30-3100	PROFESSIONAL SERVICES	28,808.89	16,000.00	50.00	8,021.90	7,978.10	50
001-513-30-3200	ACCOUNTING/AUDITING FEE	18,000.00	18,500.00	0.00	18,500.00	0.00	100
001-513-30-3400	OTHER CONTRACTUAL SERVICES	12,232.19	4,850.00	1,229.97	2,720.05	2,129.95	56
001-513-30-4000	TRAVEL & PER DIEM	54.00	3,000.00	0.00	0.00	3,000.00	0
001-513-30-4100	TELEPHONE EXPENSE	5,629.07	3,000.00	1,326.74-	3,024.53	24.53-	101
001-513-30-4110	IT LICENSING / EQUIPMENT	7,909.66	29,200.00	2,869.56	32,360.99	3,160.99-	111
001-513-30-4150	ADVERTISING/RECORDING EXPENSE	4,086.39	4,000.00	292.52	1,763.85	2,236.15	44

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Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
001-513-30-4200	POSTAGE/TRANSPORTATION FEES	1,976.76	2,500.00	0.00	4,347.60	1,847.60-	174
001-513-30-4300	UTILITIES EXPENSE	21,931.67	26,000.00	0.00	14,928.61	11,071.39	57
001-513-30-4400	RENTAL & LEASING	2,925.51	3,700.00	181.67	2,980.75	719.25	81
001-513-30-4500	GENERAL INSURANCE	106,249.00	146,000.00	0.00	149,199.14	3,199.14-	102
001-513-30-4600	REPAIR & MAINTENANCE	21,259.57	18,400.00	497.50	11,954.69	6,445.31	65
001-513-30-4900	MISC. EXPENSE & OTHER CURRENT	4,847.09	6,000.00	0.00	5,651.03	348.97	94
001-513-30-4910	ELECTION EXPENSES	0.00	500.00	0.00	0.00	500.00	0
001-513-30-5100	OFFICE SUPPLIES	3,424.08	3,500.00	48.99	4,216.10	716.10-	120
001-513-30-5200	OPERATING SUPPLIES	7,771.48	7,050.00	2,086.67	7,054.45	4.45-	100
001-513-30-5400	SUBSCRIPTIONS/DUES	3,502.20	2,075.00	0.00	432.50	1,642.50	21
001-513-30-5500	TRAINING	4,606.20	1,950.00	700.00	1,818.00	132.00	93
001-513-70-7100	DEBT SERVICE/CITY HALL-PRINCIPAL	107,219.92	109,875.00	55,272.67	109,873.75	1.25	100
001-513-70-7200	DEBT SERVICE/CITY HALL-INTEREST	27,207.62	24,555.00	11,941.10	24,553.79	1.21	100
001-513-70-7500	DEBT SERVICE/POLICE STATION-PRINCIPAL	217,830.04	223,555.00	0.00	223,552.49	2.51	100
001-513-70-7550	DEBT SERVICE/POLICE STATION-INTEREST	73,780.66	68,060.00	0.00	68,058.21	1.79	100
001-513-70-7600	DEBT SERV/2018 GEN FUND PROJ LOAN-PRINCP	240,017.36	327,170.00	0.00	327,167.69	2.31	100
001-513-70-7650	DEBT SERV/2018 GEN FUND PROJ LOAN-INTRST	71,395.35	95,420.00	0.00	95,401.31	18.69	100
513 CLERK/FINANCE DEPARTMENT:		1,414,464.13	1,530,160.00	119,799.13	1,456,273.69	73,886.31	95
001-516-00-0000	DEVELOPMENT SERVICES:	0.00	0.00	0.00	0.00	0.00	0
001-516-10-1200	SALARIES	404,143.28	627,160.00	51,904.99	469,376.17	157,783.83	75
001-516-10-1300	OVERTIME	2,590.12	1,000.00	0.00	1,684.41	684.41-	168
001-516-10-1500	SICK LEAVE	9,647.98	0.00	706.97	10,237.69	10,237.69-	0
001-516-10-1600	VACATION PAY	21,677.07	0.00	6,831.18	29,637.20	29,637.20-	0
001-516-10-1800	HOLIDAY PAY	17,529.88	0.00	1,915.29	19,472.89	19,472.89-	0
001-516-10-2100	FICA EXPENSE	35,185.69	48,060.00	4,693.92	40,576.27	7,483.73	84
001-516-10-2200	RETIREMENT	61,699.36	82,230.00	9,312.56	76,419.65	5,810.35	93
001-516-10-2210	BENEFIT ADMIN FEES	0.00	0.00	13.50	211.50	211.50-	0
001-516-10-2300	LIFE & HEALTH INSURANCE	56,696.46	72,390.00	5,704.49	70,524.84	1,865.16	97
001-516-10-2500	UNEMPLOYMENT COMPENSATION	1,925.00	0.00	0.00	0.00	0.00	0
001-516-10-2600	WORKERS COMPENSATION INSURANCE	1,238.61	1,500.00	0.00	1,339.72	160.28	89
001-516-30-3100	PROFESSIONAL SERVICES	191,150.93	465,000.00	7,994.38	405,001.55	59,998.45	87
001-516-30-3115	PASS THROUGH PROFESSIONAL SERVICES	359,964.69	0.00	0.00	0.00	0.00	0
001-516-30-3400	OTHER CONTRACTUAL SERVICES	4,847.82	5,000.00	424.60-	1,221.24	3,778.76	24
001-516-30-3450	CLOTHING AND UNIFORMS	375.98	1,700.00	32.71	628.54	1,071.46	37
001-516-30-4000	TRAVEL & PER DIEM	1,361.34	8,000.00	1,357.30	3,032.44	4,967.56	38

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Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
001-516-30-4100	TELEPHONE EXPENSE	8,636.75	8,000.00	774.46	8,450.54	450.54-	106
001-516-30-4110	IT LICENSING / EQUIPMENT	11,151.27	33,700.00	12.31	15,621.40	18,078.60	46
001-516-30-4150	ADVERTISING/RECORDING EXPENSE	26,040.31	25,000.00	1,639.50	33,198.10	8,198.10-	133
001-516-30-4200	POSTAGE/TRANSPORTATION FEES	637.11	4,000.00	0.00	1,317.67	2,682.33	33
001-516-30-4400	RENTAL & LEASING	2.00	0.00	0.00	0.00	0.00	0
001-516-30-4600	REPAIR & MAINTENANCE	6,303.85	6,000.00	152.76	3,267.89	2,732.11	54
001-516-30-4900	MISC. EXPENSE & OTHER CURRENT	3,103.60	5,000.00	28.87	273.06	4,726.94	5
001-516-30-4950	CODE ENFORCEMENT	10,265.91	18,000.00	592.97	2,598.72	15,401.28	14
001-516-30-5100	OFFICE SUPPLIES	2,213.44	9,000.00	693.71	2,250.71	6,749.29	25
001-516-30-5200	OPERATING SUPPLIES	6,725.70	20,000.00	113.56	15,236.35	4,763.65	76
001-516-30-5250	FUEL EXPENSE	1,258.94	2,000.00	128.43	1,766.21	233.79	88
001-516-30-5400	SUBSCRIPTIONS/DUES	3,452.88	3,180.00	145.00	2,284.95	895.05	72
001-516-30-5500	TRAINING	4,051.46	13,280.00	2,349.00	7,497.85	5,782.15	56
001-516-30-5550	LICENSING	5,400.00	15,000.00	0.00	10,961.10	4,038.90	73
001-516-60-6330	JPA COMP PLAN AMENDMENTS	98,229.35	40,000.00	0.00	15,033.63	24,966.37	38
001-516-60-6400	CAPITAL IMPROV.-MACHINERY/EQUIPMENT	3,570.19	43,000.00	0.00	39,090.00	3,910.00	91
516 DEVELOPMENT SERVICES:		1,361,076.97	1,557,200.00	96,673.26	1,288,212.29	268,987.71	83
001-518-00-0000	INFORMATION TECHNOLOGY DEPARTMENT	0.00	0.00	0.00	0.00	0.00	0
001-518-10-1200	SALARIES	121,913.19	149,600.00	14,710.11	109,722.55	39,877.45	73
001-518-10-1300	OVERTIME	0.00	0.00	0.00	41.47	41.47-	0
001-518-10-1500	SICK LEAVE	600.35	0.00	943.25	6,520.75	6,520.75-	0
001-518-10-1600	VACATION PAY	3,783.18	0.00	69.11	6,969.13	6,969.13-	0
001-518-10-1800	HOLIDAY PAY	4,602.88	0.00	542.15	5,224.00	5,224.00-	0
001-518-10-2100	FICA EXPENSE	9,535.60	11,450.00	1,244.28	9,828.87	1,621.13	86
001-518-10-2200	RETIREMENT	13,384.14	16,190.00	1,937.10	14,332.63	1,857.37	89
001-518-10-2210	BENEFIT ADMIN FEES	0.00	0.00	4.50	54.00	54.00-	0
001-518-10-2300	LIFE & HEALTH INSURANCE	13,541.95	15,240.00	1,189.20	15,172.20	67.80	100
001-518-10-2600	WORKERS COMPENSATION INSURANCE	68.96	200.00	0.00	178.65	21.35	89
001-518-30-3100	PROFESSIONAL SERVICES	27,029.62	145,320.00	0.00	0.00	145,320.00	0
001-518-30-3400	OTHER CONTRACTUAL SERVICES	8,614.46	10,000.00	676.66	848.66	9,151.34	8
001-518-30-4000	TRAVEL & PER DIEM	41.29	7,500.00	0.00	0.00	7,500.00	0
001-518-30-4100	TELEPHONE EXPENSE	5,555.50	5,000.00	443.60	5,519.23	519.23-	110
001-518-30-4110	IT LICENSING / EQUIPMENT	4,151.47	10,500.00	36.92	8,392.77	2,107.23	80
001-518-30-4200	POSTAGE/TRANSPORTATION FEES	134.47	250.00	0.00	8.26	241.74	3
001-518-30-4300	UTILITIES EXPENSE	658.06	2,300.00	2,049.92	5,272.56	2,972.56-	229

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Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
001-518-30-4400	RENTAL & LEASING	0.00	500.00	0.00	0.00	500.00	0
001-518-30-4600	REPAIR & MAINTENANCE	1,636.12	4,000.00	0.00	74.97	3,925.03	2
001-518-30-4900	MISC. EXPENSE & OTHER CURRENT	0.00	8,000.00	0.00	0.00	8,000.00	0
001-518-30-5100	OFFICE SUPPLIES	372.27	900.00	0.00	203.59	696.41	23
001-518-30-5200	OPERATING SUPPLIES	44,803.08	15,000.00	1,559.73	7,769.60	7,230.40	52
001-518-30-5400	SUBSCRIPTIONS/DUES	250.00	2,500.00	0.00	355.00	2,145.00	14
001-518-30-5500	TRAINING	3,058.66	8,000.00	0.00	1,552.98	6,447.02	19
001-518-30-5550	LICENSING	13,976.94	30,000.00	1,000.00	47,110.77	17,110.77-	157
001-518-60-6300	CAPITAL IMPROVEMENT-OTHER	0.00	16,000.00	0.00	11,398.95	4,601.05	71
001-518-60-6400	CAP. IMPROVEMENTS-MACHINERY/EQUIP	56,891.18	0.00	0.00	17,215.00	17,215.00-	0
518 INFORMATION TECHNOLOGY DEPARTMENT		334,603.37	458,450.00	26,406.53	273,766.59	184,683.41	60
001-519-00-0000	HUMAN RESOURCE DEPARTMENT:	0.00	0.00	0.00	0.00	0.00	0
001-519-10-1200	SALARIES	104,650.26	119,720.00	11,579.16	103,762.87	15,957.13	87
001-519-10-1300	OVERTIME	14.35	0.00	0.00	298.61	298.61-	0
001-519-10-1500	SICK LEAVE	1,097.98	0.00	649.04	2,327.18	2,327.18-	0
001-519-10-1600	VACATION PAY	3,466.25	0.00	1,173.19	5,570.61	5,570.61-	0
001-519-10-1800	HOLIDAY PAY	4,694.68	0.00	735.46	4,608.81	4,608.81-	0
001-519-10-2100	FICA EXPENSE	8,714.91	9,160.00	1,081.48	8,917.78	242.22	97
001-519-10-2200	RETIREMENT	11,646.02	12,960.00	1,683.68	12,983.32	23.32-	100
001-519-10-2210	BENEFIT ADMIN FEES	0.00	0.00	4.50	54.00	54.00-	0
001-519-10-2300	LIFE & HEALTH INSURANCE	14,194.44	15,240.00	1,274.28	15,291.36	51.36-	100
001-519-10-2600	WORKERS COMPENSATION INSURANCE	90.82	110.00	0.00	98.26	11.74	89
001-519-30-3100	PROFESSIONAL SERVICES	7,725.00	18,000.00	0.00	816.00	17,184.00	5
001-519-30-3400	OTHER CONTRACTUAL SERVICES	14,541.74	1,240.00	38.00	863.04	376.96	70
001-519-30-4000	TRAVEL & PER DIEM	2,281.69	4,000.00	1,534.62	3,484.89	515.11	87
001-519-30-4100	TELEPHONE EXPENSE	3,520.47	4,000.00	413.20	4,602.71	602.71-	115
001-519-30-4110	IT LICENSING / EQUIPMENT	7,886.57	30,800.00	12.31	19,428.24	11,371.76	63
001-519-30-4150	ADVERTISING/RECRUITING	3,766.20	5,000.00	819.00	4,355.00	645.00	87
001-519-30-4200	POSTAGE/TRANSPORTATION FEES	191.64	500.00	0.00	123.01	376.99	25
001-519-30-4300	UTILITIES EXPENSE	658.04	2,300.00	2,049.91	5,360.99	3,060.99-	233
001-519-30-4400	RENTAL & LEASING	0.00	60.00	0.00	10.40	49.60	17
001-519-30-4600	REPAIR & MAINTENANCE	2,226.91	2,000.00	0.00	2,475.17	475.17-	124
001-519-30-4800	EMPLOYEE PROGRAMS	4,993.77	6,000.00	311.87	6,724.51	724.51-	112
001-519-30-4900	MISC. EXPENSE & OTHER CURRENT	696.00	6,000.00	16.00	519.40	5,480.60	9
001-519-30-5100	OFFICE SUPPLIES	1,704.99	2,000.00	98.63	1,076.85	923.15	54

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001-519-30-5200	OPERATING SUPPLIES	2,561.84	2,500.00	10.04	959.88	1,540.12	38
001-519-30-5250	FUEL EXPENSE	0.00	0.00	41.53	497.73	497.73-	0
001-519-30-5400	SUBSCRIPTIONS/DUES	954.50	1,110.00	0.00	1,023.24	86.76	92
001-519-30-5500	TRAINING	2,910.85	5,000.00	15.99	4,559.99	440.01	91
001-519-30-5501	STAFF TRAINING PROGRAMS	628.82	6,000.00	548.08	1,780.05	4,219.95	30
519 HUMAN RESOURCE DEPARTMENT:		205,818.74	253,700.00	24,089.97	212,573.90	41,126.10	84
001-521-00-0000	POLICE DEPARTMENT:	0.00	0.00	0.00	0.00	0.00	0
001-521-10-1200	SALARIES	1,857,878.92	2,483,070.00	233,537.71	1,952,135.38	530,934.62	79
001-521-10-1220	UNIFORM ALLOWANCE	13,540.00	14,820.00	1,060.00	13,980.00	840.00	94
001-521-10-1250	ON CALL	7,500.00	10,400.00	750.00	7,050.00	3,350.00	68
001-521-10-1260	SHIFT DIFFERENTIAL	14,049.90	20,080.00	1,601.04	14,061.06	6,018.94	70
001-521-10-1300	OVERTIME	84,223.77	157,000.00	14,785.86	117,487.00	39,513.00	75
001-521-10-1500	SICK LEAVE	40,984.56	0.00	5,266.99	72,320.99	72,320.99-	0
001-521-10-1600	VACATION PAY	65,639.79	0.00	13,085.40	101,695.36	101,695.36-	0
001-521-10-1700	INCENTIVE PAY	16,820.00	56,000.00	1,660.00	20,290.00	35,710.00	36
001-521-10-1800	HOLIDAY PAY	72,011.15	0.00	12,099.60	83,822.11	83,822.11-	0
001-521-10-1820	HOLIDAY PREMIUM	64,594.95	82,000.00	6,436.13	73,753.36	8,246.64	90
001-521-10-2100	FICA EXPENSE	171,396.63	214,860.00	22,229.55	188,389.65	26,470.35	88
001-521-10-2200	RETIREMENT	527,884.53	806,520.00	75,655.81	611,549.51	194,970.49	76
001-521-10-2210	BENEFIT ADMIN FEES	0.00	0.00	18.00	243.00	243.00-	0
001-521-10-2300	LIFE & HEALTH INSURANCE	278,649.78	384,810.00	25,222.20	317,198.87	67,611.13	82
001-521-10-2500	UNEMPLOYMENT COMP. REIMBURSEMENT	137.50	0.00	0.00	2,817.24	2,817.24-	0
001-521-10-2600	WORKERS COMPENSATION INSURANCE	54,990.71	65,000.00	0.00	58,053.22	6,946.78	89
001-521-30-3100	PROFESSIONAL SERVICES	20,168.86	47,000.00	800.00	9,330.99	37,669.01	20
001-521-30-3400	OTHER CONTRACTUAL SERVICES	99,908.92	95,000.00	1,288.76	12,775.35	82,224.65	13
001-521-30-3450	CLOTHING AND UNIFORMS	8,830.27	20,000.00	1,944.56	10,568.31	9,431.69	53
001-521-30-3500	INVESTIGATIONS	7,991.95	15,000.00	959.00	7,544.14	7,455.86	50
001-521-30-4000	TRAVEL & PER DIEM	5,972.46	7,000.00	865.32	4,507.60	2,492.40	64
001-521-30-4100	TELEPHONE EXPENSE	71,334.22	80,000.00	4,854.51	58,556.27	21,443.73	73
001-521-30-4110	IT LICENSING / EQUIPMENT	49,993.01	229,100.00	149.96	231,160.02	2,060.02-	101
001-521-30-4200	POSTAGE/TRANSPORTATION FEES	268.08	3,000.00	157.25	288.24	2,711.76	10
001-521-30-4300	UTILITIES EXPENSE	61,728.39	54,000.00	4,526.60	80,273.83	26,273.83-	149
001-521-30-4400	RENTAL & LEASING	2,069.42	10,000.00	154.99	2,028.53	7,971.47	20
001-521-30-4600	REPAIR & MAINTENANCE	58,512.87	65,000.00	4,412.26	56,054.95	8,945.05	86
001-521-30-4900	MISC. EXPENSE & OTHER CURRENT	2,315.27	4,000.00	0.00	876.65-	4,876.65	22-

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Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
001-521-30-4960	BOOT ALLOWANCE	2,078.69	7,525.00	754.64	2,127.90	5,397.10	28
001-521-30-5100	OFFICE SUPPLIES	2,697.87	5,000.00	0.00	773.09	4,226.91	15
001-521-30-5200	OPERATING SUPPLIES	79,336.98	80,000.00	7,426.57	51,704.38	28,295.62	65
001-521-30-5250	FUEL EXPENSE	105,488.80	120,000.00	13,332.49	149,659.17	29,659.17-	125
001-521-30-5400	SUBSCRIPTIONS/DUES	3,801.80	3,000.00	0.00	1,150.00	1,850.00	38
001-521-30-5500	TRAINING	50,374.14	40,000.00	6,357.44	27,975.06	12,024.94	70
001-521-60-6200	CAP. IMPROVEMENT-BUILDINGS	34,839.70	0.00	0.00	0.00	0.00	0
001-521-60-6400	CAP. IMPROVEMENT-MACHINERY	31,748.00	200,000.00	0.00	185,188.49	14,811.51	93
001-521-70-7100	2018 POLICE CARS CAP LEASE-PRINCIPAL	108,485.69	57,525.00	0.00	57,524.09	0.91	100
001-521-70-7200	2018 POLICE CARS CAP LEASE-INTEREST	10,911.67	4,175.00	0.00	4,170.32	4.68	100
521 POLICE DEPARTMENT:		4,089,159.25	5,440,885.00	461,392.64	4,587,330.83	853,554.17	84
001-541-00-0000	PUBLIC WORKS/STREET DEPT.	0.00	0.00	0.00	0.00	0.00	0
001-541-10-1200	SALARIES	666,928.24	958,240.00	90,518.72	786,046.11	172,193.89	82
001-541-10-1250	ON CALL	3,825.00	3,900.00	450.00	3,900.00	0.00	100
001-541-10-1300	OVERTIME	13,067.35	12,000.00	1,210.98	12,544.80	544.80-	105
001-541-10-1500	SICK LEAVE	42,484.07	0.00	5,085.32	39,374.25	39,374.25-	0
001-541-10-1600	VACATION PAY	49,959.63	0.00	4,022.39	45,392.03	45,392.03-	0
001-541-10-1800	HOLIDAY PAY	29,417.75	0.00	4,513.62	35,068.54	35,068.54-	0
001-541-10-2100	FICA EXPENSE	61,560.42	74,530.00	8,156.01	70,586.10	3,943.90	95
001-541-10-2200	RETIREMENT	82,668.17	108,400.00	13,401.38	108,592.12	192.12-	100
001-541-10-2210	BENEFIT ADMIN FEES	0.00	0.00	0.00	27.00	27.00-	0
001-541-10-2300	LIFE & HEALTH INSURANCE	121,924.49	160,020.00	10,920.02	137,294.00	22,726.00	86
001-541-10-2500	UNEMPLOYMENT COMPENSATION	0.00	2,000.00	0.00	0.00	2,000.00	0
001-541-10-2600	WORKERS COMPENSATION INSURANCE	15,198.39	20,000.00	0.00	17,862.46	2,137.54	89
001-541-30-3100	PROFESSIONAL SERVICES	140,767.81	178,500.00	10,140.00	67,875.67	110,624.33	38
001-541-30-3400	OTHER CONTRACTUAL SERVICES	56,516.54	100,000.00	2,012.48	100,440.83	440.83-	100
001-541-30-3440	RIGHT-OF-WAY MAINTENANCE	0.00	200,000.00	108,099.00	108,099.00	91,901.00	54
001-541-30-3450	CLOTHING AND UNIFORMS	7,081.71	8,000.00	195.45	8,249.51	249.51-	103
001-541-30-4000	TRAVEL & PER DIEM	116.13	3,000.00	10.65	591.73	2,408.27	20
001-541-30-4100	TELEPHONE EXPENSE	17,010.56	20,400.00	1,970.60	16,377.20	4,022.80	80
001-541-30-4110	IT LICENSING / EQUIPMENT	26,210.53	45,000.00	3,469.89	29,334.32	15,665.68	65
001-541-30-4200	POSTAGE/TRANSPORTATION FEES	74.51	100.00	0.00	49.14	50.86	49
001-541-30-4300	UTILITIES EXPENSE	40,547.51	80,000.00	9,137.26	22,776.49	57,223.51	28
001-541-30-4350	VILLAGES STREET LIGHTING	365,475.83	370,000.00	39,093.63	384,565.06	14,565.06-	104
001-541-30-4400	RENTAL & LEASING	6,451.18	7,575.00	11.98	1,685.87	5,889.13	22

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Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
001-541-30-4600	REPAIR & MAINTENANCE	39,132.84	40,250.00	2,960.26	31,563.46	8,686.54	78
001-541-30-4601	REPAIR & MAINTENANCE - BUILDINGS	13,257.09	15,000.00	1,522.49	11,458.08	3,541.92	76
001-541-30-4602	REPAIR & MAINTENANCE - 610 JACKSON ST	23,784.50	0.00	0.00	0.00	0.00	0
001-541-30-4900	MISC. EXPENSE & OTHER CURRENT	938.53	3,000.00	0.00	18.92	2,981.08	1
001-541-30-4940	LANDFILL DISPOSAL FEES	4,614.74	5,000.00	90.60	2,368.05	2,631.95	47
001-541-30-4960	BOOT ALLOWANCE	989.88	2,625.00	67.39	2,493.28	131.72	95
001-541-30-5100	OFFICE SUPPLIES	2,329.32	3,000.00	314.88	2,244.34	755.66	75
001-541-30-5200	OPERATING SUPPLIES	65,493.40	70,000.00	1,805.19	54,344.25	15,655.75	78
001-541-30-5250	FUEL EXPENSE	25,569.59	35,000.00	4,049.67	34,798.04	201.96	99
001-541-30-5400	SUBSCRIPTIONS/DUES	7,963.69	4,475.00	99.94	1,331.93	3,143.07	30
001-541-30-5500	TRAINING	7,543.00	16,000.00	0.00	13,759.37	2,240.63	86
001-541-60-6100	CAPITAL IMPROVEMENT-LAND	10,984.80	0.00	0.00	0.00	0.00	0
001-541-60-6110	WARFIELD COMPLEX REHAB	685,102.09	0.00	0.00	0.00	0.00	0
001-541-60-6115	CITY HALL / ANNEX REHAB	240,525.68	50,000.00	5,125.54	59,774.38	9,774.38-	120
001-541-60-6120	STREET PROJECTS	782,812.49	0.00	0.00	0.00	0.00	0
001-541-60-6302	ROAD IMPROVEMENT DESIGNS	217,133.50	0.00	0.00	0.00	0.00	0
001-541-60-6400	CAP. IMPROVEMENT-MACHINERY	345,251.70	272,000.00	0.00	106,377.50	165,622.50	39
001-541-60-6681	PRINCIPAL-EQUIPMENT LEASE	44,463.96	46,320.00	0.00	46,316.72	3.28	100
001-541-60-6691	INTEREST-EQUIPMENT LEASE	5,944.25	4,100.00	0.00	4,091.49	8.51	100
541 PUBLIC WORKS/STREET DEPT.		4,271,120.87	2,918,435.00	328,455.34	2,367,672.04	550,762.96	81
001-549-00-0000	FLEET MAINTENANCE DEPT:	0.00	0.00	0.00	0.00	0.00	0
001-549-10-1200	SALARIES	156,221.84	184,840.00	19,937.93	160,093.51	24,746.49	87
001-549-10-1300	OVERTIME	0.00	1,500.00	0.00	0.00	1,500.00	0
001-549-10-1500	SICK LEAVE	3,992.01	0.00	1,304.55	3,984.32	3,984.32-	0
001-549-10-1600	VACATION PAY	10,812.06	0.00	124.80	12,787.72	12,787.72-	0
001-549-10-1800	HOLIDAY PAY	6,623.70	0.00	736.00	7,001.01	7,001.01-	0
001-549-10-2100	FICA EXPENSE	13,590.42	14,260.00	1,690.94	14,065.54	194.46	99
001-549-10-2200	RETIREMENT	18,154.18	20,170.00	2,632.52	20,478.95	308.95-	102
001-549-10-2300	LIFE & HEALTH INSURANCE	28,257.36	30,480.00	2,446.68	30,260.16	219.84	99
001-549-10-2600	WORKERS COMPENSATION INSURANCE	6,440.86	7,800.00	0.00	6,966.43	833.57	89
001-549-30-3100	PROFESSIONAL SERVICES	0.00	500.00	0.00	0.00	500.00	0
001-549-30-3400	OTHER CONTRACTUAL SERVICES	0.00	0.00	20.00	220.00	220.00-	0
001-549-30-3450	CLOTHING AND UNIFORMS	1,943.40	3,000.00	209.21	2,299.49	700.51	77
001-549-30-4000	TRAVEL & PER DIEM	0.00	100.00	0.00	70.90	29.10	71
001-549-30-4100	TELEPHONE EXPENSE	2,606.04	3,500.00	207.15	2,276.73	1,223.27	65

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001-549-30-4110	IT LICENSING / EQUIPMENT	4,452.86	22,100.00	542.31	14,865.76	7,234.24	67
001-549-30-4200	POSTAGE/TRANSPORTATION FEES	40.50	100.00	0.00	0.00	100.00	0
001-549-30-4300	UTILITIES EXPENSE	3,965.45	4,500.00	389.34	3,768.31	731.69	84
001-549-30-4400	RENTAL & LEASING	1,404.27	1,700.00	184.50	1,570.49	129.51	92
001-549-30-4600	REPAIR & MAINTENANCE	1,521.07	4,500.00	0.00	2,896.45	1,603.55	64
001-549-30-4900	MISC. EXPENSE & OTHER CURRENT	0.00	100.00	0.00	0.00	100.00	0
001-549-30-4960	BOOT ALLOWANCE	174.87	525.00	0.00	235.37	289.63	45
001-549-30-5100	OFFICE SUPPLIES	330.72	800.00	0.00	428.47	371.53	54
001-549-30-5200	OPERATING SUPPLIES	23,988.83	30,000.00	3,591.04	24,781.04	5,218.96	83
001-549-30-5250	FUEL EXPENSE	5,447.04	3,000.00	633.11	3,664.38	664.38-	122
001-549-30-5400	SUBSCRIPTIONS/DUES	1,658.00	3,000.00	0.00	1,069.99	1,930.01	36
001-549-30-5500	TRAINING	1,259.00	2,500.00	150.00	400.00	2,100.00	16
001-549-60-6400	CAP. IMPROVEMENTS-MACHINERY/EQUIP	18,673.00	78,000.00	0.00	23,626.15	54,373.85	30
549 FLEET MAINTENANCE DEPT:		311,557.48	416,975.00	34,800.08	337,811.17	79,163.83	81
001-572-00-0000	PARKS & RECREATION:	0.00	0.00	0.00	0.00	0.00	0
001-572-10-1200	SALARIES	350,731.96	552,900.00	51,144.08	427,018.66	125,881.34	77
001-572-10-1250	ON CALL	3,900.00	3,500.00	450.00	3,900.00	400.00-	111
001-572-10-1300	OVERTIME	7,000.26	2,000.00	149.45	11,767.52	9,767.52-	588
001-572-10-1500	SICK LEAVE	10,238.80	0.00	344.01	15,073.16	15,073.16-	0
001-572-10-1600	VACATION PAY	16,096.42	0.00	1,206.38	21,229.69	21,229.69-	0
001-572-10-1800	HOLIDAY PAY	13,699.18	0.00	2,909.46	16,704.26	16,704.26-	0
001-572-10-1820	HOLIDAY PREMIUM	50.40	0.00	0.00	166.00	166.00-	0
001-572-10-2100	FICA EXPENSE	30,731.13	42,720.00	4,299.60	37,933.68	4,786.32	89
001-572-10-2200	RETIREMENT	39,714.79	60,420.00	6,693.82	52,865.36	7,554.64	88
001-572-10-2300	LIFE & HEALTH INSURANCE	56,806.68	91,440.00	7,571.61	78,852.42	12,587.58	86
001-572-10-2500	UNEMPLOYMENT COMPENSATION	1,402.94	0.00	0.00	37.41	37.41-	0
001-572-10-2600	WORKERS COMPENSATION INSURANCE	4,954.53	6,000.00	0.00	5,358.78	641.22	89
001-572-30-3100	PROFESSIONAL SERVICES	9,017.03	11,750.00	1,225.00	19,025.50	7,275.50-	162
001-572-30-3400	OTHER CONTRACTUAL SERVICES	82,229.12	131,500.00	18,229.65	95,852.20	35,647.80	73
001-572-30-3450	CLOTHING AND UNIFORMS	2,447.04	6,650.00	2,666.61	3,842.07	2,807.93	58
001-572-30-4000	TRAVEL & PER DIEM	562.19	3,300.00	170.63-	91.97	3,208.03	3
001-572-30-4100	TELEPHONE EXPENSE	14,954.00	15,300.00	1,985.19	18,101.48	2,801.48-	118
001-572-30-4110	IT LICENSING / EQUIPMENT	11,565.64	30,300.00	3,043.74	28,194.23	2,105.77	93
001-572-30-4150	ADVERTISING AND PROMOTIONS	1,635.43	17,000.00	4,032.92	19,264.07	2,264.07-	113
001-572-30-4200	POSTAGE/TRANSPORTATION FEES	0.51	100.00	0.00	27.85	72.15	28

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001-572-30-4300	UTILITIES EXPENSE	13,662.04	13,200.00	2,342.09	14,762.23	1,562.23-	112
001-572-30-4400	RENTAL & LEASING	6,513.27	12,000.00	108.96	4,148.21	7,851.79	35
001-572-30-4600	REPAIR & MAINTENANCE	35,810.06	68,000.00	18,934.59	37,375.57	30,624.43	55
001-572-30-4601	REPAIR & MAINTENANCE - BUILDINGS	3,980.85	16,500.00	0.00	2,955.18	13,544.82	18
001-572-30-4610	BAKER HOUSE MAINTENANCE	2,383.41	10,000.00	0.00	2,506.91	7,493.09	25
001-572-30-4620	BAKER HOUSE OPERATIONS-OTHER MISC.	9,237.80	7,070.00	283.68	6,667.16	402.84	94
001-572-30-4630	BAKER HOUSE SPECIAL EVENTS	2,206.81	10,000.00	732.91	5,822.15	4,177.85	58
001-572-30-4900	MISC. EXPENSE & OTHER CURRENT	260.99	5,000.00	0.00	777.87	4,222.13	16
001-572-30-4910	SPECIAL EVENTS	68,700.41	123,400.00	1,021.38	123,526.80	126.80-	100
001-572-30-4915	PROGRAMS, ACTIVITIES & LEAGUES	70,419.97	89,060.00	11,712.24	76,195.44	12,864.56	86
001-572-30-4920	SUMMER RECREATION PROGRAM	12,310.03	24,500.00	3,846.52	9,542.13	14,957.87	39
001-572-30-4960	BOOT ALLOWANCE	560.48	1,575.00	175.00	1,122.58	452.42	71
001-572-30-5100	OFFICE SUPPLIES	1,163.33	2,000.00	207.95	1,943.84	56.16	97
001-572-30-5200	OPERATING SUPPLIES	38,013.01	72,000.00	5,779.84	59,922.08	12,077.92	83
001-572-30-5250	FUEL EXPENSE	16,532.17	25,000.00	2,889.31	23,290.44	1,709.56	93
001-572-30-5280	LANDSCAPING	13,133.42	50,000.00	6,092.69-	17,215.99	32,784.01	34
001-572-30-5400	SUBSCRIPTIONS/DUES	1,921.30	2,610.00	80.00	410.10	2,199.90	16
001-572-30-5500	TRAINING	1,713.48	8,500.00	425.00	4,105.00	4,395.00	48
001-572-60-6300	CAPITAL IMPROVEMENT-OTHER	5,150.00	10,000.00	0.00	18,647.65	8,647.65-	186
001-572-60-6351	MLK PARK PROJECT	2,012.18	341,000.00	223,828.54	224,643.64	116,356.36	66
001-572-60-6360	MILLENNIUM PARK PROJECT	74,535.00	0.00	0.00	0.00	0.00	0
001-572-60-6400	CAP. IMPROVEMENT-MACHINERY	62,147.76	192,000.00	4,950.00	52,081.00	139,919.00	27
572 PARKS & RECREATION:		1,100,105.82	2,058,295.00	377,006.21	1,542,968.28	515,326.72	75
001-575-00-0000	COMMUNITY CENTER:	0.00	0.00	0.00	0.00	0.00	0
001-575-10-1200	SALARIES	463.28	32,860.00	2,001.64	11,311.43	21,548.57	34
001-575-10-1300	OVERTIME	0.00	0.00	0.00	55.69	55.69-	0
001-575-10-2100	FICA EXPENSE	35.43	2,520.00	153.18	869.65	1,650.35	35
001-575-10-2200	RETIREMENT	46.33	3,560.00	238.37	1,318.13	2,241.87	37
001-575-10-2300	LIFE & HEALTH INSURANCE	6.25	200.00	0.00	0.00	200.00	0
001-575-30-3100	PROFESSIONAL SERVICES	2,242.56	3,000.00	0.00	849.85	2,150.15	28
001-575-30-3400	OTHER CONTRACTUAL SERVICES	2,736.83	8,440.00	455.00	1,084.70	7,355.30	13
001-575-30-3450	CLOTHING AND UNIFORMS	730.24	400.00	0.00	220.48	179.52	55
001-575-30-4100	TELEPHONE EXPENSE	4,321.39	6,680.00	0.00	2,657.08	4,022.92	40
001-575-30-4200	POSTAGE/TRANSPORTATION FEES	18.50	100.00	0.00	5.83	94.17	6
001-575-30-4300	UTILITIES EXPENSE	34,259.05	24,750.00	4,516.28	41,107.23	16,357.23-	166

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001-575-30-4400	RENTAL & LEASING	2,046.97	2,600.00	32.35	1,865.86	734.14	72
001-575-30-4600	REPAIR & MAINTENANCE	25,997.88	32,000.00	1,267.16	11,410.24	20,589.76	36
001-575-30-4900	MISC. EXPENSE & OTHER CURRENT	326.35	0.00	0.00	0.00	0.00	0
001-575-30-5100	OFFICE SUPPLIES	712.70	500.00	9.49	425.01	74.99	85
001-575-30-5200	OPERATING SUPPLIES	15,077.32	17,000.00	746.46	7,384.15	9,615.85	43
001-575-30-5400	SUBSCRIPTIONS/DUES	100.00	0.00	0.00	100.00	100.00-	0
001-575-60-6200	CAP. IMPROVEMENT-BUILDINGS	0.00	30,000.00	0.00	0.00	30,000.00	0
575 COMMUNITY CENTER:		89,121.08	164,610.00	9,419.93	80,665.33	83,944.67	49
001-580-90-0000	CONTINGENCY	0.00	0.00	0.00	0.00	0.00	0
001-580-90-9901	CONTINGENCY RESERVE-GEN FUND	0.00	4,034,340.00	0.00	0.00	4,034,340.00	0
001-581-00-1040	TRANSFER TO EXPANDED CRA	156,812.00	185,870.00	0.00	185,870.00	0.00	100
001-581-90-3010	TRANSFER TO CAPITAL PROJECT FUND	0.00	10,750,000.00	0.00	18,650,000.00	7,900,000.00-	173
581 Total		156,812.00	10,935,870.00	0.00	18,835,870.00	7,900,000.00-	172
001 GENERAL FUND Expend Total		14,100,805.60	30,436,800.00	1,548,547.92	31,558,909.37	1,122,109.37-	104

001 GENERAL FUND

	Prior	Current	YTD
Revenues:	17,782,183.27	1,139,037.97	22,471,090.38
Expended:	14,100,805.60	1,548,547.92	31,558,909.37
Net Income:	3,681,377.67	409,509.95-	9,087,818.99-

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Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
101-361-1350	INTEREST EARNED	0.00	200.00	92.46	397.59	197.59	199
101-364-1000	CEMETERY LOT SALES	1,050.00	2,100.00	0.00	2,100.00	0.00	100
101-366-1350	CONTRIBUTIONS/DUES	1,950.00	2,000.00	640.00	2,430.00	430.00	122
101-366-1360	GRAVE OPENING PERMITS	1,800.00	600.00	0.00	600.00	0.00	100
101-369-0000	OTHER MISCELLANEOUS REVENUE	0.00	100.00	0.00	0.00	100.00-	0
101-389-5000	NON-OPER/ CEMETERY RESERVES FORWARD	0.00	51,700.00	0.00	0.00	51,700.00-	0
101 CEMETERY FUND Revenue Total		4,800.00	56,700.00	732.46	5,527.59	51,172.41-	10

Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
101-569-00-0000	GREENWOOD CEMETERY:	0.00	0.00	0.00	0.00	0.00	0
101-569-30-3100	PROFESSIONAL SERVICES	0.00	200.00	0.00	0.00	200.00	0
101-569-30-4600	REPAIR & MAINTENANCE	0.00	500.00	0.00	0.00	500.00	0
101-569-30-4900	MISC. EXPENSE & OTHER CURRENT	72.30	200.00	0.00	61.37	138.63	31
101-569-30-5200	OPERATING SUPPLIES	0.00	100.00	0.00	0.00	100.00	0
569 GREENWOOD CEMETERY:		72.30	1,000.00	0.00	61.37	938.63	6
101-580-90-9999	CONTINGENCY	0.00	55,700.00	0.00	0.00	55,700.00	0
101 CEMETERY FUND Expend Total		72.30	56,700.00	0.00	61.37	56,638.63	0

101 CEMETERY FUND

	Prior	Current	YTD
Revenues:	4,800.00	732.46	5,527.59
Expended:	72.30	0.00	61.37
Net Income:	4,727.70	732.46	5,466.22

CITY OF WILDWOOD
YEAR TO DATE REVENUE-EXPENDITURE REPORT
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Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
104-361-0000	INTEREST	271.54	0.00	1,964.34	5,999.52	5,999.52	0
104-369-9000	TAX INCREMENT FINANCING - SUM CTY	219,900.00	250,000.00	0.00	369,830.00	119,830.00	148
104-382-0010	TRANSFER FROM GENERAL	156,812.00	185,870.00	0.00	185,870.00	0.00	100
104-389-5006	CASH FORWARD - CRA DISTRICT	0.00	654,000.00	0.00	0.00	654,000.00-	0
104 COMMUNITY REDEVELOPMENT Revenue Tota		376,983.54	1,089,870.00	1,964.34	561,699.52	528,170.48-	52

Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
104-550-00-0000	COMM REDEVELOPMENT DEPT.:	0.00	0.00	0.00	0.00	0.00	0
104-550-10-1200	SALARIES	33,254.53	35,910.00	2,320.40	31,654.31	4,255.69	88
104-550-10-1500	SICK LEAVE	1,379.11	0.00	0.00	599.30	599.30-	0
104-550-10-1600	VACATION PAY	525.77	0.00	1,155.96	2,697.94	2,697.94-	0
104-550-10-1800	HOLIDAY PAY	1,327.57	0.00	0.00	1,265.58	1,265.58-	0
104-550-10-2100	FICA EXPENSE	2,791.17	2,750.00	265.94	2,770.52	20.52-	101
104-550-10-2200	RETIREMENT	4,982.43	3,890.00	722.47	4,330.56	440.56-	111
104-550-10-2300	LIFE & HEALTH INSURANCE	3,577.41	3,600.00	1.90	3,524.49	75.51	98
104-550-30-3100	PROFESSIONAL SERVICES	0.00	70,000.00	875.00	6,000.00	64,000.00	9
104-550-30-4000	TRAVEL & PER DIEM	0.00	500.00	0.00	0.00	500.00	0
104-550-30-4100	TELEPHONE EXPENSE	14.11	200.00	0.00	0.00	200.00	0
104-550-30-5400	SUBSCRIPTIONS/DUES	175.00	175.00	0.00	175.00	0.00	100
104-550-30-5500	TRAINING	0.00	3,550.00	0.00	0.00	3,550.00	0
104-550-60-6330	FACADE IMPROVEMENT GRANT	0.00	50,000.00	0.00	0.00	50,000.00	0
104-550-70-7303	DEMOLITIONS	0.00	20,000.00	0.00	0.00	20,000.00	0
104-550-70-7307	MISC. OTHER PROJECTS	0.00	100,000.00	11,300.00	67,403.62	32,596.38	67
104-550-70-7308	DOWNTOWN PARKING IMPROVEMENTS	0.00	140,000.00	72,711.00	149,651.45	9,651.45-	107
550 COMM REDEVELOPMENT DEPT.:		48,027.10	430,575.00	89,352.67	270,072.77	160,502.23	63
104-580-90-9904	CONTINGENCY - CRA DISTRICT	0.00	659,295.00	0.00	0.00	659,295.00	0
104 COMMUNITY REDEVELOPMENT Expend Total		48,027.10	1,089,870.00	89,352.67	270,072.77	819,797.23	25

104 COMMUNITY REDEVELOPMENT

	Prior	Current	YTD
Revenues:	376,983.54	1,964.34	561,699.52
Expended:	48,027.10	89,352.67	270,072.77
Net Income:	328,956.44	87,388.33-	291,626.75

Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
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CITY OF WILDWOOD
YEAR TO DATE REVENUE-EXPENDITURE REPORT
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Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
105-361-0000	INTEREST	0.00	100.00	40.97	106.97	6.97	107
105-369-0058	DONATIONS	2,530.72	15,000.00	75.00	14,697.00	303.00-	98
105-389-5010	CASH FORWARD - BAKER HOUSE	0.00	12,500.00	0.00	0.00	12,500.00-	0
105 BAKER HOUSE Revenue Total		2,530.72	27,600.00	115.97	14,803.97	12,796.03-	54

Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
105-576-00-0000	BAKER HOUSE DEPARTMENT:	0.00	0.00	0.00	0.00	0.00	0
105-576-30-4620	BAKER HOUSE OPERATIONS	128.24	15,000.00	0.00	103.38	14,896.62	1
105-580-90-9910	CONTINGENCY - BAKER HOUSE	0.00	12,600.00	0.00	0.00	12,600.00	0
105 BAKER HOUSE Expend Total		128.24	27,600.00	0.00	103.38	27,496.62	0

105 BAKER HOUSE		Prior	Current	YTD
Revenues:		2,530.72	115.97	14,803.97
Expended:		128.24	0.00	103.38
Net Income:		2,402.48	115.97	14,700.59

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Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
106-589-5010	CARRY FORWARD - HISTORICAL FUND	0.00	45.00	0.00	0.00	45.00-	0
	106 WILDWOOD AREA HISTORICA Revenue Tota	0.00	45.00	0.00	0.00	45.00-	0
Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
106-577-00-0000	WILDWOOD AREA HISTORICAL ASSN	0.00	0.00	0.00	0.00	0.00	0
106-580-90-9911	CONTINGENCY - HISTORICAL ACCT	0.00	45.00	0.00	0.00	45.00	0
	106 WILDWOOD AREA HISTORICA Expend Total	0.00	45.00	0.00	0.00	45.00	0

106 WILDWOOD AREA HISTORICAL ASSOCIATION	Prior	Current	YTD
Revenues:	0.00	0.00	0.00
Expended:	0.00	0.00	0.00
Net Income:	0.00	0.00	0.00

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Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
107-341-3004	RECREATION IMPACT FEES	258,842.52	225,000.00	4,395.84	241,018.02	16,018.02	107
107-361-0000	INTEREST	179.71	0.00	519.82	1,562.57	1,562.57	0
107-389-5004	CASH FORWARD - P & R IMPACT FEE	0.00	80,000.00	0.00	0.00	80,000.00-	0
107 RECREATION IMPACT FEES Revenue Total		259,022.23	305,000.00	4,915.66	242,580.59	62,419.41-	80
Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
107-572-00-0000	RECREATION IMPACT FEES:	0.00	0.00	0.00	0.00	0.00	0
107-572-30-4900	MISC. EXPENSE & OTHER CURRENT	2.62	0.00	0.00	4.80	4.80-	0
107-572-60-6100	CAP. IMPROVEMENT - LAND	620,060.76	0.00	0.00	0.00	0.00	0
572 RECREATION IMPACT FEES:		620,063.38	0.00	0.00	4.80	4.80-	0
107-580-90-9903	CONTINGENCY - P&R IMPACT FEES	0.00	305,000.00	0.00	0.00	305,000.00	0
107 RECREATION IMPACT FEES Expend Total		620,063.38	305,000.00	0.00	4.80	304,995.20	0

107 RECREATION IMPACT FEES		Prior	Current	YTD
Revenues:		259,022.23	4,915.66	242,580.59
Expended:		620,063.38	0.00	4.80
Net Income:		361,041.15-	4,915.66	242,575.79

CITY OF WILDWOOD
YEAR TO DATE REVENUE-EXPENDITURE REPORT
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Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
108-341-3001	LAW ENFORCEMENT IMPACT FEES	1,342,321.32	1,100,000.00	155,194.61	1,416,256.93	316,256.93	129
108-361-0000	INTEREST	94.21	0.00	0.00	139.88	139.88	0
108-389-5002	CASH FORWARD - POLICE IMPACT FEE	0.00	790,000.00	0.00	0.00	790,000.00-	0
108 LAW ENFORCEMENT IMPACT Revenue Total		1,342,415.53	1,890,000.00	155,194.61	1,416,396.81	473,603.19-	75
Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
108-521-00-0000	LAW ENFORCEMENT IMPACT FEES:	0.00	0.00	0.00	0.00	0.00	0
108-521-30-4900	MISC. EXPENSE & OTHER CURRENT	380.45	0.00	0.00	356.30	356.30-	0
108-521-60-6400	CAP. IMPROVEMENT- MACHINERY & EQUIPMENT	197,749.99	315,000.00	0.00	215,588.32	99,411.68	68
108-521-70-9105	TRANSFER TO GENERAL FUND - LOAN PAYMENT	532,080.00	412,800.00	0.00	412,800.00	0.00	100
521 LAW ENFORCEMENT IMPACT FEES:		730,210.44	727,800.00	0.00	628,744.62	99,055.38	86
108-580-90-9902	CONTINGENCY -LAW ENFORCEMENT IMPACT FEES	0.00	1,162,200.00	0.00	0.00	1,162,200.00	0
108 LAW ENFORCEMENT IMPACT Expend Total		730,210.44	1,890,000.00	0.00	628,744.62	1,261,255.38	33

108 LAW ENFORCEMENT IMPACT FEES	Prior	Current	YTD
Revenues:	1,342,415.53	155,194.61	1,416,396.81
Expended:	730,210.44	0.00	628,744.62
Net Income:	612,205.09	155,194.61	787,652.19

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YEAR TO DATE REVENUE-EXPENDITURE REPORT
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Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
301-361-0000	INTEREST	0.00	0.00	20,126.19	52,107.00	52,107.00	0
301-382-0010	TRANSFER FROM GENERAL FUND	0.00	0.00	0.00	18,650,000.00	18,650,000.00	0
301 CAPITAL IMPROVEMENT FUN Revenue Tota		0.00	0.00	20,126.19	18,702,107.00	18,702,107.00	0
Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
301-500-00-0000	CAPITAL IMPROVEMENT FUND	0.00	0.00	0.00	0.00	0.00	0
301-513-60-6201	CITY HALL HVAC PROJECT	0.00	450,000.00	0.00	349,579.75	100,420.25	78
301-516-60-6301	DOWNTOWN MASTER PLAN PROJECTS	0.00	500,000.00	0.00	44,734.76	455,265.24	9
301-516-60-6302	CITY PARKING FACILITIES REHAB	0.00	20,000.00	925.00	7,676.45	12,323.55	38
301-516-60-6303	CITY SIGN AT TRAILWINDS	0.00	165,000.00	0.00	171,231.00	6,231.00-	104
516 Total		0.00	685,000.00	925.00	223,642.21	461,357.79	33
301-541-60-6101	DRAINAGE PROJECT LAND ACQUISITION	0.00	100,000.00	0.00	2,547.17	97,452.83	3
301-541-60-6201	PW BUILDING METAL ROOF REHAB	0.00	155,000.00	0.00	98,082.26	56,917.74	63
301-541-60-6202	MUNICIPAL SERVICES COMPLEX PROJECT	0.00	3,640,000.00	49,384.61	3,182,191.71	457,808.29	87
301-541-60-6301	PLEASANTDALE REHAB	0.00	890,000.00	937.50	22,550.00	867,450.00	3
301-541-60-6302	BARWICK REHAB	0.00	890,000.00	10,090.00	93,293.90	796,706.10	10
301-541-60-6303	OAK GROVE VILLAGE DRAINAGE IMPROVEMENTS	0.00	50,000.00	0.00	6,000.00	44,000.00	12
301-541-60-6304	PW PARKING FACILITIES REHAB	0.00	19,500.00	875.00	19,773.35	273.35-	101
301-541-60-6305	PAVEMENT PRESERVATION PLAN	0.00	800,000.00	193,984.48	635,922.82	164,077.18	79
301-541-60-6306	CLAY DRAIN ROAD DESIGN	0.00	337,500.00	49,550.00	134,465.00	203,035.00	40
541 Total		0.00	6,882,000.00	304,821.59	4,194,826.21	2,687,173.79	61
301-572-60-6201	MLK PARK CONCESSION STAND/RESTROOMS	0.00	200,000.00	8,500.00	20,017.09	179,982.91	10
301-572-60-6202	BAKER HOUSE RESTROOMS	0.00	100,000.00	0.00	52,958.66	47,041.34	53
301-572-60-6203	LAKE DEATON RESTROOMS	0.00	150,000.00	0.00	109,499.41	40,500.59	73
301-572-60-6204	MILLENNIUM PARK STORAGE BARN	0.00	25,000.00	0.00	0.00	25,000.00	0
301-572-60-6301	LAKE DEATON PARKING FACILITIES REHAB	0.00	12,000.00	0.00	10,213.15	1,786.85	85
301-572-60-6302	MILLENNIUM PARK IMPROVEMENTS	0.00	2,638,000.00	0.00	93,308.98	2,544,691.02	4
572 Total		0.00	3,125,000.00	8,500.00	285,997.29	2,839,002.71	9
301-575-60-6301	COMMUNITY CENTER PARKING REHAB	0.00	23,000.00	0.00	21,834.35	1,165.65	95

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Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
	301 CAPITAL IMPROVEMENT FUN Expend Total	0.00	11,165,000.00	314,246.59	5,075,879.81	6,089,120.19	45

301 CAPITAL IMPROVEMENT FUND		Prior	Current	YTD
Revenues:		0.00	20,126.19	18,702,107.00
Expended:		0.00	314,246.59	5,075,879.81
Net Income:		0.00	294,120.40-	13,626,227.19

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Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
401-343-3100	WATER SALES-OPERATING INCOME	2,827,242.24	2,840,000.00	273,008.96	3,129,653.04	289,653.04	110
401-343-3151	DEVELOPER OPERATIONAL REVENUE	230,000.00	0.00	0.00	0.00	0.00	0
401-343-3500	WATER- METER INSTALLATIONS	221,276.81	40,000.00	8,773.58	140,063.34	100,063.34	350
401-343-3510	WATER- OTHER (ON/OFF FEES)	39,983.80	30,000.00	1,620.00	37,125.00	7,125.00	124
401-343-3520	WATER INCOME-OTHER	16,292.94	10,000.00	1,624.26	14,822.16	4,822.16	148
401-343-3550	WATER UTILITY TAX	3.43	0.00	9,565.19-	0.00	0.00	0
401-343-4151	RE-ROUTE FEE	0.00	0.00	0.00	28.75-	28.75-	0
401-343-5100	SEWER OPERATING INCOME-BILLINGS	4,186,474.03	4,230,000.00	406,402.50	4,644,618.25	414,618.25	110
401-343-5510	SEWER OTHER MISC	0.00	12,000.00	0.00	0.00	12,000.00-	0
401-343-5511	LAND LEASE-TURTLE MOUNT(TOWER)	16,715.50	12,000.00	0.00	15,795.50	3,795.50	132
401-343-5520	TSS/COD WASTEWATER FEES	840,947.88	800,000.00	61,435.61	783,061.15	16,938.85-	98
401-343-6100	REUSE WATER OPERATIONS	73,205.80	50,000.00	38.35	83,007.95	33,007.95	166
401-361-0000	INTEREST EARNINGS	6,143.65	5,000.00	19,704.12	62,769.69	57,769.69	***
401-381-1007	TRANSFER FROM 2013 DEBT REFI CONST FUND	261,250.00	0.00	0.00	0.00	0.00	0
401-381-1009	TRANSFER FROM WATER TIE FEE FUND	31.24	0.00	0.00	0.00	0.00	0
401-381-1010	TRANSFER FROM SEWER TIE FEE FUND	2.50	0.00	0.00	0.00	0.00	0
401-381-1011	TRANSFER FROM WATER SDC FUND	139,050.49	0.00	0.00	0.00	0.00	0
401-381-1014	TRANSFER FROM SEWER SDC FUND	262,301.61	0.00	0.00	0.00	0.00	0
401-389-5000	Non-Operational-Cash Forward- W/S	0.00	8,611,430.00	0.00	0.00	8,611,430.00-	0
	401 UTILITY FUND Revenue Total	9,120,921.92	16,640,430.00	763,042.19	8,910,887.33	7,729,542.67-	54

Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
401-530-00-0000	PHYSICAL ENVIRONMENT/ADMIN:	0.00	0.00	0.00	0.00	0.00	0
401-530-10-1200	SALARIES	142,215.81	147,580.00	14,729.36	126,645.91	20,934.09	86
401-530-10-1300	OVERTIME	10.07	1,000.00	0.00	0.00	1,000.00	0
401-530-10-1500	SICK LEAVE	9,745.40	0.00	1,448.30	6,659.06	6,659.06-	0
401-530-10-1600	VACATION PAY	6,110.71	0.00	489.64	7,634.30	7,634.30-	0
401-530-10-1800	HOLIDAY PAY	5,809.05	0.00	792.92	5,638.77	5,638.77-	0
401-530-10-2100	FICA EXPENSE	11,088.63	11,370.00	1,333.40	11,193.42	176.58	98
401-530-10-2200	RETIREMENT	14,823.70	15,930.00	2,079.49	16,319.60	389.60-	102
401-530-10-2210	BENEFIT ADMIN FEES	0.00	0.00	4.50	54.00	54.00-	0
401-530-10-2300	LIFE & HEALTH INSURANCE	34,462.49	30,480.00	2,437.50	30,150.00	330.00	99
401-530-10-2500	UNEMPLOYMENT COMPENSATION	0.00	1,500.00	0.00	0.00	1,500.00	0
401-530-10-2600	WORKERS COMPENSATION INSURANCE	825.70	1,000.00	0.00	893.14	106.86	89
401-530-30-3100	PROFESSIONAL SERVICES	4,263.78	1,000.00	0.00	772.50	227.50	77
401-530-30-3200	ACCOUNTING & AUDITING FEES	18,000.00	15,000.00	0.00	18,500.00	3,500.00-	123

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Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
401-530-30-3400	OTHER CONTRACTUAL SERVICES	15,836.37	22,120.00	2,260.47	13,163.58	8,956.42	60
401-530-30-4000	TRAVEL & PER DIEM	0.00	1,000.00	0.00	0.00	1,000.00	0
401-530-30-4100	TELEPHONE EXPENSE	5,442.66	2,300.00	378.99	4,329.41	2,029.41-	188
401-530-30-4110	IT LICENSING / EQUIPMENT	6,523.23	26,300.00	257.25	16,930.09	9,369.91	64
401-530-30-4200	POSTAGE/TRANSPORTATION FEES	23,762.80	30,000.00	0.00	21,540.89	8,459.11	72
401-530-30-4300	UTILITIES EXPENSE	8,655.07	9,800.00	0.00	14,080.07	4,280.07-	144
401-530-30-4400	RENTAL & LEASING	2,902.97	3,100.00	181.65	2,980.75	119.25	96
401-530-30-4500	GENERAL INSURANCE	106,249.00	145,000.00	0.00	145,449.13	449.13-	100
401-530-30-4600	REPAIR & MAINTENANCE	15,286.01	18,100.00	497.50	9,118.99	8,981.01	50
401-530-30-4900	MISC. EXPENSE & OTHER CURRENT	14,607.43	15,000.00	0.00	15,227.77	227.77-	102
401-530-30-5100	OFFICE SUPPLIES	811.47	2,500.00	0.00	887.68	1,612.32	36
401-530-30-5200	OPERATING SUPPLIES	3,330.16	4,200.00	71.90	4,614.40	414.40-	110
401-530-30-5400	SUBSCRIPTIONS/DUES	37.50	500.00	0.00	37.50	462.50	8
401-530-30-5500	TRAINING	702.00	3,000.00	0.00	2,808.00	192.00	94
401-530-60-6300	CAPITAL IMPROVEMENT-OTHER	11,520.00	0.00	0.00	0.00	0.00	0
530 PHYSICAL ENVIRONMENT/ADMIN:		463,022.01	507,780.00	26,962.87	475,628.96	32,151.04	94
401-533-00-0000	WATER DEPARTMENT:	0.00	0.00	0.00	0.00	0.00	0
401-533-10-1200	SALARIES	483,843.54	692,220.00	73,064.14	562,282.25	129,937.75	81
401-533-10-1250	ON CALL	7,800.00	7,800.00	900.00	7,950.00	150.00-	102
401-533-10-1300	OVERTIME	9,996.72	20,000.00	4,921.47	10,948.00	9,052.00	55
401-533-10-1500	SICK LEAVE	14,909.29	0.00	3,279.64	19,901.90	19,901.90-	0
401-533-10-1600	VACATION PAY	29,671.04	0.00	2,681.10	27,997.90	27,997.90-	0
401-533-10-1800	HOLIDAY PAY	18,383.27	0.00	3,940.94	23,228.01	23,228.01-	0
401-533-10-1820	HOLIDAY PREMIUM	3,387.04	5,000.00	331.19	3,128.30	1,871.70	63
401-533-10-2100	FICA EXPENSE	43,451.31	55,470.00	6,817.55	50,140.52	5,329.48	90
401-533-10-2200	RETIREMENT	53,195.44-	78,450.00	10,614.01	73,144.51	5,305.49	93
401-533-10-2210	BENEFIT ADMIN FEES	0.00	0.00	13.50	189.00	189.00-	0
401-533-10-2300	LIFE & HEALTH INSURANCE	85,605.52	121,920.00	8,183.76	90,475.94	31,444.06	74
401-533-10-2500	UNEMPLOYMENT COMPENSATION	695.90	2,500.00	0.00	0.00	2,500.00	0
401-533-10-2600	WORKERS COMPENSATION INSURANCE	12,386.27	15,000.00	0.00	13,396.92	1,603.08	89
401-533-30-3100	PROFESSIONAL SERVICES	41,045.81	125,000.00	1,550.00	117,874.41	7,125.59	94
401-533-30-3400	OTHER CONTRACTUAL SERVICES	48,196.61	133,000.00	8,133.27	49,642.02	83,357.98	37
401-533-30-3450	CLOTHING AND UNIFORMS	7,203.34	11,000.00	249.32	4,824.59	6,175.41	44
401-533-30-4000	TRAVEL & PER DIEM	4,338.71	4,500.00	10.68	2,611.03	1,888.97	58
401-533-30-4100	TELEPHONE EXPENSE	33,834.29	30,000.00	3,353.08	24,673.10	5,326.90	82

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Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
401-533-30-4110	IT LICENSING / EQUIPMENT	9,594.34	44,500.00	319.56	13,575.61	30,924.39	31
401-533-30-4200	POSTAGE/TRANSPORTATION FEES	1,357.21	1,500.00	0.00	2,045.46	545.46-	136
401-533-30-4300	UTILITIES EXPENSE	118,782.93	120,000.00	13,745.71	135,471.41	15,471.41-	113
401-533-30-4400	RENTAL & LEASING	9,381.15	9,000.00	653.97	7,970.74	1,029.26	89
401-533-30-4600	REPAIR & MAINTENANCE	84,920.77	80,000.00	5,769.30	159,212.20	79,212.20-	199
401-533-30-4900	MISC. EXPENSE & OTHER CURRENT	4,956.05	7,500.00	0.00	0.00	7,500.00	0
401-533-30-4960	BOOT ALLOWANCE	349.54	1,750.00	175.00	1,024.79	725.21	59
401-533-30-5100	OFFICE SUPPLIES	3,409.89	4,000.00	199.80	3,980.89	19.11	100
401-533-30-5200	OPERATING SUPPLIES	244,870.47	227,000.00	24,681.18	303,001.29	76,001.29-	133
401-533-30-5250	FUEL EXPENSE	33,988.43	25,000.00	4,452.69	45,359.40	20,359.40-	181
401-533-30-5260	CHEMICALS	141,438.72	175,000.00	13,131.44	204,095.58	29,095.58-	117
401-533-30-5270	LABORATORY SAMPLES	17,165.00	50,000.00	1,005.00	14,005.00	35,995.00	28
401-533-30-5400	SUBSCRIPTIONS/DUES	6,073.96	12,000.00	259.00	5,564.00	6,436.00	46
401-533-30-5500	TRAINING	3,814.52	7,600.00	475.00	3,668.09	3,931.91	48
401-533-60-6200	CAP. IMPROVEMENT-BUILDINGS	0.00	168,000.00	0.00	109,689.00	58,311.00	65
401-533-60-6300	CAPITAL IMPROVEMENT-OTHER	70,508.64	190,000.00	9,945.75	81,954.55	108,045.45	43
401-533-60-6301	METER CHANGE OUT PROGRAM	99,889.04	100,000.00	0.00	18,396.00	81,604.00	18
401-533-60-6350	LOOP/UPGRADE WATER MAINS	120,146.08	500,000.00	0.00	122,750.39	377,249.61	25
401-533-60-6400	CAP. IMPROVEMENT-MACHINERY	4,370.98	152,350.00	0.00	142,100.47	10,249.53	93
401-533-60-6681	LEASE PURCHASE PRINCIPAL PMT	0.00	17,730.00	0.00	0.00	17,730.00	0
401-533-60-6691	LEASE PURCHASE INTEREST PMT	0.00	3,870.00	0.00	0.00	3,870.00	0
401-533-70-7319	CR 209 WATER MAIN EXTENSION	0.00	1,500,000.00	111,334.41	755,775.97	744,224.03	50
533 WATER DEPARTMENT:		1,766,570.94	4,698,660.00	314,191.46	3,212,049.24	1,486,610.76	68
401-535-00-0000	WASTEWATER DEPARTMENT:	0.00	0.00	0.00	0.00	0.00	0
401-535-10-1200	SALARIES	649,725.71	885,400.00	80,797.42	683,076.38	202,323.62	77
401-535-10-1250	ON CALL	7,875.00	11,700.00	1,350.00	11,325.00	375.00	97
401-535-10-1300	OVERTIME	9,549.87	20,000.00	2,899.31	11,504.15	8,495.85	58
401-535-10-1500	SICK LEAVE	52,133.54	0.00	2,045.91	41,969.86	41,969.86-	0
401-535-10-1600	VACATION PAY	42,603.20	0.00	4,422.19	47,271.59	47,271.59-	0
401-535-10-1800	HOLIDAY PAY	25,316.85	0.00	4,874.30	28,565.32	28,565.32-	0
401-535-10-1820	HOLIDAY PREMIUM	7,360.52	9,000.00	674.32	7,594.27	1,405.73	84
401-535-10-2100	FICA EXPENSE	61,222.47	70,850.00	7,490.86	64,372.19	6,477.81	91
401-535-10-2200	RETIREMENT	84,882.47	100,210.00	11,897.77	95,563.04	4,646.96	95
401-535-10-2210	BENEFIT ADMIN FEES	0.00	0.00	13.50	184.50	184.50-	0
401-535-10-2300	LIFE & HEALTH INSURANCE	111,188.29	144,780.00	9,520.90	121,399.96	23,380.04	84

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401-535-10-2500	UNEMPLOYMENT COMPENSATION	5,848.70	2,500.00	0.00	0.00	2,500.00	0
401-535-10-2600	WORKERS COMPENSATION INSURANCE	24,772.64	30,000.00	0.00	26,793.74	3,206.26	89
401-535-30-3100	PROFESSIONAL SERVICES	55,239.01	150,000.00	11,387.90	106,557.55	43,442.45	71
401-535-30-3400	OTHER CONTRACTUAL SERVICES	60,457.78	125,000.00	9,154.87	69,986.83	55,013.17	56
401-535-30-3450	CLOTHING AND UNIFORMS	7,484.72	11,000.00	628.60	7,604.12	3,395.88	69
401-535-30-4000	TRAVEL & PER DIEM	1,780.71	4,500.00	0.00	998.89	5,498.89	22
401-535-30-4100	TELEPHONE EXPENSE	12,733.14	19,040.00	1,356.87	13,073.22	5,966.78	69
401-535-30-4110	IT LICENSING / EQUIPMENT	14,991.43	45,100.00	106.52	24,062.53	21,037.47	53
401-535-30-4200	POSTAGE/TRANSPORTATION FEES	203.88	1,500.00	0.00	389.97	1,110.03	26
401-535-30-4300	UTILITIES EXPENSE	267,478.26	250,000.00	28,874.66	310,914.10	60,914.10	124
401-535-30-4400	RENTAL & LEASING	1,621.81	2,000.00	68.30	2,546.02	546.02	127
401-535-30-4600	REPAIR & MAINTENANCE	234,472.68	175,000.00	24,277.01	348,617.71	173,617.71	199
401-535-30-4900	MISC. EXPENSE & OTHER CURRENT	2,550.00	5,000.00	0.00	1,740.11	3,259.89	35
401-535-30-4940	LANDFILL DISPOSAL FEES	60,911.36	96,000.00	6,552.00	81,357.44	14,642.56	85
401-535-30-4960	BOOT ALLOWANCE	390.94	2,800.00	463.75	1,179.46	1,620.54	42
401-535-30-5100	OFFICE SUPPLIES	3,620.31	4,000.00	71.57	3,766.83	233.17	94
401-535-30-5200	OPERATING SUPPLIES	117,989.35	100,000.00	8,262.20	180,768.59	80,768.59	181
401-535-30-5250	FUEL EXPENSE	31,870.11	30,000.00	5,605.51	35,033.29	5,033.29	117
401-535-30-5260	CHEMICALS	75,149.12	90,000.00	7,581.67	90,600.75	600.75	101
401-535-30-5270	LABORATORY SAMPLES	50,472.38	55,000.00	5,826.00	43,182.42	11,817.58	79
401-535-30-5400	SUBSCRIPTIONS/DUES	1,471.13	4,000.00	0.00	370.00	3,630.00	9
401-535-30-5500	TRAINING	2,996.00	7,600.00	0.00	1,145.00	6,455.00	15
401-535-60-6200	CAP. IMPROVEMENT-BUILDINGS	0.00	6,000.00	0.00	6,830.00	830.00	114
401-535-60-6250	LIFT STATION UPGRADES	331,041.52	268,400.00	43,500.00	192,427.00	75,973.00	72
401-535-60-6300	CAPITAL IMPROVEMENT-OTHER	0.00	331,420.00	17,003.50	273,799.14	57,620.86	83
401-535-60-6310	MILLENNIUM PARK PROJECT	0.00	250,000.00	5,700.00	91,900.00	158,100.00	37
401-535-60-6400	CAP. IMPROVEMENT-MACHINERY	0.00	315,940.00	0.00	33,499.00	282,441.00	11
401-535-60-6610	SEWER SYSTEM RENEWAL AND REPLACEMENT	162,260.14	500,000.00	73,682.50	341,180.10	158,819.90	68
401-535-60-6681	LEASE PURCHASE PRINCIPAL PMT	0.00	71,500.00	0.00	71,491.17	8.83	100
401-535-60-6691	LEASE PURCHASE INTEREST PMT	17,008.74	13,200.00	0.00	13,107.50	92.50	99
401-535-60-6770	SR 44 FM / CCC DECOMMISSIONING	0.00	1,500,000.00	0.00	442,782.25	1,057,217.75	30
401-535-70-7302	BUENA VISTA FORCEMAIN	77.50	350,000.00	0.00	0.00	350,000.00	0
401-535-70-7303	WILDWOOD ESTATES LS	0.00	400,000.00	16,945.00	320,059.00	79,941.00	80
535 WASTEWATER DEPARTMENT:		2,596,751.28	6,458,440.00	393,034.91	4,248,592.21	2,209,847.79	66
401-580-90-0000	CONTINGENCY:	0.00	0.00	0.00	0.00	0.00	0

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Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
401-580-90-9912	CONTIN- WATER SEWER-REFUSE	0.00	4,014,630.00	0.00	0.00	4,014,630.00	0
401-582-00-0000	DEBT SERVICE:	0.00	0.00	0.00	0.00	0.00	0
401-582-30-5900	DEPRECIATION	2,439,861.00	0.00	0.00	0.00	0.00	0
401-582-30-5920	BAD DEBT EXPENSE	153,263.39	0.00	0.00	0.00	0.00	0
401-582-70-7100	SUMTER SCHOOL BOARD LEASE PURCHASE	0.00	170,000.00	0.00	170,000.00	0.00	100
401-582-70-7103	DBT SRV.-SRF LOAN PRIN-2007	0.00	333,850.00	0.00	333,830.02	19.98	100
401-582-70-7104	DEBT SRV-PRINCIPAL-2013 REFINANCE	0.00	274,000.00	0.00	274,000.00	0.00	100
401-582-70-7106	DEBT SERV-2016 CONTINENTAL LOAN (BB&T)	0.00	105,050.00	0.00	105,048.62	1.38	100
401-582-70-7204	INT EXP.-SRF LOAN-3 (2007)	88,872.97	46,100.00	0.00	46,084.86	15.14	100
401-582-70-7205	DEBT SVC.-INTEREST-2013 REFINANCE	11,508.90	2,320.00	0.00	2,315.30	4.70	100
401-582-70-7206	DEBT SERV-INTERST-2016 CONTINENTAL (BBT)	15,776.82	29,600.00	0.00	29,566.42	33.58	100
582 DEBT SERVICE:		2,709,283.08	960,920.00	0.00	960,845.22	74.78	100
401 UTILITY FUND Expend Total		7,535,627.31	16,640,430.00	734,189.24	8,897,115.63	7,743,314.37	53

401 UTILITY FUND

	Prior	Current	YTD
Revenues:	9,120,921.92	763,042.19	8,910,887.33
Expended:	7,535,627.31	734,189.24	8,897,115.63
Net Income:	1,585,294.61	28,852.95	13,771.70

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Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
402-334-3102	STATE APPROPRIATION - CR 209 WATER MAIN	118,750.00	0.00	0.00	197,033.60	197,033.60	0
402-361-0000	INTEREST	253.20	1,000.00	4,877.83	14,264.02	13,264.02	***
402-389-5000	CASH FORWARD	0.00	289,000.00	0.00	0.00	289,000.00-	0
402 CAPITAL PROJECTS (LOAN/ Revenue Tota		119,003.20	290,000.00	4,877.83	211,297.62	78,702.38-	73

Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
402-536-70-7351	CR 501 WTP UPGRADES CONSTRUCTION	0.00	3,000,000.00	0.00	0.00	3,000,000.00	0
402-536-70-7352	MILLENNIUM PARK REUSE PROJECT	0.00	3,000,000.00	0.00	0.00	3,000,000.00	0
536 Total		0.00	6,000,000.00	0.00	0.00	6,000,000.00	0
402-580-90-9913	CONTINGENCY - CONSTRUCTION FUND	0.00	290,000.00	0.00	0.00	290,000.00	0
402-581-90-9101	TRANSFER TO W/S REVENUE FUND	261,250.00	0.00	0.00	0.00	0.00	0
402 CAPITAL PROJECTS (LOAN/ Expend Total		261,250.00	6,290,000.00	0.00	0.00	6,290,000.00	0

402 CAPITAL PROJECTS (LOAN/GRANT)		Prior	Current	YTD
Revenues:	119,003.20	4,877.83	211,297.62	
Expended:	261,250.00	0.00	0.00	
Net Income:	142,246.80-	4,877.83	211,297.62	

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Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
403-361-0000	INTEREST EARNINGS	20.09	145.00	125.11	391.97	246.97	270
403-389-5000	NON-OPERATIONAL-CASH FORWARD	0.00	82,400.00	0.00	0.00	82,400.00-	0
403 INDUSTRIAL FUND Revenue Total		20.09	82,545.00	125.11	391.97	82,153.03-	0
Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
403-552-00-0000	INDUSTRIAL PARK:	0.00	0.00	0.00	0.00	0.00	0
403-552-30-3100	PROFESSIONAL SERVICES	0.00	1,000.00	0.00	0.00	1,000.00	0
403-552-30-4900	MISC. EXPENSE & OTHER CURRENT	0.00	0.00	0.00	13.19	13.19-	0
403-552-30-4980	DEPRECIATION EXPENSE	6,607.00	0.00	0.00	0.00	0.00	0
552 INDUSTRIAL PARK:		6,607.00	1,000.00	0.00	13.19	986.81	1
403-580-90-9999	CONTINGENCY	0.00	71,545.00	0.00	0.00	71,545.00	0
403-581-00-0000	INDUSTRIAL PARK:	0.00	0.00	0.00	0.00	0.00	0
403-581-00-0100	TRANSFER TO GENERAL FUND	10,000.00	10,000.00	0.00	10,000.00	0.00	100
403 INDUSTRIAL FUND Expend Total		16,607.00	82,545.00	0.00	10,013.19	72,531.81	12

403 INDUSTRIAL FUND

	Prior	Current	YTD
Revenues:	20.09	125.11	391.97
Expended:	16,607.00	0.00	10,013.19
Net Income:	16,586.91-	125.11	9,621.22-

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Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
404-343-3501	WATER SYSTEM CONNECTION FEES	40,813.56	15,000.00	0.00	7,412.21	7,587.79-	49
404-361-0000	INTEREST	47.95	0.00	0.00	45.39	45.39	0
404-389-5002	CASH FORWARD - WATER CONNECTIONS	0.00	500,000.00	0.00	0.00	500,000.00-	0
404 WATER CONNECTION FEES Revenue Total		40,861.51	515,000.00	0.00	7,457.60	507,542.40-	1
Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
404-533-30-4900	MISC. EXPENSE & OTHER CURRENT	1,114.39	0.00	0.00	331.58	331.58-	0
404-533-70-7352	ASHLEY WTP PROJECT	0.00	380,000.00	0.00	11,860.87	368,139.13	3
533 Total		1,114.39	380,000.00	0.00	12,192.45	367,807.55	3
404-580-90-9909	CONTINGENCY - WATER CONNECTION FEES	0.00	135,000.00	0.00	0.00	135,000.00	0
404 WATER CONNECTION FEES Expend Total		1,114.39	515,000.00	0.00	12,192.45	502,807.55	2

404 WATER CONNECTION FEES

	Prior	Current	YTD
Revenues:	40,861.51	0.00	7,457.60
Expended:	1,114.39	0.00	12,192.45
Net Income:	39,747.12	0.00	4,734.85-

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Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
405-533-30-4900	MISC. EXPENSE & OTHER CURRENT	7.35	0.00	0.00	0.00	0.00	0
405-581-90-9101	TRANSFER TO W/S FUND	31.24	0.00	0.00	0.00	0.00	0
	405 WATER TIE FEES Expend Total	38.59	0.00	0.00	0.00	0.00	0

405 WATER TIE FEES

	Prior	Current	YTD
Revenues:	0.00	0.00	0.00
Expended:	38.59	0.00	0.00
Net Income:	38.59-	0.00	0.00

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Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
406-343-5500	SEWER TAP CONNECTION FEES	86,622.75	15,000.00	0.00	15,731.69	731.69	105
406-361-0000	INTEREST	34.16	0.00	0.00	35.09	35.09	0
406-389-5006	CASH FORWARD - WASTEWATER CONNECTION FEE	0.00	385,000.00	0.00	0.00	385,000.00-	0
	406 WASTEWATER CONNECTION F Revenue Total	86,656.91	400,000.00	0.00	15,766.78	384,233.22-	4

Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
406-535-00-0000	SEWER TAP CONNECTION FEES:	0.00	0.00	0.00	0.00	0.00	0
406-535-30-4900	MISC. EXPENSE & OTHER CURRENT	364.50	0.00	0.00	331.20	331.20-	0
406-535-60-6392	WWTF CLARIFIER DEMO/CONSTRUCTION-DESIGN	0.00	200,000.00	0.00	0.00	200,000.00	0
406-535-60-6393	WILDWOOD ESTATES LS	0.00	120,000.00	0.00	0.00	120,000.00	0
	535 SEWER TAP CONNECTION FEES:	364.50	320,000.00	0.00	331.20	319,668.80	0
406-580-90-5006	CONTINGENCY - WASTEWATER CONNECTION FEES	0.00	80,000.00	0.00	0.00	80,000.00	0
	406 WASTEWATER CONNECTION F Expend Total	364.50	400,000.00	0.00	331.20	399,668.80	0

406 WASTEWATER CONNECTION FEES	Prior	Current	YTD
Revenues:	86,656.91	0.00	15,766.78
Expended:	364.50	0.00	331.20
Net Income:	86,292.41	0.00	15,435.58

CITY OF WILDWOOD
YEAR TO DATE REVENUE-EXPENDITURE REPORT
COMMISSION MEETING OCTOBER 10 2022

Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
407-361-0000	INTEREST	27.00	0.00	0.00	0.00	0.00	0
	407 WASTEWATER TIE FEES Revenue Total	27.00	0.00	0.00	0.00	0.00	0

Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
407-535-00-0000	WASTEWATER TIE FEES:	0.00	0.00	0.00	0.00	0.00	0
407-535-30-3401	DEVELOPER REIMBURSEMENTS	98,983.82	0.00	0.00	0.00	0.00	0
407-581-90-9101	TRANSFER TO W/S FUND	2.50	0.00	0.00	0.00	0.00	0
	407 WASTEWATER TIE FEES Expend Total	98,986.32	0.00	0.00	0.00	0.00	0

407 WASTEWATER TIE FEES

	Prior	Current	YTD
Revenues:	27.00	0.00	0.00
Expended:	98,986.32	0.00	0.00
Net Income:	98,959.32-	0.00	0.00

CITY OF WILDWOOD
YEAR TO DATE REVENUE-EXPENDITURE REPORT
COMMISSION MEETING OCTOBER 10 2022

Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
408-343-3560	WATER SDC FEES	1,554,154.24	1,500,000.00	31,907.20	1,717,366.25	217,366.25	114
408-361-0000	INTEREST EARNED	188.26	100.00	0.00	276.91	176.91	277
408-389-5012	CASH FORWARD - WATER SDC	0.00	2,535,400.00	0.00	0.00	2,535,400.00-	0
408 WATER SDC FEES Revenue Total		1,554,342.50	4,035,500.00	31,907.20	1,717,643.16	2,317,856.84-	43
Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
408-533-30-3401	DEVELOPER REIMBURSEMENTS	487,606.40	0.00	0.00	0.00	0.00	0
408-533-30-4900	MISC. EXPENSE & OTHER CURRENT	92,830.75	0.00	0.00	346.68	346.68-	0
408-533-70-7353	US 301/SR 44 UTILITY RELOCATION	15,000.00	150,000.00	0.00	0.00	150,000.00	0
533 Total		595,437.15	150,000.00	0.00	346.68	149,653.32	0
408-580-90-9914	CONTINGENCY - WATER SDC FUND	0.00	3,629,450.00	0.00	0.00	3,629,450.00	0
408-581-90-9101	TRANSFER TO W/S FUND	139,050.49	0.00	0.00	0.00	0.00	0
408-582-70-7107	SRF PRINCIPAL - OXFORD WTP	0.00	219,100.00	0.00	219,080.26	19.74	100
408-582-70-7207	SRF INTEREST - OXFORD WTP	38,728.11	36,950.00	0.00	36,949.34	0.66	100
582 Total		38,728.11	256,050.00	0.00	256,029.60	20.40	100
408 WATER SDC FEES Expend Total		773,215.75	4,035,500.00	0.00	256,376.28	3,779,123.72	6

408 WATER SDC FEES

	Prior	Current	YTD
Revenues:	1,554,342.50	31,907.20	1,717,643.16
Expended:	773,215.75	0.00	256,376.28
Net Income:	781,126.75	31,907.20	1,461,266.88

CITY OF WILDWOOD
YEAR TO DATE REVENUE-EXPENDITURE REPORT
COMMISSION MEETING OCTOBER 10 2022

Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
409-343-5560	WASTEWATER SDC FEES	2,704,699.33	2,500,000.00	50,129.60	3,022,260.92	522,260.92	121
409-361-0000	INTEREST EARNED	340.85	100.00	0.00	557.94	457.94	558
409-389-5013	CASH FORWARD	0.00	4,200,000.00	0.00	0.00	4,200,000.00-	0
409 WASTEWATER SDC FEES Revenue Total		2,705,040.18	6,700,100.00	50,129.60	3,022,818.86	3,677,281.14-	45
Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
409-535-30-3401	DEVELOPER REIMBURSEMENTS	691,206.94	0.00	0.00	0.00	0.00	0
409-535-30-4900	MISC. EXPENSE & OTHER CURRENT	379.98	0.00	0.00	352.63	352.63-	0
409-535-70-7345	SR 44 FORCEMAIN PROJECT	78.00-	0.00	0.00	0.00	0.00	0
409-535-70-7346	WWTP FACILITY PLAN	0.00	0.00	34,331.25	201,256.25	201,256.25-	0
409-535-70-7349	MISC CAPACITY IMPROVEMENTS	0.00	125,000.00	0.00	124,293.00	707.00	99
409-535-70-7355	BRIDGE CROSSING PROJECT	0.00	215,000.00	0.00	32,760.00	182,240.00	15
409-535-70-7356	WWTF BIOSOLIDS IMPROVEMENTS-DESIGN	0.00	400,000.00	0.00	0.00	400,000.00	0
535 Total		691,508.92	740,000.00	34,331.25	358,661.88	381,338.12	48
409-580-90-9915	CONTINGENCY - WASTEWATER SDC FUND	0.00	5,884,505.00	0.00	0.00	5,884,505.00	0
409-581-90-9101	TRANSFER TO W/S REVENUE FUND	262,301.61	0.00	0.00	0.00	0.00	0
409-582-70-7101	DBT SERV-SRF CRC09 FORCEMAIN DESIGN PRIN	0.00	4,355.00	0.00	4,318.99	36.01	99
409-582-70-7102	DBT SRV-SRF CR209 FM CONSTRUCTION PRIN	0.00	69,770.00	0.00	69,767.37	2.63	100
409-582-70-7200	INTEREST EXPENSE-CR209 FM SRF CONSTRUCTN	372.37	355.00	0.00	351.43	3.57	99
409-582-70-7202	INT EXP.-SRF DESIGN LOAN-CR209 FORCEMAIN	1,218.04	1,115.00	0.00	1,147.23	32.23-	103
582 Total		1,590.41	75,595.00	0.00	75,585.02	9.98	100
409 WASTEWATER SDC FEES Expend Total		955,400.94	6,700,100.00	34,331.25	434,246.90	6,265,853.10	6

409 WASTEWATER SDC FEES

	Prior	Current	YTD
Revenues:	2,705,040.18	50,129.60	3,022,818.86
Expended:	955,400.94	34,331.25	434,246.90
Net Income:	1,749,639.24	15,798.35	2,588,571.96

CITY OF WILDWOOD
YEAR TO DATE REVENUE-EXPENDITURE REPORT
COMMISSION MEETING OCTOBER 10 2022

Revenue Account	Description	Prior Yr Rev	Anticipated	Current Rev	YTD Revenue	Excess/Deficit	% Real
601-351-2000	CONFISCATED PROPERTY	0.00	1,500.00	0.00	0.00	1,500.00-	0
601-361-0000	INTEREST	0.12	10.00	83.14	242.04	232.04	***
601 LAW ENFORCEMENT FUND Revenue Total		0.12	1,510.00	83.14	242.04	1,267.96-	16

Expend Account	Description	Prior Yr Expd	Budgeted	Current Expd	YTD Expended	Balance	% Expd
601-521-00-0000	LAW ENFORCEMENT TRUST:	0.00	0.00	0.00	0.00	0.00	0
601-521-30-4900	MISC. EXPENSE & OTHER CURRENT	45.11	0.00	0.00	36.22	36.22-	0
601-580-90-9999	CONTINGENCY	0.00	52,710.00	0.00	0.00	52,710.00	0
601 LAW ENFORCEMENT FUND Expend Total		45.11	52,710.00	0.00	36.22	52,673.78	0

601 LAW ENFORCEMENT FUND

	Prior	Current	YTD
Revenues:	0.12	83.14	242.04
Expended:	45.11	0.00	36.22
Net Income:	44.99-	83.14	205.82

EXECUTIVE SUMMARY

REQUESTED ACTION: Special Magistrate recommends approval.

Vendor/Entity:

Termination Date:

HISTORY/FACTS/ISSUES:

CASE NUMBER SP 2207-006 VOSO Phase XII D, E, & F Master Plan

PARCEL NUMBER(S) K11-001, K12-001, K12-002, K12-003, K13-001, K13-002, K13-003, K13-011, K13-040, K13-041, K14-001, K14-002, K23-001, & K24-001

ACREAGE 1,459.18 +/-

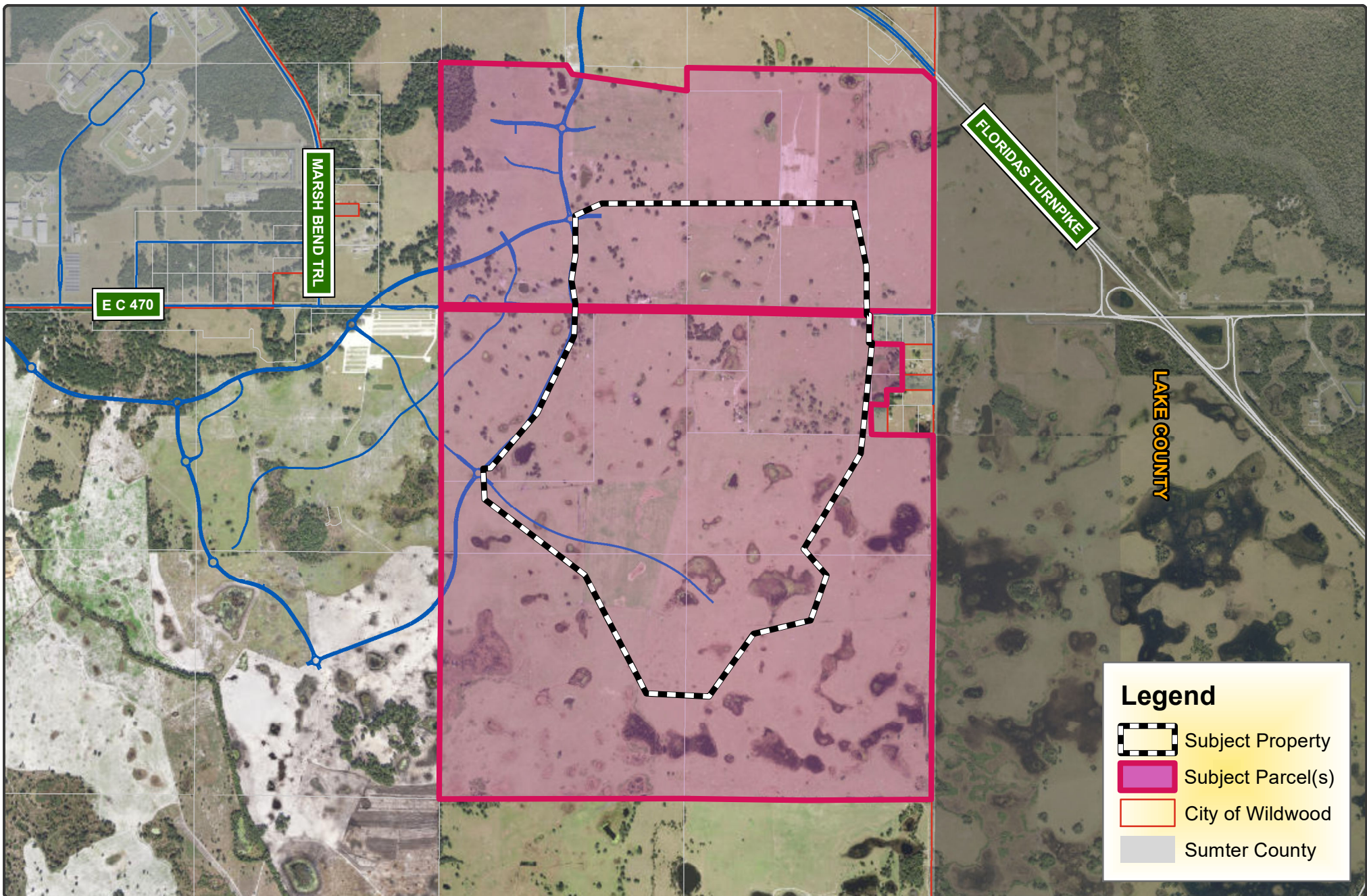
PROPERTY LOCATION	The subject property is generally located north and south along C 470 E, approximately 0.73 miles east of Marsh Bend Trail and approximately 1.21 miles west of the Florida Turnpike.
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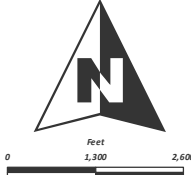
OWNER/APPLICANT The Villages Development Company, LLC

The applicant is seeking approval from the City Commission for VOSO Phase XII D, E & F, a master plan, not to exceed 3,000 dwelling units.

Frank Buck

DATED: 10/04/2022
Amanda Bush
Planner, Development Services



 WILDWOOD FLORIDA	CITY OF WILDWOOD 100 North Main Street Wildwood, FL 34785 Phone: (352) 330-1330 www.wildwood-fl.gov		SP 2207-006		MAP 1B
			VOSO PHASE 12-D, E & F MASTER PLAN		LOCATION MAP
			PORTION OF PARCELS K11-001, K12-001, K12-002, K12-003, K13-001, K13-002, K13-003, K13-011, K13-040, K13-041, K14-001, K14-002, K23-001 & K24-001		AUGUST 2022

City of Wildwood, Florida

Planning & Zoning Board/Special Magistrate

The case below was heard on Tuesday, October 4, 2022 by the Special Magistrate. The applicant is seeking a favorable recommendation from the City of Wildwood Planning and Zoning Board/Special Magistrate for VOSO Phase XII D, E, & F, a master plan, not to exceed 3,000 dwelling units on 1,459.18 acres MOL. The subject property is generally located north and south along C 470 E, approximately 0.73 miles east of Marsh Bend Trail and approximately 1.21 miles west of the Florida Turnpike.

Case: SP 2207-006 VOSO Phase XII D, E, & F Master Plan

Parcels: K11-001, K12-001, K12-002, K12-003, K13-001, K13-002, K13-003
K13-011, K13-040, K13-041, K14-001, K14-002, K23-001, &
K24-001

Owner/Applicant: The Villages Development Company, LLC

Under Land Development Regulation (LDR) § 1.7(B)(1), the Planning and Zoning Board/Special Magistrate has a duty to make a recommendation to the City Commission on all proposed site plans.

Based upon the testimony, evidence, and information presented as to the criteria set forth in LDR § 4.4, the Special Magistrate recommends approval.

Dated: October 4, 2022



Lindsay C.T. Holt
Special Magistrate, City of Wildwood

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: **Roof Replacement for the Fourth Street Outreach Center in the Amount of \$14,300**

REQUESTED ACTION: Staff Recommends Approval

CONTRACT: Vendor/Entity: Bowles Roofing
Effective Date: Termination Date:
Managing Division/Department:

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

Public Works Administration has solicited quotes for roof replacement at the Fourth Street Outreach Center. The roof on the center's main building and storage building need replacement due to age and deterioration of roof shingles and plywood decking. A total of three (3) roofing contractors were contacted for quotes, with all submitting proposals. The proposals were reviewed by Public Works Administration and Facilities and determined that the lowest responsive bidder was Bowles Roofing in the amount of \$14,300.00. Staff is requesting the commission's approval to award the contract to Bowles Roofing.

The Project was funded in the FY23 budget and will be allocated from 301-572-60-6207.



Bowles ROOFING

5891 S.E. 78th Street • Ocala, FL 34472
Phone: (352) 732-9855 • Fax: (352) 245-8211
State License No. CC-C058119

PROPOSAL SUBMITTED TO Terry Bunn	PHONE 661-0284	DATE 9/22/2022
STREET 602 4th St	JOB NAME	
CITY, STATE AND ZIP CODE Wildwood, FL 34785	JOB LOCATION	

We hereby submit specifications and estimates for:

Preparation:

- ☒ Remove existing roofing: One layer
☒ Re-nail decking up to FL Code: 6" inches

Installation:

- ☒ Install new underlayment: Double Layer Synthetic
☒ Install new eave metal: Aluminum Drip Edge
☒ Install new valley flashing: N/A
☒ Install new pipe flashing: Yes
☒ Install new exhaust fan vents: Yes
☒ Install attic ventilation: Shingle Over Ridge Vents

Shingles:

Brand: CertainTeed Landmark Color: _____ Other: _____
25 yr. 3 tab: \$ _____ Lifetime Architectural: \$ 14,300.00 \$ _____

☒ Clean Out Gutters ☒ Haul Away Debris ☒ Magnetic Clean Up

Other: Quote includes two sheets of plywood at no charge \$90.00 per sheet after two.
Quote includes shed/garage. Estimated wood cost will be an additional \$600.00 to \$1,500.00.

Workmanship guaranteed 5 years against leaks.
All of the above to be completed in a substantial and workmanlike manner for the sum of Fouteen
Thousand Three Hundred Dollars (\$ 14,300.00).

Payment to be made as follows: Due upon completion.
This price includes all **licenses, insurance, permits, bonds and taxes.**
We sincerely appreciate your business. Bowles Roofing Company has served our customers for 30 years.
This proposal subject to acceptance within 60 days and is void thereafter at the option of the undersigned.

Cell # 352-789-3428 Submitted By Chris Ramsdell
Signature Company Representative

Acceptance of Contract

You are hereby authorized to furnish all materials and labor required to complete the work according to the terms above and the conditions on the back of this contract, for which we agree to pay the amounts itemized above.

Thank you!

Signature: _____ Date: _____



Batterbee Roofing, Inc. State License #
CCC1326176
4049 NE 120th Xing
Oxford, FL 34484

09/15/2022
Claim Information

Phone: 352-748-6300

Fax: 352-748-6400

Company Representative

Michael Crimi
Phone: (352) 456-1325
michael.crimi@batterbeeroofing.com

Terry Bunn
602 4th Street
Wildwood, FL 34785
(352) 661-0284

Job: BR-27648: Terry Bunn

Complete Roof Replacement-OCOS-100

- Remove one layer existing shingles and underlayment bringing the deck to a clean surface. If additional layers of shingles are discovered it will be \$50 per square for removal of each layer. If roof is greater than 7:12 Pitch additional charges will apply. Initial _____
- Re-nail deck sheathing with 2 3/8" 8D ring shank nails 6" on center per Florida building code.
- Install new eave and rake metal. » 1 3/4" Aluminum drip edge **Note: Will replace eve metal where there are no gutters present.
- Install InterWrap RhinoRoof Granulated Self-Adhered underlayment as secondary water barrier in the valleys. Adds protection against the most vulnerable areas of the roof. RhinoRoof Granulated adheres directly to the deck sheathing.
- Install InterWrap RhinoRoof U20 Synthetic Roofing Underlayment as secondary water barrier. Two Plys of underlayment will be installed to meet Florida Building Code. *Note: 1 of 3 components required for your roof to eligible for the Total Protection Warranty. RhinoRoof synthetic underlayment has a much higher tear strength, repels water, and is more durable than traditional felt papers.
- Install Owens Corning Starter Strip Shingles. **Note: 2 of 3 components required for your roof to eligible for the Total Protection Warranty. Starter shingles are installed at the bottom of the eaves and rakes prior to the first course of shingles being installed. Starter shingles have a properly positioned adhesive strip that adheres to the first course of shingles to help prevent wind blow-off. Starter shingles are required for home to eligible for 130 mph wind warranty rated roof system.
- Install Owens Corning Oakridge Limited Lifetime Dimensional Shingles per specifications using 1 1/4" roofing nails. **Note: 130 mph wind warranty shingles with 4 nail installation. We use 6 nails per shingle. Shingles provide a limited-lifetime warranty.
- Install Owens Corning ProEdge Genuine Hip and Ridge. **Note: 3 of 3 components required for your roof to eligible for the Total Protection Warranty. ProEdge is a hip and ridge product specifically designed for hips and ridges. ProEdge performs better and is aesthetically more appealing with a distinct shadow line. ProEdge is necessary for roof to achieve 130 MPH wind warranty.
- Install Owens Corning Ventsure Shingle Over Ridge Vent for ventilation. **Note: 4th genuine Owens Corning components installed with roofing system. Ventsure is a shingle over ridge vent. Ventsure is installed at the peak of the roof for attic ventilation and provides a seamless finish at the ridge. Roofs may require a secondary ventilation because two types of ventilation are existing on roof. If needed will provide as necessary.
- Install new Bullet Boot Pipe Flashings and Bullet Goosenecks as needed.
- Replacement is necessary when decking is damaged or decaying. Install new 1/2" OSB deck sheathing @ \$115 per sheet. -Install new 1/2' CDX deck sheathing @ \$130 per sheet. Replacement is necessary when decking is damaged or decaying. Install new fascia boards and rafters starting at a cost of \$8.75 per foot. Plywood/OSB greater than a 1/2" will incur additional cost. Replacement required if existing is damaged or decaying. Initial _____
- Clean up job site, run magnet around perimeter to pick up loose nails and haul away all debris.
- Pull permit for roof replacement

Register Owens Corning Total Protection Roofing System Warranty . **Note: Total Protection Roofing System Warranty provides lifetime coverage on shingles and components if there is a material defect. Within the first 10 years the warranty is non-prorated, the warranty covers labor and

material for product failure. After 10 years Owens Corning only covers material only on a pro-rated level.

Batterbee Roofing Workmanship will be for a period of 5 years after completion.

- Due to the current market fluctuations and material shortages, pricing will be guaranteed for 10 days from the date provided.

	Qty	Unit
Materials		
Owens Corning Oakridge AR	36.86	SQ
Owens Corning ProEdge AR (33')	3.03	BD
Owens Corning Starter Strip Plus - 7 3/4" (105')	3.45	BD
InterWrap RhinoRoof U20 Synthetic Underlayment (10 sq)	7.24	RL
Interwrap RhinoRoof Granulated Self Adhered Underlayment (2 SQ)	2.00	RL
Owens Corning VentSure Heat & Moisture Rigid Strip - 12" (4')	22.75	PC
Aluminum Eave Drip - 1 3/4 x 4 3/4" (10')	34.54	PC
Framing Coil Nails - 2 3/8" 8D Ring Shank	1.18	BX
Stinger Roofing Coil Nails 1 1/4"	2.35	BX
Stinger Nail Pack - 1" (2000 Cnt)	3.29	EA
APOC Pro's Choice 104 Plastic Roof Cement (5 Gal)	0.94	EA
Bullet Boot Pipe Flashing - 1 1/2"	1.00	EA
Bullet Boot Pipe Flashing - 2"	1.00	EA
Bullet Boot Pipe Flashing - 3"	2.00	EA
Labor		
Tear off and Install Laminated Shingles	32.91	SQ
Re-nail deck sheathing 6" on center per Florida Building Code	32.91	SQ
Install Architectural Shingles	110.58	BD
Install Hip and Ridge Shingles	3.03	BD
Install Starter Strip Shingles	3.45	BD
Install all pertinent accessories for roof replacment	0.18	EA
Install 1/2" OSB	32.00	BRD
		\$24,199.00

TOTAL	\$24,199.00
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Work Order Service Agreement (No Warranty Claim)

TERMS AND CONDITIONS

1. **Parties to Contract:** This Contract is between Batterbee Roofing, Inc., ("Batterbee") and the homeowner (the "Owner"). Batterbee agrees to perform the work described herein ("the Work"). The Owner agrees to pay Batterbee for the Work in accordance with the terms of the Contract as provided herein.
2. **Management Review:** This Contract is subject to the review and approval by Batterbee's management. Batterbee reserves the right to cancel this Contract for any reason within five business days from the date of the execution of this Contract. If Batterbee cancels this Contract, Batterbee shall provide written Notice of Cancellation to Owner in accordance with Paragraph 25 of this Contract, Batterbee shall be released from any obligations under the Contract, and Batterbee shall refund to Owner any deposits paid by Owner.

- 3. Payment :** Owner hereby agrees to pay Batterbee for the Work in U.S. Funds via cash or cash equivalents, unless otherwise agreed upon in writing. Payments made by credit card will be subject to an additional convenience fee in the amount of 3.5% of the amount charged. Owner agrees to pay Batterbee an initial deposit of 20% of the total contract price at the time of the execution of this Agreement, 30% of the total contract price due upon 50% of Substantial Completion as determined by Batterbee, and the balance of the contract price due upon Substantial Completion of the Work. "Substantial Completion " is defined as that stage of the completion of the Work where the new roof is installed and only minor work is required to complete the Work.
- 4. Invoices/ Service Charge:** Batterbee will issue invoices to Owner for all payments due. Invoices are due and payable upon receipt. Any delay in payment may result in suspension of the Work. Any invoiced amount not paid within ten days will bear interest at 18% per annum (1.5% per month).
- 5. Work Schedule:** Batterbee will schedule the Work upon receipt of the initial deposit described in Paragraph 3 above and finalization of the details of the Work (shingle style & color, aluminum colors, etc.). Batterbee will endeavor to commence the Work within approximately 14 days of delivery of materials to the job site, and Batterbee will endeavor to complete the Work within a reasonable time. Owner acknowledges that commencement of the Work and/or Substantial Completion of the Work may be delayed by weather, unavailability of materials, delays in permitting and/or inspections, manufacturing or shipping delays, government regulations or restrictions, labor disputes including strikes and "lockouts," and other delays that are beyond the control of Batterbee, and that such delays shall extend the time for Substantial Completion of the Work. Batterbee shall have sole discretion in the scheduling, sequencing, and performance of the Work.
- 6. Permit:** Batterbee shall secure all necessary permits for the Work and shall post the Permit on the job site. Owner acknowledges that the Permit must remain posted on the job site for the duration of the Work through final inspection. If the Work fails inspection due to Owner's removal of the posted Permit, Owner shall pay to Batterbee the sum of \$100.00 for the re-inspection fee.
- 7. Materials:** Batterbee shall provide necessary materials to complete the Work as specified. Owner acknowledges that the color and texture of some materials may vary due to variances in manufacturing. Batterbee shall not be responsible for an exact match of any materials, including but not limited to, roofing, siding, metal work, and shingle shading. All materials shall remain the property of Batterbee until Owner has paid all sums due under this Contract. All surplus materials shall remain the property of Batterbee. Batterbee may, in its sole discretion, substitute materials to be used in the Work. Owner is responsible for the cost of replacing lumber, sheathing, trim, or rotted wood necessary for the Work as specified in the Contract. Owner acknowledges that the replacement of rotted or damaged wood products in addition to that specified in the Contract (if any) may be discovered during the performance of the Work. Owner agrees that the cost of any materials or labor relating to the replacement of rotted or damaged wood products in addition to that specified in the Contract is the sole responsibility of Owner and will be addressed in a Change Order in accordance with Paragraph 8 of this Contract
- 8. Changes to Contract Including Scope of the Work:** In the event Batterbee determines that additional labor and/or materials are required to complete the Work, Owner will be responsible for the cost of same. Batterbee shall provide to Owner a written Change Order for the additional labor and materials as soon as practicable. Owner shall pay Batterbee's invoice for the Change Order in accordance with Paragraph 3 above. Owner acknowledges that the total Contract Price is based upon the removal of one layer of shingles. If additional layers of shingles are discovered, Batterbee will issue a Change Order for the additional cost of removing additional layers of shingles. In the event Owner requests a change in the scope of the Work, and said change is accepted by Batterbee, then Owner or his/her agent must sign a Change Order authorizing the change. Owner authorizes any of his /her joint signatories, if any, his/her spouse, co-residents, agents, or employees, to execute and deliver to Batterbee any written Change Order and any other documents necessary to consummate this Contract.
- 9. Owner Responsibilities:** Owner warrants to Batterbee that he/she is the legal owner of the property and otherwise has authority to authorize the Work. Owner agrees to provide to Batterbee access to the property during reasonable hours for the performance of the Work. Owner agrees to provide to Batterbee at no charge, electric power and water necessary for Batterbee to perform the Work. Owner acknowledges that performance of the Work may generate noise and dust, and that performance of the Work may disturb and vibrate the area. Such disturbance and vibration may cause damage to the site of the Work, or to structures adjacent to or near the Work. Such damage includes interior wall or ceiling cracks, flaking of wall or ceiling paint, and damage to items attached to walls or ceilings, .Batterbee is not responsible for such damage. Prior to the commencement of the Work, Owner shall remove from walls or ceilings items such as wall hangings, and chandeliers. Prior to the commencement of the Work, Owner shall advise Batterbee of any subterranean improvements on Owner's property as described in Paragraph 10 below, and Owner shall mark conspicuously any such improvements.
- 10. Damage to Surfaces, Landscaping, Etc.:** Owner acknowledges that the Work will require Batterbee to operate equipment and vehicles on Owner's property. Owner acknowledges that such equipment and vehicles may damage surfaces on Owner's property, including but not limited to concrete, asphalt, pavers, curbing, lawns, and landscaping. Batterbee shall not be responsible for any such damage. Owner acknowledges that operation of equipment and vehicles may damage subterranean improvements on Owner's property, including but not limited to water pipes, irrigation systems, plumbing pipes, plumbing systems, septic tanks, drain fields. and electrical wires, Batterbee shall not be responsible for any such damage. Batterbee is not responsible for roofing debris that may enter Owner's attic and/or damage to piping, wiring, or air conditioning equipment that may be located in Owner's attic. Batterbee shall not be responsible for drywall damage that may occur from resetting or replacing skylights or solar tubes.

- 11. Roof Deck Appearance:** Owner acknowledges that existing roof decking and/or replacement roof decking may exhibit surface variations, "dips," "humps," or "ripples" typically caused by variations in roof truss construction. Owner further acknowledges that such surface variations may become more apparent upon roof replacement. Owner agrees that such surface variations are not the responsibility of Batterbee.
- 12. Removal of Siding and Stucco:** Owner acknowledges that the Work may require the removal of siding material or stucco. Owner authorizes Batterbee to remove siding material or stucco as necessary to complete the Work, and Owner acknowledges that Batterbee is not responsible for replacing or painting such siding material or stucco upon the completion of the Work.
- 13. Cancellation of Contract by Owner:** Owner acknowledges that Batterbee has incurred costs relative to the estimating the cost of the Work, scheduling the Work to the exclusion of other work, and marshaling the labor and materials necessary for the performance of the Work, all in anticipation of performing the Work. The parties agree that Batterbee's costs are difficult or impossible to determine, and therefore the parties agree that in the event Owner cancels this Contract for any reason prior to the commencement of the Work, Batterbee may recover from Owner as liquidated damages, and not as a penalty, an amount equal to 20% of the Contract price. In the event of Owner's cancellation, Batterbee shall submit to Owner an invoice for liquidated damages in accordance with Paragraph 3 above.
- 14. Default:** In the event Owner fails to pay any sum due to Batterbee in accordance with Paragraphs 3, 4 and/or 8 of this Contract, Owner is in default of this Contract, and Batterbee shall be entitled to suspend the Work pending receipt of all payments due. Any default by Owner continuing for ten or more days shall entitle Batterbee to terminate the Contract. In the event of termination of the Contract by Batterbee caused by Owner's default, Batterbee shall be entitled to recover from Owner all sums due and unpaid plus liquidated damages as provided in Paragraph 13 of this Agreement.
- 15. Attorney Fees:** In the event of a dispute regarding the interpretation, performance, or breach of any of the obligations created by this Contract, the prevailing party shall recover from the non-prevailing party its reasonable attorney fees and costs, whether or not suit is filed.
- 16. Warranty and Exclusions:** Any warranty on the Work or any component thereof is subject to the conditions set forth in any documents pertaining to said warranty and the terms of this Paragraph 16. Owner must provide to Batterbee written notification of any warranty claim in accordance with Paragraph 25 of this Contract and within ten days of discovery of the warranty issue. No warranty shall be effective unless and until Owner has paid all sums due under this Contract. Owner's failure to provide notice to Batterbee of any warranty claim as required by Paragraph 25 within 10 days of Owner's discovery of warranty issue shall release Batterbee and any third party from any warranty obligations. If Owner authorizes any third party to alter or disturb Batterbee's work, then Owner thereby releases Batterbee from any warranty claims. Batterbee does not warrant materials utilized by Batterbee in the performance of the Work, including caulking materials, sealant, reflective coatings, painted surfaces, and metal materials, and Owner's claims for any warranty on materials must be directed to the manufacturer of said materials. Owner acknowledges that some wood material utilized in the work may be subject to cracking, splitting, warping, or shrinkage, and such wood material is not warranted against such conditions. Batterbee is not responsible for improper sloping of roof structure or roof decking and water "ponding" or drainage problems caused thereby. Batterbee's warranty is contingent on Owner maintaining and cleaning gutters if so equipped, and roof leaks attributable to improperly maintained or obstructed gutters are not warranted by Batterbee. Batterbee Roofing will not provide a workmanship warranty nor be responsible for any damages that result from the reuse of existing skylights or solar tubes. Workmanship warranty is non-transferable to new ownership unless written notice is provided within 30 days of new ownership and \$250.00 transfer is paid to Batterbee Roofing.
- 17. Limitations on Batterbee's Liability:** Owner acknowledges that at no time shall Batterbee's liability under any warranty exceed the total Contract Price. Batterbee's responsibility for damages to Owner's property is limited as set forth in Paragraph 10 above. In any event, if Owner claims that Batterbee is responsible for damage to Owner's property, Owner must provide to Batterbee written notice of Owner's claim within 48 hours of the occurrence of the damage in accordance with Paragraph 25 of this Contract. The failure of Owner to provide Batterbee with timely notice of Owner's claim of damages in accordance with this Contract shall release Batterbee for any claim for damages.
- 18. Insurance:** Owner represents to Batterbee that he/she will maintain in full force and effect homeowner's insurance on the property and structures where the Work will be performed. Batterbee shall, in amounts and with carriers subject to Batterbee's sole discretion, provide workers' compensation insurance and liability insurance for the Work, unless such insurance is supplied by the Owner or a third party.
- 19. Financing:** Owner represents to Batterbee that Owner has funds available to pay the Contract Price. If Owner is financing the Contract Price through a third party, Owner shall remain primarily responsible to Batterbee for the Contract Price, and Owner shall execute such documents and take such other action as may be required by the third party to secure funding.
- 20. Service Calls:** Service calls requested by the Owner shall be included in the written workmanship warranty only if the call for service is a warranted service call. On service calls where it is deemed by Batterbee to be a non-warranted item, the Owner will be charged for the service call or work performed at Batterbee's established rates.

21. Entire Agreement: This Contract constitutes the entire agreement between the parties. No employee or agent of Batterbee. is authorized to make any promises or representations not recited in this Contract, and Owner acknowledges that Batterbee is not required to fulfill any promise or representation that is not recited in this Contract . Except for Change Orders described in Paragraph 8, any modification of this Contract must be in writing and signed by both parties.

22. Severability: If any provisions, paragraphs or sub-paragraphs of this Contract are adjudged by any court to be void or unenforceable in whole or in part, this adjudication shall not affect the validity of the remainder of this Contractt. Each provision of this Contract is severable from every other provision, and constitutes a separate and distinct covenant.

23. No Waiver: Batterbee may accept late payments, partial payments, and/or checks, bank drafts, or money orders marked "Paid in Full" without waiving any of its rights related to this Contract.

24. Governing Law:/Venue: This Contract is made and entered into in the State of Florida and the laws of Florida shall govern its validity and interpretation. The parties agree that in the event of any litigation regarding this Contract, the exclusive venue for any proceeding shall lie in the appropriate Court in Marion County, Florida; provided, however, that the venue of any litigation regarding a Construction Lien recorded by Batterbee in accordance with Chapter 713, Florida Statutes, shall lie in the County in which the lien property is situated.

25. Notices: Any Notices required by this Contract shall be forwarded to the recipient via electronic mail, or Certified Mail, return receipt requested as follows:

Batterbee Roofing, Inc.
Attention Justin Blandford
4049 NE 120th Xing Oxford, FL 34484
Email: Justin@batterbeeroofing.com

26. Gender: Wherever in this Agreement reference is made to the masculine gender, it shall be construed to include the feminine gender and vice versa unless the context clearly indicates otherwise.

27. Copy of Contract: Owner acknowledges receipt of a copy of this Contract via electronic mail

.....

_____ Company Authorized Signature	_____ Date
_____ Customer Signature	_____ Date
_____ Customer Signature	_____ Date

Southern Pro Roofing LLC

15760 SE 36th Ave
Summerfield, FL 34491 US
352-209-5504
southernproroofingllc@gmail.com



Estimate

ADDRESS	SHIP TO	ESTIMATE	1016
City of Wildwood	City of Wildwood	DATE	09/12/2022
604 fourth Street	604 fourth Street		
Wildwood, Fl 34785	Wildwood, Fl 34785		

DATE	ACTIVITY	DESCRIPTION	QTY	RATE	AMOUNT
	Shingle Roof Installation	-Install Limited lifetime Architectural Shingle Roof. -New Eve trim and flashings -Re nailing Entire Deck Per New Fl Code. -Double Underlayment Per Fl. Code -All Permits Included. -5 year Workmanship Included. *Price is Per Sq. (100 sq ft)	38	410.00	15,580.00
	Roof Tear-Off	Tear-off Dispose of All material.	38	45.00	1,710.00
	PlyWood Replacement	Plywood replacement By the Sheet- -\$100 Per sheet replaced (decided during Installation and added to final invoice.)	45	100.00	4,500.00
	Facia Board replacement	facia Board is By the Linear Ft. \$20 Per ft Not included Unless customer Request, IF rotten boards are found during install we will consult With Owner to decide further actions. Any additional Sheets will BE \$100	206	20.00	4,120.00

TOTAL					\$25,910.00
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Accepted By

Accepted Date

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: Public Works Pole Barn in the Amount of \$117,400

REQUESTED ACTION: Staff Recommends Approval

CONTRACT: Vendor/Entity: Southern Pro Fence & Gates
Effective Date: Termination Date:
Managing Division/Department: Public Works

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

Public Works Administration, along with Kimley-Horn, has solicited contractual services for the building of a pole barn at the Public Works facility through a Request for Proposals (RFP). The RFP for the requested services was issued on Demand Star. The RFP closed on October 4, 2022, with a total of two (2) qualified vendors submitting proposals. Kimley-Horn reviewed the bids to evaluate the vendors' proposals according to the RFP criteria. Based on the review from Kimley-Horn, Southern Pro Fence & Gates submittal was chosen as the lowest responsive bidder in the amount of \$117,400.00. The Project was funded in the FY23 budget and will be allocated from 301-572-60-6203.



October 4, 2022

Mr. Thomas Rigwood
City of Wildwood
100 North Main Street
Wildwood, FL 34785

**RE: *City of Wildwood Public Works Pole Barn Bid Recommendation
Kimley-Horn Project No. 142173000 – Task 0257***

Dear Mr. Rigwood:

We have reviewed the construction bid received for the above referenced project. As of the deadline on October 4, 2022, at 12:00 p.m. two bids were received and opened at 12:05 p.m. on October 4, 2022. The bids received were responsive.

Based upon our review of the documents submitted, Southern Pro Fence & Gate was the lowest responsive bidder with a bid in the amount of \$117,400.00. Attached is a copy the bid received.

Kimley-Horn does not object to the City of Wildwood selecting Southern Pro Fence & Gate as the lowest responsive bidder.

Please feel free to contact us should you have any questions.

Sincerely,
KIMLEY-HORN

Mohammed Murad, PE

Attachment: Bid Document

Cc: Jeremy Hockenbury, City of Wildwood

\\kimley-horn.com\FL_OCA\OCA_Civil\142173000 - City Engineering Support\Additional Tasks\0257 - Wildwood PW Pole Barn\Bid Admin\Bid Recommendation Letter\Ltr20221004mm_Bid Recommendation.docx

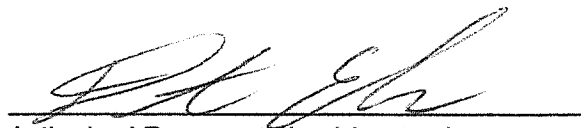
SECTION 00003 – CERTIFICATION PAGE
CONTRACT DOCUMENTS FOR
CITY OF WILDWOOD PUBLIC WORKS POLE BARN

I certify that the contract documents contained in this booklet are the original contract documents and I have read and understood the conditions stated herein.

I further certify that I have received a copy of these contract documents and any additional information referenced to be a part thereof.

I further certify that I was afforded the opportunity to ask any question regarding the contract documents and engineering plans.

CONTRACTOR: Southern Pro Fence & Gate


Authorized Representative (signature)

Dustin Enochs / Owner
(print name and title)

END OF SECTION

SECTION 00020 – INVITATION TO BID
CITY OF WILDWOOD PUBLIC WORKS POLE BARN

DATE: 10/3/2022

ITB Number: 142173000-0257

NOTICE IS HEREBY GIVEN that the City of Wildwood will receive sealed bids for construction of **CITY OF WILDWOOD PUBLIC WORKS POLE BARN**.

All contractors licensed by the State of Florida are hereby invited to submit a bid on the above referenced project. Bids will be received until 12:00 p.m. on September 30, 2022, at the City Commission Chambers at the Wildwood City Hall, 100 North Main Street, Wildwood, Florida 34785.

DESCRIPTION OF WORK: Bids shall be submitted for furnishing, delivering, and installing all materials, equipment, and services, including labor for the Work, which generally involves the following activities:

The Project consists of a design-build procurement of a new 4000 square foot red metal building at the City of Wildwood Public Works property located at Parcel #G05-113 on S. Palmer Drive, Wildwood, Florida 34785, see Exhibit 01 attached. The Owner reserves the right to adjust the scope and limits of construction at any time during the bidding or execution of the Work.

Under this bid the contractor shall include all work necessary to provide a completely new 4,000 square foot metal building facility at the above location consisting of the following components:

1. 40' x 100' rigid frame clean span metal building meeting all current building code requirements.
2. Building shall have 12' high eave.
3. Building shall have 26 gauge panels.
4. Building shall have concrete floor with 1 inch crown down the center.
5. Building shall have 5' concrete approach ramps.
6. Building shall have Closed gable ends.

The contractor shall include all work, costs, labor, etc. to provide a fixed price for the above building including, but not limited to:

1. Review of building shop drawings with City of Wildwood for approval
2. All design calculations and permit plans
3. Building permit
4. Final certificate of occupancy

The successful bidder shall include a description of the building that will be provided under this proposal, including manufacturer information and structural details.

CONTRACT TIME: As part of the Bid the Contractor is required to prepare and submit a construction schedule showing major construction milestones and times for completion.

PRE-BID MEETING: A pre-bid meeting will not be conducted.

END OF SECTION

SECTION 00100 – INSTRUCTIONS TO BIDDER

A. DEFINITION

1. Bidding documents include the Invitation to Bid, Instructions to Bidders, Bid Form, other sample bidding and contract forms, and the proposed Contract Documents, including any Addenda issued prior to receipt of bids.

B. COPIES

1. Bidding Documents may be obtained in compliance with the Invitation to Bid. No partial sets of the Bidding documents will be issued. Complete sets of Bidding Documents shall be used in preparing bids; neither the Owner nor the Engineer will assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

C. QUESTIONS

1. Any Bidder who is in doubt as to the true meaning of any part of the Bidding documents, or finds a discrepancy or omission therein, may submit to the City of Wildwood (as indicated in C.2 below) a written request for an interpretation or correction. All questions shall be submitted no later than 5:00pm on September 26, 2022. Questions submitted after that time may not be answered.
2. All questions concerning the Bid Documents and plans shall be directed to the Public Works Department by email to trigwood@wildwood-fl.gov. Any interpretation, correction or change of the bidding Documents will be made in writing by the City. Interpretations, corrections, or changes made in any other manner will not be binding.

EXAMINATION OF DOCUMENTS AND INSPECTION OF SITE

- A. Before submitting a Bid, Bidders shall carefully examine the Bidding Documents and inspect the project site to fully inform themselves of all existing conditions and limitations. Each Bidder, by submitting his Bid, represents that he has so examined the Bidding Documents and inspected the site, that he understands the provisions of the Bidding Documents and that he has familiarized himself with the local conditions under which the work is to be performed. Bidders will not be given extra payment or contract time for conditions which could have been determined by such examinations.

BIDDING PROCEDURE

A. FORM OF BID

1. Each Bid shall be submitted on the Bid Form (Section 300) prepared by the Engineer and included as part of the Bidding Documents. The Bidder is not permitted to make changes in the Bid Form provided. The Bidder shall fill in spaces on the Bid Form by typewriter or manually in ink. When a Bidder submits a Bid with spaces containing erasures or other changes, each erasure or change must be initialed by the person signing the Bid. The Bidder must fill in all relevant blank spaces.
2. No conditional Bids will be accepted. Oral proposals or modifications will not be considered.
3. The Bid shall include the legal name of the Bidder and a statement whether the Bidder is a sole proprietor, a partnership, a corporation, or any other legal entity, and the Bid shall be signed by the person or persons legally authorized to bind the Bidder to a Contract. A Bid by a corporation shall further give the State of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current Power of Attorney attached certifying agent's authority to bind Bidder.
4. All bidders must be licensed contractors capable of performing the scope of work necessary to satisfactorily complete the project.

B. SUBMISSION OF BIDS

1. One (1) original and two (2) copies of the following items shall be submitted in a sealed envelope marked **"Sealed Bid for Public Works Pole Barn, City of Wildwood, Project # 142173000-0257"**. The envelope shall also bear on the outside the Bidder's name and address. Failure to submit all required Bid Documents may result in the bid being deemed as non-responsive.
 - a. Certification Page
 - b. Bid Form
 - c. Public Entities Crime Statement
 - d. Drug Free Workplace Form
 - e. Hold Harmless Agreement
 - f. Proposed Schedule showing major construction milestones and proposed number of calendar days to reach Substantial and Final Completion
 - g. Project Reference Form Documents – Minimum of three references must be provided

C. BID OPENING

1. The Owner, in its best interest, reserves complete and total authority to determine the completeness of any and all Bid Documents and may, at its discretion, waive any informalities or minor defects or reject any and all Bids.
2. The Owner, in its best interest, reserves complete and total authority to select the successful Bidder based on price, schedule, references and qualifications and prior work history, or based on any combination of the above criteria that will, in the Owner's opinion, result in the selection of the best Contractor for the Work.

D. MODIFICATION AND WITHDRAWAL

1. Bids may not be modified after submittal.
2. Bidders may withdraw Bids at any time prior to the Bid Opening time and date. Withdrawal requests shall be made in writing and must be received by the Owner before the time and date stated or as amended for the Bid Opening. Properly withdrawn Bids will be returned to the person or firm submitting the Bid.
3. A Bidder who withdraws his Bid may submit a new Bid in the same manner as specified herein under "Submission of Bid". A Bid submitted in place of a withdrawn Bid shall be clearly marked as such on the outside of the envelope and on the Bid form.
4. If a Contract is not awarded within ninety (90) calendar days after opening of Bids, a Bidder may file a written request with the Owner for the withdrawal of his Bid.

E. BIDDER'S INTEREST IN MORE THAN ONE BID

1. No person, firm, or corporation shall be allowed to make, file, or have an interest in more than one Bid for the same work, unless Alternates are called for. A person, firm or corporation who has submitted a sub-bid to a Bidder or who has quoted prices on materials to a Bidder is not hereby disqualified from submitting a sub-bid or quoting prices to other Bidders.

END OF SECTION

SECTION 00300 – BID FORM

1. The undersigned Bidder does hereby declare that he has carefully examined the Bid Documents, and project addenda relating to the above entitled matter and the work, and has also examined the site.
2. The undersigned Bidder hereby declares that he has based his proposal on the conditions as they exist on site and has noted all items of work required of the project that is not illustrated on the plans.
3. The undersigned does hereby offer and agree to furnish all materials, to fully and faithfully construct, perform and execute all work in the above titled matter in accordance with the Plans, Drawings and Specifications relating thereto.
4. The undersigned does hereby declare that the prices so stated cover all expenses of every kind incidental to the completion of said work, and the contract therefore, including all claims that may arise through damages or any other causes whatsoever.
5. The undersigned does hereby declare that he shall make no claim on account of minor variation of the approximate estimate in the work to be done, nor on account of any misunderstanding or misconception of the nature of the work to be done or the grounds or place where it is to be done.
6. The undersigned does also declare and agree that he will commence the work within ten (10) days after notification by the ENGINEER to do so and will complete the work fully and in every respect on or before the time specified in said contract.

7. The Bidder acknowledges having received the following project addenda:

No. 1, Date: 9-14-2022

No. 2, Date: 9-27-2022

No. _____, Date: _____

No. _____, Date: _____

No. _____, Date: _____

No. _____, Date: _____

8. By submission of this bid, each bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that this bid has been arrived at independently, without consultation, communication or agreement as to any matter relating to this bid with any other bidder or with any competitor.

Grand Total amounts are to be shown in both words and figures. In case of discrepancies, the amount in words will govern.

GRAND TOTAL: \$ 117,400.00

WORDS: One hundred seventeen thousand four hundred & no/100.

THIS PROPOSAL DATED THIS 3rd day of Oct., 2022.

ATTEST:

Witness:

Denise Enochs
Signature

By:

[Signature]
Authorized Signature (Principal)

Denise Enochs
Printed Name

Dustin Enochs/Owner
Printed Name, Title

Southern Pro Fence & Ga
Company Name

Address:

15760 SE 36 Ave.
Summerfield, FL 34491

Employee I.D. No.

C.GC1528650
Florida State Certified General
Contractor's License Number

Telephone Number:

352-572-1747

END OF SECTION

SECTION 00302 – PUBLIC ENTITY CRIMES STATEMENT

NOTICE TO BIDDERS: This form must be properly completed, executed and returned with the Bid Documents in order for your bid to be considered. Failure to do so will result in automatic disqualification.

SWORN STATEMENT UNDER SECTION 287.133(3)(a), FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

(To be signed in the presence of a notary public or other officer authorized to administer oaths.)

STATE OF Florida
COUNTY: Marion

Before me, the undersigned authority, personally appeared Dustin Enochs
who, being by me first duly sworn, made the following statement:

1. The business address of Southern Pro Fence & Gate (name of Bidder or contractor) is 15760 SE 36 Ave. Summerfield, FL 34491.

2. My relationship Dustin Enochs (name of Bidder or contractor) is Owner (relationship such as sole proprietor, partner, president, vice president).

3. I understand that a public entity crime as defined in Section 287.133 of the Florida Statutes includes a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity in Florida or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or such an agency or political subdivision and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

4. I understand that "convicted" or "conviction" is defined by the statute to mean a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilt or nolo contendere.

5. I understand that "affiliate" is defined by the statute to mean (1) a predecessor or successor of a person or a corporation convicted of a public entity crime, or (2) an entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime, or (3) those officer, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate, or (4) a person or corporation who knowingly entered into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months.

6. Neither the Bidder or contractor nor any officer, director, executive, partner, shareholder, employee, member or agent who is active in the management of the Bidder or contractor nor any affiliate of the Bidder or contractor has been convicted of a public entity crime subsequent to July 1, 1989.

(Draw a line through paragraph 6 if paragraph 7 below applies.)

7. ~~There has been a conviction of a public entity crime by the Bidder or contractor, or an officer, director, executive, partner, shareholder, employee, member or agent of the Bidder or contractor who is active in the management of the Bidder or contractor or an affiliate of the Bidder or contractor. A determination has been made pursuant to Section 287.133(3) by order of the Division of Administrative Hearings that it is not in the public interest for the name of the convicted person or affiliate to appear on the convicted vendor list. The name of the convicted person or affiliate is n/a. A copy of the order of the Division of Administrative Hearings is attached to this statement.~~

~~(Draw a line through paragraph 7 if paragraph 6 above applies.)~~

Sworn to and subscribed before me in the state and county first mentioned above on the 3rd day of October, 2022.

Signed: Colton Howell
Notary Public

(Affix seal)



My commission expires: July 2026

END OF SECTION

SECTION 00303 – DRUG FREE WORKPLACE FORM

The undersigned vendor in accordance with the Florida Statute 287.067 hereby certifies that Southern Pro Fence & Gate does:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about dangers of drug abuse in the workplace, the business' policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees from drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employees will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of chapter 1893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm fully complies with the above requirements.


Bidder's Signature

10-3-2022
Date

END OF SECTION

SECTION 00304 –HOLD HARMLESS AGREEMENT

The Contractor/Vendor is required to purchase and maintain minimum limits of \$1,000,000 per occurrence for all liability, which includes general liability and, if applicable, automobile liability. Other coverage may be required where applicable.

The Contractor/Vendor agrees to hold the City of Wildwood harmless against all claims for bodily injury, sickness, disease, death or personal injury or damage to property or loss of use resulting there from, arising out of the agreement, unless such claims are a result of the County's sole negligence.

The Contractor/Vendor shall purchase and maintain workers' compensation insurance for all workers' compensation obligations imposed by state law and employer's liability limits of at least \$100,000 each accident and \$100,000 each employee/\$500,000 policy limit for disease. Even if the Contractor/Vendor is not required by state law to secure workers' compensation insurance, the Contractor/Vendor shall purchase and maintain worker's compensation insurance in order to perform or provide services to City of Wildwood. This is the standard requirement however; the Financial Services Department can perform a special review as needed on a case-by-case basis for the Contractor/Vendor.

The Contractor/Vendor shall also purchase any other coverage required by law for the benefit of employees.

Required insurance shall be documented in Certificates of Insurance and shall be provided to the County representative requesting the service.

By signature upon this form the Contractor/Vendor stipulates that he/she agrees to the Hold Harmless Agreement, and to abide by all insurance requirements.

Dustin Enochs
Contractor/Vendor-Print Name


Signature

Public Works Pole Barn
Project Name

10-3-2022
Date

The effective dates of this Hold Harmless Agreement shall be for the current Fiscal Year.

END OF SECTION

SECTION 00652 – REFERENCE FORM
PUBLIC WORKS POLE BARN
REFERENCE & SIMILAR PROJECTS FORM

Owner / Business Name: <u>University of Florida, UFIS, ESC</u>		
Project Name / Location / Address: <u>2645 NW 100th St.</u>		
City: <u>Ocala</u>	State:	Zip Code:
Point of Contact: <u>Sean Mountain</u>	Dates of Work: <u>4/13/2022</u>	
Phone Number: <u>352-672-7835</u>	Fax Number: <u>n/a</u>	
E-mail Address: <u>smountain73@ufl.edu</u>		
Original Contract Amount: <u>\$42,595.00</u>	Final Contract Amount Including all Change Orders: <u>\$42,595.00</u>	
Brief Description of Project: <u>40 X 72 X 14</u> <u>Metal truss engineered pole barn</u> <u>closed gables</u> <u>Gutters</u>		

SECTION 00652 – REFERENCE FORM
PUBLIC WORKS POLE BARN
REFERENCE & SIMILAR PROJECTS FORM

Owner / Business Name: <u>University of Florida, Horse Teaching Unit</u>		
Project Name / Location / Address: <u>1934 SW 63rd Ave.</u>		
City: <u>Gainesville</u>	State: <u>FL</u>	Zip Code: <u>32608</u>
Point of Contact: <u>Sean Mountain</u>		Dates of Work: <u>1/25/2021</u>
Phone Number: <u>352-672-7835</u>		Fax Number: <u>n/a</u>
E-mail Address: <u>smountain73@ufl.edu</u>		
Original Contract Amount: <u>\$56,465.00</u>		Final Contract Amount Including all Change Orders: <u>\$56,465.00</u>
Brief Description of Project: <u>60 x 110' Red Iron Building</u> <u>Concrete piers</u> <u>Closed Gables</u>		

SECTION 00652 – REFERENCE FORM
PUBLIC WORKS POLE BARN
REFERENCE & SIMILAR PROJECTS FORM

Owner / Business Name: <u>Gene Batson</u>		
Project Name / Location / Address: <u>16770 Keene Rd</u>		
City: <u>Umatilla</u>	State: <u>FL</u>	Zip Code: <u>32784</u>
Point of Contact: <u>Gene Batson</u>		Dates of Work: <u>Present</u>
Phone Number: <u>352-516-0420</u>		Fax Number: <u>n/a</u>
E-mail Address: <u>genebatson@gmail.com</u>		
Original Contract Amount: <u>\$ 149,886.00</u>		Final Contract Amount Including all Change Orders: <u>\$ 149,886.00</u>
Brief Description of Project: • 60 x 60 Red Iron Building • 60 x 60 Concrete Slab • Engineered Plans • Fully enclosed with 26 guage metal and roll up doors/walk doors • Site Prep		

CITY OF WILDWOOD PUBLIC WORKS POLE BARN

ADDENDUM NO. 1

DATE: September 14, 2022

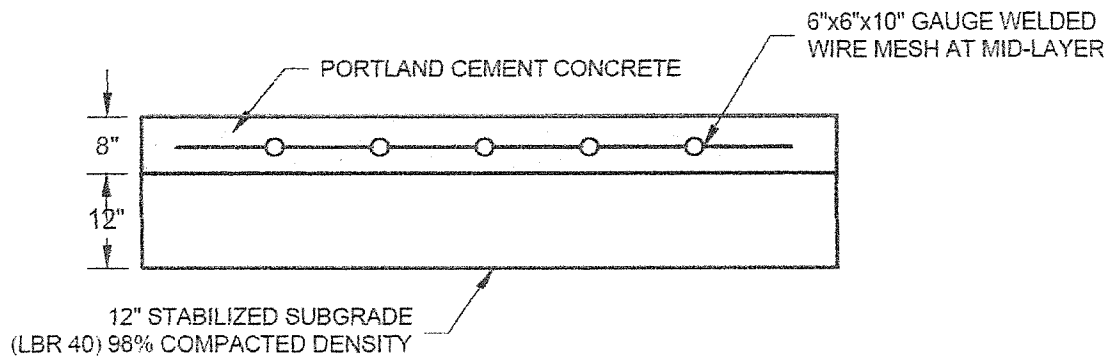
Bid Number: 1421-73000-0257

This addendum forms a part of the Specifications and modifies the original Document as noted. Acknowledge receipt of this Addendum in the appropriate portion of Section 00300 with the submitted bid. Failure to do so may subject the proposer to disqualification.

Submitted Questions:

1. Is there any way we can get some more details on the concrete slab that is to be poured with the building? Depth, what type of concrete is wanted (PSI, Fiber), rebar? Or is there already a concrete slab on site?

Response: There is no existing concrete slab on site. The concrete slab will be per the following detail:



NOTE:

1. CONTRACTOR SHALL REMOVE ALL UNSUITABLE MATERIAL SUCH AS CLAY AND ROOTS PER AGENCY REQUIREMENTS. ALL CONCRETE JOINTING SHALL BE PER FDOT INDEX NO. 310.
2. CONCRETE JOINTS WILL BE INSTALL PER FDOT STANDARDS.
3. PORTLAND CEMENT CONCRETE (MIN. 28-DAY COMPRESSIVE STRENGTH AT 4,000 PSI PER FDOT SECTION 346)
3. CONCRETE SHALL BE PREPARED, FORMED, POURED AND CURED IN ACCORDANCE WITH ACI 330.

TYPICAL CONCRETE PAVEMENT SECTION

N.T.S.

2. I'm assuming since not mentioned, there are no doors, windows or walls?

Response: See attached photos. No doors, no windows.

3. The approach ramps on just one 40' side or all 4 sides?
Response: Just one side, follow existing pole barn. See attached.
4. What is the use of this building? Is 4", 3,000 psi enough for the floor?
Response: Vehicle and outdoor storage.
5. What wind load is required?
Response: Code minimum per local requirements.
6. What roof slope is desired?
Response: Typical slope, not steep, see attached to match existing.
7. Are there any utilities or irrigation in the way or being installed?
Response: Contractor to call 811 before digging.
8. Trowel or broom finish?
Response: Trowel.
9. Estimated costs of permits?
Response: Not available.
10. Is there an estimated Budget?
Response: Not available.

ATTACHMENTS: Photos for reference

END OF SECTION

CITY OF WILDWOOD PUBLIC WORKS POLE BARN

ADDENDUM NO. 2

DATE: September 27, 2022

Bid Number: 1421-73000-0257

This addendum forms a part of the Specifications and modifies the original Document as noted. Acknowledge receipt of this Addendum in the appropriate portion of Section 00300 with the submitted bid. Failure to do so may subject the proposer to disqualification.

NOTE:

DUE TO THE FORECAST OF INCLEMENT WEATHER EXPECTED WITH HURRICANE IAN,
THE BID SUBMISSION DEADLINE AND OPENING DATE WILL BE POSTPONED TO
TUESDAY, OCTOBER 4TH, 2022 AT 12:00 P.M.

END OF SECTION

Construction Schedule Timeline

- 1) Approximate Building Delivery time frame is 22 weeks from order date.
- 2) Site Prep/Concrete (ground work, grading, clearing of site, etc.) can approximately begin 12 weeks prior to building.
- 3) Construction should take approximately 7 - 10 days to completion depending on weather delays and/or supply issues.

Submitted by:



Date:

10-3-2022

Southern Pro Fence

15760 SE 36th Ave
 Summerfield, FL 34491
 352-572-1747
 southernprofence@gmail.com

**Estimate**

ADDRESS
 City Of wildwood
 Wildwood Fl

SHIP TO
 City Of wildwood
 Wildwood Fl

ESTIMATE# 2476
 DATE 09/27/2022

DATE	ACTIVITY	DESCRIPTION	QTY	RATE	AMOUNT
	Red Iron Building Enclosed	1 - 40' x 100' x 12' - 1:12 ROOF PITCH W/ 4 @ 25' BAY SPACINGS 1 - 40' POST & BEAM FRAMING ON LEFT ENDWALL W/ 2 @ 20' SPACINGS 1 - 40' POST & BEAM FRAMING ON RIGHT ENDWALL W/ 2 @ 20' SPACINGS MAIN FRAMES: 3 RIGID FRAMES CLEAR SPAN ROOF: 26 GAUGE PBR GALVALUME W/ DIE-FORMED RIDGE CAP FRONT SIDEWALL: OPEN TO REMAIN BACK SIDEWALL: OPEN TO REMAIN LEFT ENDWALL: 26 GAUGE PBR COLOR W/ FLUSH GIRTS RIGHT ENDWALL: 26 GAUGE PBR COLOR W/ FLUSH GIRTS 1 WIND COLUMN BRACING ON FRONT SIDEWALL 1 WIND COLUMN BRACING ON BACK SIDEWALL FL ENGINEER STRUCTURAL STAMPED DRAWINGS 200' OF SCULPTURED GUTTER W/ DOWNSPOUTS NOTE: ANCHOR BOLTS NOT INCLUDED	1	36,000.00	36,000.00T

THIS BUILDING DESIGNED TO
 MEET THE FBC 20 CLOSED CODE
 SPECIFICATIONS FOR
 12/20/123 MPH (3 SECOND
 GUST) W/ 0# COLLATERAL,

EXPOSURE "B", RISK CATEGORY I,
LOW HAZARD TO HUMAN LIFE

Rediron Building Erection, with Gutters. Enclosed	Labor to Erect Enclosed Metal building Including gutters. Enclosed only on 40' endwalls	4,000	6.50	26,000.00
Site prep, Ground scrape.	* prep ground work is based on #1 in Addendum 1 Question #1 with 12" scape and fill.	5,000	1.75	8,750.00T
	Scraping Ground and prepping for bam or concrete pad -Includes Compact fill dirt to Fill scarped ground and All prep work. - Compacted to 98% density.			
Anchor Bolts	3/4" J-bolts with Nuts and washers. -Includes J-bolts welded together in pattern to set in pad.	50	18.00	900.00T
Concrete, Red iron Building	45'x100' Slab ****Concrete Based on On Addendum #1 Question #1 Detail for 8" thick Slab ****	4,500	9.50	42,750.00T
	Labor and materials to Form prep and pour Concrete for red iron building. -Includes prepping all steel for footers and timing in. - Includes setting all anchor Bolts -Pour and finish and saw cut -8" thick slab -3000psi concrete -6x6" Wire mesh included -Plastic and termite treating included.			
Engineering and permitting	Permitting for Iron Pole bam -Permitting and associated costs for county Permitting	1	3,000.00	3,000.00T

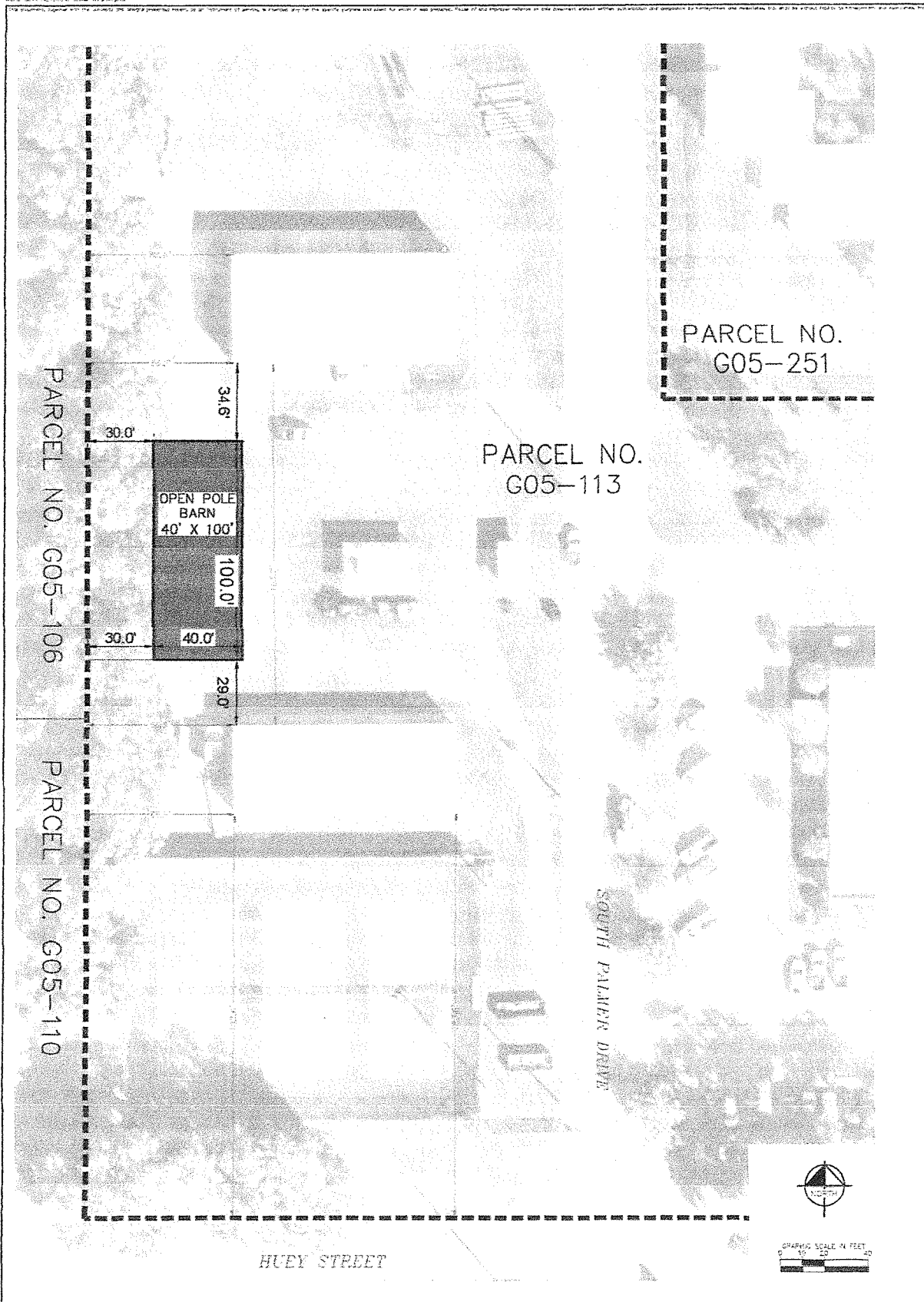
SUBTOTAL 117,400.00

TAX 0.00

TOTAL **\$117,400.00**

Accepted By

Accepted Date



EX-01	WILDWOOD PW POLE BARN PREPARED FOR CITY OF WILDWOOD CLAY COUNTY FLORIDA	POLE BARN EXHIBIT	KHA PROJECT 142173000		LISCENSED PROFESSIONAL KIMLEY-HORN	KIMLEY-HORN AND ASSOCIATES, INC. 101 EAST BAYVIEW AVENUE, SUITE 200, MIAMI, FL 33131 PHONE: 305-468-1000 FAX: 305-468-1001 WWW.KIMLEY-HORN.COM	SHEET NO. DATE
			DATE 8/10/2011	SCALE AS SHOWN			
			DESIGNED BY KHA	STATE LICENSE NUMBER 91245			
			DRAWN BY KHA	CHECKED BY KHA			

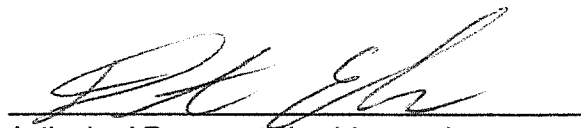
SECTION 00003 – CERTIFICATION PAGE
CONTRACT DOCUMENTS FOR
CITY OF WILDWOOD PUBLIC WORKS POLE BARN

I certify that the contract documents contained in this booklet are the original contract documents and I have read and understood the conditions stated herein.

I further certify that I have received a copy of these contract documents and any additional information referenced to be a part thereof.

I further certify that I was afforded the opportunity to ask any question regarding the contract documents and engineering plans.

CONTRACTOR: Southern Pro Fence & Gate


Authorized Representative (signature)

Dustin Enochs / Owner
(print name and title)

END OF SECTION

SECTION 00020 – INVITATION TO BID
CITY OF WILDWOOD PUBLIC WORKS POLE BARN

DATE: 10/3/2022

ITB Number: 142173000-0257

NOTICE IS HEREBY GIVEN that the City of Wildwood will receive sealed bids for construction of **CITY OF WILDWOOD PUBLIC WORKS POLE BARN**.

All contractors licensed by the State of Florida are hereby invited to submit a bid on the above referenced project. Bids will be received until 12:00 p.m. on September 30, 2022, at the City Commission Chambers at the Wildwood City Hall, 100 North Main Street, Wildwood, Florida 34785.

DESCRIPTION OF WORK: Bids shall be submitted for furnishing, delivering, and installing all materials, equipment, and services, including labor for the Work, which generally involves the following activities:

The Project consists of a design-build procurement of a new 4000 square foot red metal building at the City of Wildwood Public Works property located at Parcel #G05-113 on S. Palmer Drive, Wildwood, Florida 34785, see Exhibit 01 attached. The Owner reserves the right to adjust the scope and limits of construction at any time during the bidding or execution of the Work.

Under this bid the contractor shall include all work necessary to provide a completely new 4,000 square foot metal building facility at the above location consisting of the following components:

1. 40' x 100' rigid frame clean span metal building meeting all current building code requirements.
2. Building shall have 12' high eave.
3. Building shall have 26 gauge panels.
4. Building shall have concrete floor with 1 inch crown down the center.
5. Building shall have 5' concrete approach ramps.
6. Building shall have Closed gable ends.

The contractor shall include all work, costs, labor, etc. to provide a fixed price for the above building including, but not limited to:

1. Review of building shop drawings with City of Wildwood for approval
2. All design calculations and permit plans
3. Building permit
4. Final certificate of occupancy

The successful bidder shall include a description of the building that will be provided under this proposal, including manufacturer information and structural details.

CONTRACT TIME: As part of the Bid the Contractor is required to prepare and submit a construction schedule showing major construction milestones and times for completion.

PRE-BID MEETING: A pre-bid meeting will not be conducted.

END OF SECTION

SECTION 00100 – INSTRUCTIONS TO BIDDER

A. DEFINITION

1. Bidding documents include the Invitation to Bid, Instructions to Bidders, Bid Form, other sample bidding and contract forms, and the proposed Contract Documents, including any Addenda issued prior to receipt of bids.

B. COPIES

1. Bidding Documents may be obtained in compliance with the Invitation to Bid. No partial sets of the Bidding documents will be issued. Complete sets of Bidding Documents shall be used in preparing bids; neither the Owner nor the Engineer will assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

C. QUESTIONS

1. Any Bidder who is in doubt as to the true meaning of any part of the Bidding documents, or finds a discrepancy or omission therein, may submit to the City of Wildwood (as indicated in C.2 below) a written request for an interpretation or correction. All questions shall be submitted no later than 5:00pm on September 26, 2022. Questions submitted after that time may not be answered.
2. All questions concerning the Bid Documents and plans shall be directed to the Public Works Department by email to trigwood@wildwood-fl.gov. Any interpretation, correction or change of the bidding Documents will be made in writing by the City. Interpretations, corrections, or changes made in any other manner will not be binding.

EXAMINATION OF DOCUMENTS AND INSPECTION OF SITE

- A. Before submitting a Bid, Bidders shall carefully examine the Bidding Documents and inspect the project site to fully inform themselves of all existing conditions and limitations. Each Bidder, by submitting his Bid, represents that he has so examined the Bidding Documents and inspected the site, that he understands the provisions of the Bidding Documents and that he has familiarized himself with the local conditions under which the work is to be performed. Bidders will not be given extra payment or contract time for conditions which could have been determined by such examinations.

BIDDING PROCEDURE

A. FORM OF BID

1. Each Bid shall be submitted on the Bid Form (Section 300) prepared by the Engineer and included as part of the Bidding Documents. The Bidder is not permitted to make changes in the Bid Form provided. The Bidder shall fill in spaces on the Bid Form by typewriter or manually in ink. When a Bidder submits a Bid with spaces containing erasures or other changes, each erasure or change must be initialed by the person signing the Bid. The Bidder must fill in all relevant blank spaces.
2. No conditional Bids will be accepted. Oral proposals or modifications will not be considered.
3. The Bid shall include the legal name of the Bidder and a statement whether the Bidder is a sole proprietor, a partnership, a corporation, or any other legal entity, and the Bid shall be signed by the person or persons legally authorized to bind the Bidder to a Contract. A Bid by a corporation shall further give the State of incorporation and have the corporate seal affixed. A Bid submitted by an agent shall have a current Power of Attorney attached certifying agent's authority to bind Bidder.
4. All bidders must be licensed contractors capable of performing the scope of work necessary to satisfactorily complete the project.

B. SUBMISSION OF BIDS

1. One (1) original and two (2) copies of the following items shall be submitted in a sealed envelope marked **"Sealed Bid for Public Works Pole Barn, City of Wildwood, Project # 142173000-0257"**. The envelope shall also bear on the outside the Bidder's name and address. Failure to submit all required Bid Documents may result in the bid being deemed as non-responsive.
 - a. Certification Page
 - b. Bid Form
 - c. Public Entities Crime Statement
 - d. Drug Free Workplace Form
 - e. Hold Harmless Agreement
 - f. Proposed Schedule showing major construction milestones and proposed number of calendar days to reach Substantial and Final Completion
 - g. Project Reference Form Documents – Minimum of three references must be provided

C. BID OPENING

1. The Owner, in its best interest, reserves complete and total authority to determine the completeness of any and all Bid Documents and may, at its discretion, waive any informalities or minor defects or reject any and all Bids.
2. The Owner, in its best interest, reserves complete and total authority to select the successful Bidder based on price, schedule, references and qualifications and prior work history, or based on any combination of the above criteria that will, in the Owner's opinion, result in the selection of the best Contractor for the Work.

D. MODIFICATION AND WITHDRAWAL

1. Bids may not be modified after submittal.
2. Bidders may withdraw Bids at any time prior to the Bid Opening time and date. Withdrawal requests shall be made in writing and must be received by the Owner before the time and date stated or as amended for the Bid Opening. Properly withdrawn Bids will be returned to the person or firm submitting the Bid.
3. A Bidder who withdraws his Bid may submit a new Bid in the same manner as specified herein under "Submission of Bid". A Bid submitted in place of a withdrawn Bid shall be clearly marked as such on the outside of the envelope and on the Bid form.
4. If a Contract is not awarded within ninety (90) calendar days after opening of Bids, a Bidder may file a written request with the Owner for the withdrawal of his Bid.

E. BIDDER'S INTEREST IN MORE THAN ONE BID

1. No person, firm, or corporation shall be allowed to make, file, or have an interest in more than one Bid for the same work, unless Alternates are called for. A person, firm or corporation who has submitted a sub-bid to a Bidder or who has quoted prices on materials to a Bidder is not hereby disqualified from submitting a sub-bid or quoting prices to other Bidders.

END OF SECTION

SECTION 00300 – BID FORM

1. The undersigned Bidder does hereby declare that he has carefully examined the Bid Documents, and project addenda relating to the above entitled matter and the work, and has also examined the site.
2. The undersigned Bidder hereby declares that he has based his proposal on the conditions as they exist on site and has noted all items of work required of the project that is not illustrated on the plans.
3. The undersigned does hereby offer and agree to furnish all materials, to fully and faithfully construct, perform and execute all work in the above titled matter in accordance with the Plans, Drawings and Specifications relating thereto.
4. The undersigned does hereby declare that the prices so stated cover all expenses of every kind incidental to the completion of said work, and the contract therefore, including all claims that may arise through damages or any other causes whatsoever.
5. The undersigned does hereby declare that he shall make no claim on account of minor variation of the approximate estimate in the work to be done, nor on account of any misunderstanding or misconception of the nature of the work to be done or the grounds or place where it is to be done.
6. The undersigned does also declare and agree that he will commence the work within ten (10) days after notification by the ENGINEER to do so and will complete the work fully and in every respect on or before the time specified in said contract.

7. The Bidder acknowledges having received the following project addenda:

No. 1, Date: 9-14-2022

No. 2, Date: 9-27-2022

No. _____, Date: _____

No. _____, Date: _____

No. _____, Date: _____

No. _____, Date: _____

8. By submission of this bid, each bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that this bid has been arrived at independently, without consultation, communication or agreement as to any matter relating to this bid with any other bidder or with any competitor.

Grand Total amounts are to be shown in both words and figures. In case of discrepancies, the amount in words will govern.

GRAND TOTAL: \$ 117,400.00

WORDS: One hundred seventeen thousand four hundred & no/100.

THIS PROPOSAL DATED THIS 3rd day of Oct., 2022.

ATTEST:

Witness:

Denise Enochs
Signature

By:

[Signature]
Authorized Signature (Principal)

Denise Enochs
Printed Name

Dustin Enochs/Owner
Printed Name, Title

Southern Pro Fence & Ga
Company Name

Address:

15760 SE 36 Ave.
Summerfield, FL 34491

Employee I.D. No.

C.GC1528650
Florida State Certified General
Contractor's License Number

Telephone Number:

352-572-1747

END OF SECTION

SECTION 00302 – PUBLIC ENTITY CRIMES STATEMENT

NOTICE TO BIDDERS: This form must be properly completed, executed and returned with the Bid Documents in order for your bid to be considered. Failure to do so will result in automatic disqualification.

SWORN STATEMENT UNDER SECTION 287.133(3)(a), FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

(To be signed in the presence of a notary public or other officer authorized to administer oaths.)

STATE OF Florida
COUNTY: Marion

Before me, the undersigned authority, personally appeared Dustin Enochs
who, being by me first duly sworn, made the following statement:

1. The business address of Southern Pro Fence & Gate (name of Bidder or contractor) is 15760 SE 36 Ave. Summerfield, FL 34491.

2. My relationship Dustin Enochs (name of Bidder or contractor) is Owner (relationship such as sole proprietor, partner, president, vice president).

3. I understand that a public entity crime as defined in Section 287.133 of the Florida Statutes includes a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity in Florida or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or such an agency or political subdivision and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

4. I understand that "convicted" or "conviction" is defined by the statute to mean a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilt or nolo contendere.

5. I understand that "affiliate" is defined by the statute to mean (1) a predecessor or successor of a person or a corporation convicted of a public entity crime, or (2) an entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime, or (3) those officer, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate, or (4) a person or corporation who knowingly entered into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months.

6. Neither the Bidder or contractor nor any officer, director, executive, partner, shareholder, employee, member or agent who is active in the management of the Bidder or contractor nor any affiliate of the Bidder or contractor has been convicted of a public entity crime subsequent to July 1, 1989.

(Draw a line through paragraph 6 if paragraph 7 below applies.)

7. ~~There has been a conviction of a public entity crime by the Bidder or contractor, or an officer, director, executive, partner, shareholder, employee, member or agent of the Bidder or contractor who is active in the management of the Bidder or contractor or an affiliate of the Bidder or contractor. A determination has been made pursuant to Section 287.133(3) by order of the Division of Administrative Hearings that it is not in the public interest for the name of the convicted person or affiliate to appear on the convicted vendor list. The name of the convicted person or affiliate is n/a. A copy of the order of the Division of Administrative Hearings is attached to this statement.~~

~~(Draw a line through paragraph 7 if paragraph 6 above applies.)~~

Sworn to and subscribed before me in the state and county first mentioned above on the 3rd day of October, 2022.

Signed: Colton Howell
Notary Public

(Affix seal)



My commission expires: July 2026

END OF SECTION

SECTION 00303 – DRUG FREE WORKPLACE FORM

The undersigned vendor in accordance with the Florida Statute 287.067 hereby certifies that Southern Pole Fence & Gate does:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about dangers of drug abuse in the workplace, the business' policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees from drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employees will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of chapter 1893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm fully complies with the above requirements.


Bidder's Signature

10-3-2022
Date

END OF SECTION

SECTION 00304 –HOLD HARMLESS AGREEMENT

The Contractor/Vendor is required to purchase and maintain minimum limits of \$1,000,000 per occurrence for all liability, which includes general liability and, if applicable, automobile liability. Other coverage may be required where applicable.

The Contractor/Vendor agrees to hold the City of Wildwood harmless against all claims for bodily injury, sickness, disease, death or personal injury or damage to property or loss of use resulting there from, arising out of the agreement, unless such claims are a result of the County's sole negligence.

The Contractor/Vendor shall purchase and maintain workers' compensation insurance for all workers' compensation obligations imposed by state law and employer's liability limits of at least \$100,000 each accident and \$100,000 each employee/\$500,000 policy limit for disease. Even if the Contractor/Vendor is not required by state law to secure workers' compensation insurance, the Contractor/Vendor shall purchase and maintain worker's compensation insurance in order to perform or provide services to City of Wildwood. This is the standard requirement however; the Financial Services Department can perform a special review as needed on a case-by-case basis for the Contractor/Vendor.

The Contractor/Vendor shall also purchase any other coverage required by law for the benefit of employees.

Required insurance shall be documented in Certificates of Insurance and shall be provided to the County representative requesting the service.

By signature upon this form the Contractor/Vendor stipulates that he/she agrees to the Hold Harmless Agreement, and to abide by all insurance requirements.

Dustin Enochs
Contractor/Vendor-Print Name


Signature

Public Works Pole Barn
Project Name

10-3-2022
Date

The effective dates of this Hold Harmless Agreement shall be for the current Fiscal Year.

END OF SECTION

SECTION 00652 – REFERENCE FORM
PUBLIC WORKS POLE BARN
REFERENCE & SIMILAR PROJECTS FORM

Owner / Business Name: <u>University of Florida, UFIS, ESC</u>		
Project Name / Location / Address: <u>2645 NW 100th St.</u>		
City: <u>Ocala</u>	State:	Zip Code:
Point of Contact: <u>Sean Mountain</u>	Dates of Work: <u>4/13/2022</u>	
Phone Number: <u>352-672-7835</u>	Fax Number: <u>n/a</u>	
E-mail Address: <u>smountain73@ufl.edu</u>		
Original Contract Amount: <u>\$42,595.00</u>	Final Contract Amount Including all Change Orders: <u>\$42,595.00</u>	
Brief Description of Project: 40 X 72 X 14 Metal truss engineered pole barn closed gables Gutters		

SECTION 00652 – REFERENCE FORM
PUBLIC WORKS POLE BARN
REFERENCE & SIMILAR PROJECTS FORM

Owner / Business Name: <u>University of Florida, Horse Teaching Unit</u>		
Project Name / Location / Address: <u>1934 SW 63rd Ave.</u>		
City: <u>Gainesville</u>	State: <u>FL</u>	Zip Code: <u>32608</u>
Point of Contact: <u>Sean Mountain</u>		Dates of Work: <u>1/25/2021</u>
Phone Number: <u>352-672-7835</u>		Fax Number: <u>n/a</u>
E-mail Address: <u>smountain73@ufl.edu</u>		
Original Contract Amount: <u>\$56,465.00</u>		Final Contract Amount Including all Change Orders: <u>\$56,465.00</u>
Brief Description of Project: 60 x 110' Red Iron Building Concrete piers Closed Gables		

SECTION 00652 – REFERENCE FORM
PUBLIC WORKS POLE BARN
REFERENCE & SIMILAR PROJECTS FORM

Owner / Business Name: <u>Gene Batson</u>		
Project Name / Location / Address: <u>16770 Keene Rd</u>		
City: <u>Umatilla</u>	State: <u>FL</u>	Zip Code: <u>32784</u>
Point of Contact: <u>Gene Batson</u>		Dates of Work: <u>Present</u>
Phone Number: <u>352-516-0420</u>		Fax Number: <u>n/a</u>
E-mail Address: <u>genebatson@gmail.com</u>		
Original Contract Amount: <u>\$ 149,886.00</u>		Final Contract Amount Including all Change Orders: <u>\$ 149,886.00</u>
Brief Description of Project: • 60 x 60 Red Iron Building • 60 x 60 Concrete Slab • Engineered Plans • Fully enclosed with 26 guage metal and roll up doors/walk doors • Site Prep		

CITY OF WILDWOOD PUBLIC WORKS POLE BARN

ADDENDUM NO. 1

DATE: September 14, 2022

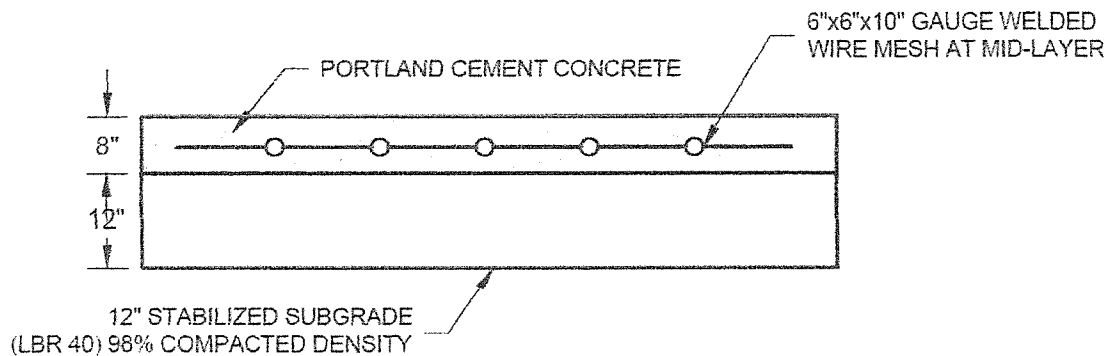
Bid Number: 1421-73000-0257

This addendum forms a part of the Specifications and modifies the original Document as noted. Acknowledge receipt of this Addendum in the appropriate portion of Section 00300 with the submitted bid. Failure to do so may subject the proposer to disqualification.

Submitted Questions:

1. Is there any way we can get some more details on the concrete slab that is to be poured with the building? Depth, what type of concrete is wanted (PSI, Fiber), rebar? Or is there already a concrete slab on site?

Response: There is no existing concrete slab on site. The concrete slab will be per the following detail:



NOTE:

1. CONTRACTOR SHALL REMOVE ALL UNSUITABLE MATERIAL SUCH AS CLAY AND ROOTS PER AGENCY REQUIREMENTS. ALL CONCRETE JOINTING SHALL BE PER FDOT INDEX NO. 310.
2. CONCRETE JOINTS WILL BE INSTALL PER FDOT STANDARDS.
3. PORTLAND CEMENT CONCRETE (MIN. 28-DAY COMPRESSIVE STRENGTH AT 4,000 PSI PER FDOT SECTION 346)
3. CONCRETE SHALL BE PREPARED, FORMED, POURED AND CURED IN ACCORDANCE WITH ACI 330.

TYPICAL CONCRETE PAVEMENT SECTION

N.T.S.

2. I'm assuming since not mentioned, there are no doors, windows or walls?

Response: See attached photos. No doors, no windows.

3. The approach ramps on just one 40' side or all 4 sides?
Response: Just one side, follow existing pole barn. See attached.
4. What is the use of this building? Is 4", 3,000 psi enough for the floor?
Response: Vehicle and outdoor storage.
5. What wind load is required?
Response: Code minimum per local requirements.
6. What roof slope is desired?
Response: Typical slope, not steep, see attached to match existing.
7. Are there any utilities or irrigation in the way or being installed?
Response: Contractor to call 811 before digging.
8. Trowel or broom finish?
Response: Trowel.
9. Estimated costs of permits?
Response: Not available.
10. Is there an estimated Budget?
Response: Not available.

ATTACHMENTS: Photos for reference

END OF SECTION

CITY OF WILDWOOD PUBLIC WORKS POLE BARN

ADDENDUM NO. 2

DATE: September 27, 2022

Bid Number: 1421-73000-0257

This addendum forms a part of the Specifications and modifies the original Document as noted. Acknowledge receipt of this Addendum in the appropriate portion of Section 00300 with the submitted bid. Failure to do so may subject the proposer to disqualification.

NOTE:

DUE TO THE FORECAST OF INCLEMENT WEATHER EXPECTED WITH HURRICANE IAN,
THE BID SUBMISSION DEADLINE AND OPENING DATE WILL BE POSTPONED TO
TUESDAY, OCTOBER 4TH, 2022 AT 12:00 P.M.

END OF SECTION

Construction Schedule Timeline

- 1) Approximate Building Delivery time frame is 22 weeks from order date.
- 2) Site Prep/Concrete (ground work, grading, clearing of site, etc.) can approximately begin 12 weeks prior to building.
- 3) Construction should take approximately 7 - 10 days to completion depending on weather delays and/or supply issues.

Submitted by:

Date:



10-3-2022

Southern Pro Fence

15760 SE 36th Ave
 Summerfield, FL 34491
 352-572-1747
 southernprofence@gmail.com

**Estimate**

ADDRESS
 City Of wildwood
 Wildwood Fl

SHIP TO
 City Of wildwood
 Wildwood Fl

ESTIMATE 2476
 DATE 09/27/2022

DATE	ACTIVITY	DESCRIPTION	QTY	RATE	AMOUNT
	Red Iron Building Enclosed	1 - 40' x 100' x 12' - 1:12 ROOF PITCH W/ 4 @ 25' BAY SPACINGS 1 - 40' POST & BEAM FRAMING ON LEFT ENDWALL W/ 2 @ 20' SPACINGS 1 - 40' POST & BEAM FRAMING ON RIGHT ENDWALL W/ 2 @ 20' SPACINGS MAIN FRAMES: 3 RIGID FRAMES CLEAR SPAN ROOF: 26 GAUGE PBR GALVALUME W/ DIE-FORMED RIDGE CAP FRONT SIDEWALL: OPEN TO REMAIN BACK SIDEWALL: OPEN TO REMAIN LEFT ENDWALL: 26 GAUGE PBR COLOR W/ FLUSH GIRTS RIGHT ENDWALL: 26 GAUGE PBR COLOR W/ FLUSH GIRTS 1 WIND COLUMN BRACING ON FRONT SIDEWALL 1 WIND COLUMN BRACING ON BACK SIDEWALL FL ENGINEER STRUCTURAL STAMPED DRAWINGS 200' OF SCULPTURED GUTTER W/ DOWNSPOUTS NOTE: ANCHOR BOLTS NOT INCLUDED	1	36,000.00	36,000.00T

THIS BUILDING DESIGNED TO
 MEET THE FBC 20 CLOSED CODE
 SPECIFICATIONS FOR
 12/20/123 MPH (3 SECOND
 GUST) W/ 0# COLLATERAL,

EXPOSURE "B", RISK CATEGORY I,
LOW HAZARD TO HUMAN LIFE

Rediron Building Erection, with Gutters. Enclosed	Labor to Erect Enclosed Metal building Including gutters. Enclosed only on 40' endwalls	4,000	6.50	26,000.00
Site prep, Ground scrape.	* prep ground work is based on #1 in Addendum 1 Question #1 with 12" scape and fill.	5,000	1.75	8,750.00T
	Scraping Ground and prepping for bam or concrete pad -Includes Compact fill dirt to Fill scarped ground and All prep work. - Compacted to 98% density.			
Anchor Bolts	3/4" J-bolts with Nuts and washers. -Includes J-bolts welded together in pattern to set in pad.	50	18.00	900.00T
Concrete, Red iron Building	45'x100' Slab ****Concrete Based on On Addendum #1 Question #1 Detail for 8" thick Slab ****	4,500	9.50	42,750.00T
	Labor and materials to Form prep and pour Concrete for red iron building. -Includes prepping all steel for footers and timing in. - Includes setting all anchor Bolts -Pour and finish and saw cut -8" thick slab -3000psi concrete -6x6" Wire mesh included -Plastic and termite treating included.			
Engineering and permitting	Permitting for Iron Pole bam -Permitting and associated costs for county Permitting	1	3,000.00	3,000.00T

SUBTOTAL 117,400.00

TAX 0.00

TOTAL **\$117,400.00**

Accepted By

Accepted Date

original

SECTION 00003 – CERTIFICATION PAGE
CONTRACT DOCUMENTS FOR
CITY OF WILDWOOD PUBLIC WORKS POLE BARN

I certify that the contract documents contained in this booklet are the original contract documents and I have read and understood the conditions stated herein.

I further certify that I have received a copy of these contract documents and any additional information referenced to be a part thereof.

I further certify that I was afforded the opportunity to ask any question regarding the contract documents and engineering plans.

CONTRACTOR: PSG Concrete & Excavation, LLC



Authorized Representative (signature)

Ken Wood, Managing Member

(print name and title)

END OF SECTION

SECTION 00300 – BID FORM

1. The undersigned Bidder does hereby declare that he has carefully examined the Bid Documents, and project addenda relating to the above entitled matter and the work, and has also examined the site.
2. The undersigned Bidder hereby declares that he has based his proposal on the conditions as they exist on site and has noted all items of work required of the project that is not illustrated on the plans.
3. The undersigned does hereby offer and agree to furnish all materials, to fully and faithfully construct, perform and execute all work in the above titled matter in accordance with the Plans, Drawings and Specifications relating thereto.
4. The undersigned does hereby declare that the prices so stated cover all expenses of every kind incidental to the completion of said work, and the contract therefore, including all claims that may arise through damages or any other causes whatsoever.
5. The undersigned does hereby declare that he shall make no claim on account of minor variation of the approximate estimate in the work to be done, nor on account of any misunderstanding or misconception of the nature of the work to be done or the grounds or place where it is to be done.
6. The undersigned does also declare and agree that he will commence the work within ten (10) days after notification by the ENGINEER to do so and will complete the work fully and in every respect on or before the time specified in said contract.
7. The Bidder acknowledges having received the following project addenda:

No. 1 , Date: 9/14/22

No. , Date:

No. , Date:

No. , Date:

No. , Date:

No. , Date:
8. By submission of this bid, each bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that this bid has been arrived at independently, without consultation, communication or agreement as to any matter relating to this bid with any other bidder or with any competitor.

Grand Total amounts are to be shown in both words and figures. In case of discrepancies, the amount in words will govern.

GRAND TOTAL: \$ \$293,724.00

WORDS: Two Hundred & Ninety Three Thousand, Seven Hundred, Twenty Four Dollars and Zero Cents.

THIS PROPOSAL DATED THIS 26 day of September 2022.

ATTEST:

Witness:

Nathan G. Lowden
Signature

By:

[Signature]
Authorized Signature (Principal)

Nathan Lowden
Printed Name

Ken Wood, Managing member
Printed Name, Title

PSG Concrete & Excavation, LLC
Company Name

Address:

2101 Stratford Drive

Deland, FL 32724

87-2759907
Employee I.D. No.

CRC1329556
Florida State Certified General
Contractor's License Number

Telephone Number:

386-804-4678 & 386-847-4988

END OF SECTION

SECTION 00302 – PUBLIC ENTITY CRIMES STATEMENT

NOTICE TO BIDDERS: This form must be properly completed, executed and returned with the Bid Documents in order for your bid to be considered. Failure to do so will result in automatic disqualification.

SWORN STATEMENT UNDER SECTION 287.133(3)(a), FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

(To be signed in the presence of a notary public or other officer authorized to administer oaths.)

STATE OF Florida

COUNTY: Volusia

Before me, the undersigned authority, personally appeared Ken Wood who, being by me first duly sworn, made the following statement:

1. The business address of PSG Concrete & Excavation, LLC (name of Bidder or contractor) is 2101 Stratford Drive, Deland, FL 32724.

2. My relationship PSG Concrete & Excavation, LLC (name of Bidder or contractor) is Sole Proprietor (relationship such as sole proprietor, partner, president, vice president).

3. I understand that a public entity crime as defined in Section 287.133 of the Florida Statutes includes a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity in Florida or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or such an agency or political subdivision and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

4. I understand that "convicted" or "conviction" is defined by the statute to mean a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilt or nolo contendere.

5. I understand that "affiliate" is defined by the statute to mean (1) a predecessor or successor of a person or a corporation convicted of a public entity crime, or (2) an entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime, or (3) those officer, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate, or (4) a person or corporation who knowingly entered into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months.

6. Neither the Bidder or contractor nor any officer, director, executive, partner, shareholder, employee, member or agent who is active in the management of the Bidder or contractor nor any affiliate of the Bidder or contractor has been convicted of a public entity crime subsequent to July 1, 1989.

(Draw a line through paragraph 6 if paragraph 7 below applies.)

~~7. There has been a conviction of a public entity crime by the Bidder or contractor, or an officer, director, executive, partner, shareholder, employee, member or agent of the Bidder or contractor who is active in the management of the Bidder or contractor or an affiliate of the Bidder or contractor. A determination has been made pursuant to Section 287.133(3) by order of the Division of Administrative Hearings that it is not in the public interest for the name of the convicted person or affiliate to appear on the convicted vendor list. The name of the convicted person or affiliate is _____.~~
A copy of the order of the Division of Administrative Hearings is attached to this statement.

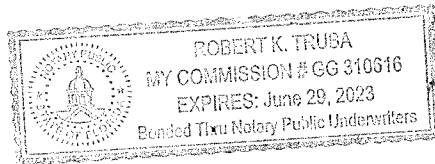
(Draw a line through paragraph 7 if paragraph 6 above applies.)

Sworn to and subscribed before me in the state and county first mentioned above on the 26 day of

September, 2022.

Signed: _____
Notary Public

(Affix seal)



My commission expires: _____

END OF SECTION

SECTION 00303 – DRUG FREE WORKPLACE FORM

The undersigned vendor in accordance with the Florida Statute 287.087 hereby certifies that PSG Concrete & Excavation, LLC does:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about dangers of drug abuse in the workplace, the business' policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees from drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employees will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of chapter 1893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm fully complies with the above requirements.



Bidder's Signature

9/26/22

Date

END OF SECTION

SECTION 00304 –HOLD HARMLESS AGREEMENT

The Contractor/Vendor is required to purchase and maintain minimum limits of \$1,000,000 per occurrence for all liability, which includes general liability and, if applicable, automobile liability. Other coverage may be required where applicable.

The Contractor/Vendor agrees to hold the City of Wildwood harmless against all claims for bodily injury, sickness, disease, death or personal injury or damage to property or loss of use resulting there from, arising out of the agreement, unless such claims are a result of the County's sole negligence.

The Contractor/Vendor shall purchase and maintain workers' compensation insurance for all workers' compensation obligations imposed by state law and employer's liability limits of at least \$100,000 each accident and \$100,000 each employee/\$500,000 policy limit for disease. Even if the Contractor/Vendor is not required by state law to secure workers' compensation insurance, the Contractor/Vendor shall purchase and maintain worker's compensation insurance in order to perform or provide services to City of Wildwood. This is the standard requirement however; the Financial Services Department can perform a special review as needed on a case-by-case basis for the Contractor/Vendor.

The Contractor/Vendor shall also purchase any other coverage required by law for the benefit of employees.

Required insurance shall be documented in Certificates of Insurance and shall be provided to the County representative requesting the service.

By signature upon this form the Contractor/Vendor stipulates that he/she agrees to the Hold Harmless Agreement, and to abide by all insurance requirements.

PSG Concrete & Excavation, LLC
Contractor/Vendor-Print Name


Signature Ken Wood, Managing Member

Public Works Pole Barn, City of Wildwood, Project # 142173000-0257
Project Name

9/26/22
Date

The effective dates of this Hold Harmless Agreement shall be for the current Fiscal Year.

END OF SECTION



Concrete & Excavation, LLC
2101 Stratford Drive
Deland, Florida 32724

Public Works Pole Barn, City of Wildwood, Project #142173000-0257

Schedule.

Up to 30 Calendar days for engineering drawings.

Up to 30 Calendar Days for Permitting.

15 Calendar days for base, compaction tests, termite bond and completed foundation.

90 Calendar days for erection of building and substantial completion.

15 calendar days for COO and Final Completion.

SECTION 00652 – REFERENCE FORM
PUBLIC WORKS POLE BARN
REFERENCE & SIMILAR PROJECTS FORM

Owner / Business Name: Tim Lincoln		
Project Name / Location / Address: 1414 Beulah Rd.		
City: Winter Garden	State: FLorida	Zip Code: 34787
Point of Contact: Tim Lincoln		Dates of Work: On-Going
Phone Number: 407-761-3202		Fax Number: None
E-mail Address: twlincoln56@aol.com		
Original Contract Amount: \$750,000.00		Final Contract Amount Including all Change Orders: Still Under construction
Brief Description of Project: 50' x 100' x 32' tall Red Iron with 1 Bedroom, 1 Bath apartment, build-out. Building erected and insulated. Interior apartment still under construction		

Owner / Business Name: Steve Wood		
Project Name / Location / Address: 1411 Beresford Rd.		
City: Deland	State: FLorida	Zip Code: 32720
Point of Contact: Steve Wood		Dates of Work: 2018/19
Phone Number: 407-832-9681		Fax Number: None
E-mail Address: None		
Original Contract Amount: \$350,000.00		Final Contract Amount Including all Change Orders: \$420,000.00
Brief Description of Project: 50' x 100' x 28' tall Red Iron with 3 bedroom, 2 Bath, Build-out.		

Owner / Business Name: Bob & Ann Shields		
Project Name / Location / Address: 32005 Forest Drive		
City: Deland	State: Florida	Zip Code:
Point of Contact: Bob Shields		Dates of Work: On-going
Phone Number: 407-314-9936		Fax Number: None
E-mail Address: bshields@ifssi.com		
Original Contract Amount: 275,000.00		Final Contract Amount Including all Change Orders: \$280,000.00
Brief Description of Project: 44' x 98' x 18' tall, T-Shape, Red Iron Barn Build.		

This document must be completed and returned with your Submittal.

END OF SECTION

CITY COMMISSION OF THE CITY OF WILDWOOD
EXECUTIVE SUMMARY

SUBJECT: Purchase of One (1) 2023 Ford F150 for the Public Works Department

REQUESTED ACTION: Staff recommends approval.

CONTRACT: FSA20-VEH 18.0 Vendor/Entity: Duval Ford
Effective Date: Termination Date:
Managing Division/Department:

BUDGET IMPACT: Included in FY23 budget in 001-541-60-6400.

HISTORY/FACTS/ISSUES:

Fleet Services is requesting approval for the purchase of one Ford F150 from Duval Ford for the amount of \$41,297.00 for the Public Works Department. This vehicle is being purchased to accommodate a new position created within the Public Works Department.

This vehicle is a budgeted item and will be paid for through budget line item 001-541-60-6400. This will be purchased through state contract FSA20-VEH 18.0.

CITY OF WILDWOOD

Prepared for:		Contract Holder		DATE:
CITY OF WILDWOOD STEVE WATSON 352-330-1335 swatson@wildwood-fl.gov		DUVAL FLEET Bambi Darr (Work) 904-381-6596 (Fax) 904-387-6816 bambi.darr@duvalfleet.com 5203 Waterside Dr. Jax, FL 32210		10/4/22
PLEASE CONFIRM RECEIPT OF QUOTE VIA EMAIL				
		<i>We appreciate your interest and the opportunity to quote. If you have any questions regarding this quote please call!</i> <i>Note, Vehicle will be ordered white exterior unless specified on purchase order. Shipping and Invoicing instructions are required on agency purchase order.</i>		
Labor	Code	Equipment	Price	
0	SPEC 102	2023 FORD F-150 CREW CAB 4X2 XL- W1C	\$ 33,888.00	
0	99B.44U	3.3L V6 GAS ENGINE	NC	
0	100A	EQUIPMENT GROUP: XL	NC	
0	85A	POWER WINDOWS & DOOR LOCKS	NC	
0	INCL	BACKUP CAMERA	NC	
0	145WB	145" WHEELBASE 5.5' BED (SHORT BED)	NC	
0	96W	SPRAY IN BEDLINER	\$ 594.00	
0	534	TOW PACKAGE- INCLUDES 53B CLASS IV TRAILER HITCH RECEIVER, 53A TOW GROUP, SMART TOW CONNECTOR & 4PIN/7PIN WIRING HARNESS. INCL TRAILER HARDWARE	\$ 1,624.00	
0	67T	ELECTRIC BRAKE CONTROLLER	\$ 274.00	
0	LED PKG 12	WHELEN JUSTICE LED LIGHT BAR- ALL AMBER WITH WHITE LENSES (JV2AAAA)	\$ 3,959.00	
0		4 CORNER WHELEN LED LIGHTS - (2) IONS PLACED IN GRILLE & (2) PLACED IN REAR (WHITE)	INCL	
0		UPGRADE TO WHELEN HAND HELD CONTROLLER (HHS3200)	INCL	
0	CABSHIELD L	HEADACHE RACK WITH LIGHT BAR PROVISION	\$ 785.00	
0	TAG.TTO	NEW CITY TAG	\$ 173.00	
0				
0	YZ	EXTERIOR: OXFORD WHITE	NC	
0	AS	INTERIOR: GRAY VINYL SEATS 40/20/40	NC	
0		VINYL FLOOR	NC	
VENDOR COMMENTS		ORDER CONFIRMATION # 7879-7880		
UNIT COST			\$ 41,297.00	

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: **Purchase of One (1) 2022 Ford F550 Dump Truck for the Public Works Department**

REQUESTED ACTION: Staff recommends approval.

CONTRACT: FSA20-VEH 18.0 Vendor/Entity: Duval Ford
Effective Date: Termination Date:
Managing Division/Department:

BUDGET IMPACT: Included in FY23 budget in 001-541-60-6400.

HISTORY/FACTS/ISSUES:

Fleet Services is requesting approval for the purchase of one (1) Ford F550 dump truck from Duval Ford for the amount of \$75,482.00 for the Public Works Department. This vehicle will be used for asphalt and pavement repair.

This vehicle is a budgeted item and will be paid for through budget line item 001-541-60-6400. This is being purchased through state contract FSA20-VEH 18.0.

CITY OF WILDWOOD

Prepared for:		Contract Holder	DATE:
CITY OF WILDWOOD STEVE WATSON 352-330-1335 swatson@wildwood-fl.gov		DUVAL FLEET Bambi Darr (Work) 904-381-6596 (Cell) 910-622-6544 (Fax) 904-387-6816 bambi.darr@duvalfleet.com 5203 Waterside Dr. Jax, FL 32210	10/4/22
PLEASE CONFIRM RECEIPT OF QUOTE VIA EMAIL			
We appreciate your interest and the opportunity to quote. If you have any questions regarding this quote please call! Note, Vehicle will be ordered white exterior unless specified on purchase order. Shipping and Invoicing instructions are required on agency purchase order.			
Labor	Code	Equipment	Price
0	SPEC 77	2022 FORD F-550 REGULAR CAB CHASSIS 4X4- F5H	\$ 53,785.00
0	99T	6.7L POWER STROKE V8 TURBO DIESEL	NC
0	660A	EQUIPMENT GROUP: XL	NC
0	169WB	169" WHEELBASE 84" CA	\$ 2,040.00
0	62R	PTO PROVISION	NC
0	X8L	4.88 LIMITED SLIP AXLE	NC
0	525	CRUISE CONTROL	\$ 235.00
0	90L	POWER WINDOWS & DOOR LOCKS	\$ 1,099.00
0	52B	TRAILER BRAKE CONTROLLER	\$ 299.00
0	67P	EXTRA VEAVY FRONT END SUSPENSION	\$ 284.00
0	18A	UPFITTER INTERFACE MODULE	\$ 294.00
0	18B	FACTORY PLATFORM RUNNING BOARDS	\$ 319.00
0	68M	PAYLOAD PLUS 19,500 GVWR	\$ 1,154.00
0	98R	OPERATOR COMMAND REGENERATION	\$ 249.00
0	DB3	9FT KNAPEIDE STEEL DUMP BODY WITH PULL TARP & ELECTRIC HOIST	\$ 18,600.00
0	CD OPT 1	FOLD DOWN SIDES	\$ 1,170.00
0	MISC OPT	ALUMINUM BACK PACK BETWEEN CAB & BODY (SEE PICTURE)	\$ 4,833.00
0	MISC OPT	COAL CHUTE ADDED TO TAILGATE	\$ 543.00
0	872	DEALER INSTALLED CAMERA	\$ 414.00
0	CAMLOC	RELOCATE FACTORY CAMERA ONCE DUMP BODY IS COMPLETE	\$ 285.00
0	31*	SHIP THROUGH TO KNAPEIDE TO INCLUDE WEIGHT SLIP, MSO, CERTIFICATION & DEALER PDI	\$ 650.00
0	534	HEAVY DUTY TOW PACKAGE- to include heavy duty flashers, wiring for trailer plug (7 prong round), and class IV frame mounted trailer hitch with 2" square removable receiver, 1" shank with 2" ball.	\$ 1,650.00
0	LED PKG 12	WHELEN JUSTICE LED LIGHT BAR- ALL AMBER WITH WHITE LENSES (JV2AAAA)	\$ 3,959.00
0		4 CORNER WHELEN LED LIGHTS - (2) IONS PLACED IN GRILLE & (2) PLACED IN REAR (WHITE)	INCL
0		UPGRADE TO WHELEN HAND HELD CONTROLLER (HHS3200)	INCL
0	TAG.TTO	NEW CITY TAG	\$ 173.00
0	OOS	OUT OF STOCK COMMERCIAL UNIT: W400/ NEE67751 (SUBJECT TO AVAILABILITY)	\$ (16,553.00)
0			
0	Z1	EXTERIOR: OXFORD WHITE	NC
0	AS	INTERIOR: GRAY VINYL SEATS 40/20/40	NC
0		VINYL FLOOR	NC
0			
VENDOR COMMENTS		PLEASE CLEARLY NOTATE ON YOUR PURCHASE ORDER WHERE DUVAL FORD IS TO SHIP YOUR VEHICLE, HOW THE VEHICLE IS TO BE TITLED, AND WHERE THE INVOICE IS TO BE MAILED.	
UNIT COST			\$ 75,482.00
TOTAL QUANTITY		1	TOTAL PURCHASE \$ 75,482.00



CITY COMMISSION OF THE CITY OF WILDWOOD
EXECUTIVE SUMMARY

SUBJECT: Purchase of One (1) 2023 Ford F150 for the Water Department

REQUESTED ACTION: Staff recommends approval.

CONTRACT: FSA20-VEH 18.0 Vendor/Entity: Duval Ford
Effective Date: Termination Date:
Managing Division/Department:

BUDGET IMPACT: Included in FY23 budget in 401-533-60-6400.

HISTORY/FACTS/ISSUES:

Fleet Services is requesting approval for the purchase of one (1) Ford F150 from Duval Ford for the amount of \$37,338.00 for the Water Department. This vehicle is being purchased as a replacement for a truck that is scheduled to be taken out of service.

This vehicle is a budgeted item and will be paid for through budget line item 401-533-60-6400. This will be purchased through state contract FSA20-VEH 18.0.

CITY OF WILDWOOD

Prepared for:		Contract Holder		DATE:
CITY OF WILDWOOD STEVE WATSON 352-330-1335 swatson@wildwood-fl.gov		DUVAL FLEET Bambi Darr (Work) 904-381-6596 (Fax) 904-387-6816 bambi.darr@duvalfleet.com 5203 Waterside Dr. Jax, FL 32210		10/4/22
PLEASE CONFIRM RECEIPT OF QUOTE VIA EMAIL				
		<i>We appreciate your interest and the opportunity to quote. If you have any questions regarding this quote please call!</i> <i>Note, Vehicle will be ordered white exterior unless specified on purchase order. Shipping and Invoicing instructions are required on agency purchase order.</i>		
Labor	Code	Equipment	Price	
0	SPEC 102	2023 FORD F-150 CREW CAB 4X2 XL- W1C	\$ 33,888.00	
0	99B.44U	3.3L V6 GAS ENGINE	NC	
0	100A	EQUIPMENT GROUP: XL	NC	
0	85A	POWER WINDOWS & DOOR LOCKS	NC	
0	INCL	BACKUP CAMERA	NC	
0	145WB	145" WHEELBASE 5.5' BED (SHORT BED)	NC	
0	96W	SPRAY IN BEDLINER	\$ 594.00	
0	534	TOW PACKAGE- INCLUDES 53B CLASS IV TRAILER HITCH RECEIVER, 53A TOW GROUP, SMART TOW CONNECTOR & 4PIN/7PIN WIRING HARNESS. INCL TRAILER HARDWARE	\$ 1,624.00	
0	67T	ELECTRIC BRAKE CONTROLLER	\$ 274.00	
0	CABSHIELD L	HEADACHE RACK WITH LIGHT BAR PROVISION	\$ 785.00	
0	TAG.TTO	NEW CITY TAG	\$ 173.00	
0				
0	YZ	EXTERIOR: OXFORD WHITE	NC	
0	AS	INTERIOR: GRAY VINYL SEATS 40/20/40	NC	
0		VINYL FLOOR	NC	
VENDOR COMMENTS		ORDER CONFIRMATION # 7879		
UNIT COST			\$ 37,338.00	
TOTAL QUANTITY		1	TOTAL PURCHASE	
			\$ 37,338.00	

CITY COMMISSION OF THE CITY OF WILDWOOD
EXECUTIVE SUMMARY

SUBJECT: Purchase of One (1) 2022 Ford Explorer for the Police Department

REQUESTED ACTION: Staff recommends approval.

CONTRACT: FSA20-VEH 18.0 Vendor/Entity: Duval Ford
Effective Date: Termination Date:
Managing Division/Department:

BUDGET IMPACT: Included in FY23 budget in line item 001-521-60-6400.

HISTORY/FACTS/ISSUES:

Fleet Services is requesting approval for the purchase of one (1) Ford Explorer from Duval Ford for the amount of \$32,657.00 for the Police Department. This is a civilian vehicle to be used by the Police Department administrative personnel.

This vehicle is a budgeted item and will be paid for through budget line item 001-521-60-6400. This will be purchased through state contract FSA20-VEH 18.0.

CITY OF WILDWOOD

Prepared for:	Contract Holder	DATE:
CITY OF WILDWOOD STEVE WATSON 352-330-1335 swatson@wildwood-fl.gov	DUVAL FLEET Bambi Darr (Work) 904-381-6596 (Cell) 910-622-6544 (Fax) 904-387-6816 bambi.darr@duvalfleet.com 5203 Waterside Dr. Jax, FL 32210	10/4/22
PLEASE CONFIRM RECEIPT OF QUOTE VIA EMAIL		
<i>We appreciate your interest and the opportunity to quote. If you have any questions regarding this quote please call! Note, Vehicle will be ordered white exterior unless specified on purchase order. Shipping and Invoicing instructions are required on agency purchase order.</i>		
Labor	Code	Equipment
0	SPEC 261	2022 FORD EXPLOER RWD XLT- K7D
0	99H	2.3L V6 ECOBOOST ENGINE
0	44T	10-SPEED AUTOMATIC TRANSMISSION
0	200A	EQUIPMENT GROUP: XLT
0	INCL	POWER WINDOWS & DOOR LOCKS
0	INCL	BACKUP CAMERA
0	INCL	SYNC/ HANDSFREE
0	LED PKG 1	4 CORNER LED LIGHTS (2-PLACED IN GRILLE & 2-PLACED IN TAIL LAMPS) WHITE
0	WT 4P	WEATHER TECH LASER CUT MATS- 4 PIECE
0	TAG.TTO	NEW CITY TAG
0	OOS	OUT OF STOCK UNIT: NGC00019 / 7631
0		
0	YZ	EXTERIOR: OXFORD WHITE
0	8N	INTERIOR: SANDSTONE CLOTH SEATS
0		CARPET
VENDOR COMMENTS		PLEASE CLEARLY NOTATE ON YOUR PURCHASE ORDER WHERE DUVAL FORD IS TO SHIP YOUR VEHICLE, HOW THE VEHICLE IS TO BE TITLED, AND WHERE THE INVOICE IS TO BE MAILED.
UNIT COST		\$ 32,657.00
TOTAL QUANTITY		1
TOTAL PURCHASE		\$ 32,657.00

CITY COMMISSION OF THE CITY OF WILDWOOD
EXECUTIVE SUMMARY

SUBJECT: Purchase of One (1) 2023 Unmarked Ford Explorer Interceptor for the Police Department

REQUESTED ACTION: Staff recommends approval.

CONTRACT: FSA20-VEH 18.0 Vendor/Entity: Duval Ford
Effective Date: Termination Date:
Managing Division/Department:

BUDGET IMPACT: Included in FY23 budget in 001-521-60-6400.

HISTORY/FACTS/ISSUES:

Fleet Services is requesting approval for the purchase of one (1) Ford Explorer from Duval Ford for the amount of \$50,340.13 for the Police Department. This vehicle will be used in CID to replace a unit that will be taken out of service.

This vehicle is a budgeted item and will be paid for through budget line item 001-521-60-6400. This will be purchased through state contract FSA20-VEH 18.0.

CITY OF WILDWOOD (UNMARKED)

Prepared for:		Contract Holder	DATE:
CITY OF WILDWOOD (UNMARKED)		DUVAL FLEET	10/4/22
STEVE WATSON		Bambi Darr	
352-330-1335		(Work) 904-381-6596	
swatson@wildwood-fl.gov		(Cell) 910-622-6544	
		(Fax) 904-387-6816	
		bambi.darr@duvalfleet.com	
		5203 Waterside Dr. Jax, FL 32210	
PLEASE CONFIRM RECEIPT OF QUOTE VIA EMAIL			
We appreciate your interest and the opportunity to quote. Pricing per FLORIDA SHERIFFS ASSOCIATION LIGHT VEHICLE CONTRACT FSA22-VEL30.0 Heavy Equipment and Trucks FSA22-VEH 20.0. If you have any questions regarding this quote please call! Note, Vehicle will be ordered white exterior unless specified on purchase order. Shipping and Invoicing instructions are required on agency purchase order.			
Labor	Code	Equipment	Price
0	SPEC 226	2023 FORD POLICE INTERCEPTOR GAS AWD - K&A	\$ 41,361.00
0	99B.44U	3.3L TI-VCT V6 ENGINE	NC
0	INCL	POWER WINDOWS & DOOR LOCKS	NC
0	INCL	FRONT LICENSE BRACKET	NC
0	INCL	BACKUP CAMERA	NC
0	56F	KEYLESS ENTRY	NC
0	INCL	BLUETOOTH	NC
0	INCL	FACTORY WIG WAG HEADLIGHT FLASHERS	NC
0	D51R	DELETE DRIVER SIDE SPOTLIGHT	\$ (145.00)
0	19V	REAR CAMERA ON DEMAND	\$ 229.00
0	16D	BADGE DELETE	NC
0	55B	BLIND SPOT INFORMATION SYSTEM	\$ 544.00
0	60A	WIRING GRILL/LAMP/SIREN/SPEAKERS	\$ 49.00
0	76P	PRE-COLLISION ASSIST	\$ 144.00
0	76R	REVERSE SENSING SYSTEM	\$ 274.00
0			
9	WPUMP-LED	WHELEN UNDER COVER PREMIUM INTERIOR LIGHTING: RED/BLUE	\$ 2,836.64
0		FULL WIDTH FLASHING SYSTEM- FRONT & REAR	INCL
0		(2) HIDEAWAY MIRCRONS GRILLE LIGHTS (SPLIT RED/BLUE WITH DARK LENS)	INCL
0		(2) TAIL LIGHT FLASHERS	INCL
0		(2) VERTEX PLACED IN PRE-DRILLED HOLES (SPLIT RED/BLUE)	INCL
0			
0	CC-20-UV10-L8	TROY PRODUCTS 18" L-shaped console with 10" slope / 8" level with faceplates, 4" dual cup internal beverage holder, 4" shallow console tray, 2" face plate pre-punched w/ holes for (2) DC outlets & (1) dual-port USB module, & height adjustable swivel arm rest with 5"x8" foam pad that bolts to rear of console.	\$ 855.92
0	AC-PENPRTR-58-CC	HEIGHT-ADJUSTABLE PRINTER ARM REST W/ 5X8 PAD, BOLTS TO REAR OF CONSOLE REAR	\$ 661.25
0	CM-LT-1600	THEFT-DETERRENT LAPTOP TRAY FOR COMPUTERS UP TO 15" WX 11.5"H	NC
0	CC-SDMT-SL-LED	SIDE-MOUNT COMPUTER MOUNT WITH TROY'S UNIQUE SLIDE ARM	NC
0	GL-SC-6	HANDCUFF STYLE AR RIFLE LOCK WITH #2 KEY AND PUSH BUTTON OVERRIDE	\$ 445.00
0			
0	CP-GB44248-T3-K	TROY PRODUCTS storage vault, 40"Wx32"Lx12"H". Includes two (2) lockable draw-tight handles, carpet on top, foam on floor, tilt-up cargo mount that allows access to spare tire, & tilt-down electronics tray. SAME AS NGA09371 (CP-UV20-MNT-EB, CP-GB44248-T3)	\$ 1,391.32
0	TINTA	DEEP TINT WITH STRIP	\$ 365.00
0	WTCH4	WEATHER TECH LASER CUT FLOOR LINERS- 4 PIECE	\$ 346.00
0	TAG.TTO	NEW CITY TAG	\$ 173.00
0			
0	M7	EXTERIOR: CARBONIZED GREY	NC
0	F6	INTERIOR: BLACK CLOTH SEATS FRONT & REAR	NC
0		FLOOR CARPET	NC
0			
9	LABOR	Total labor hours per spec. Includes wire, loom, connectors, PDI and shop supplies:	\$90 \$ 810.00
VENDOR COMMENTS		ORDER # 1814	
UNIT COST			\$ 50,340.13
TOTAL QUANTITY		1	TOTAL PURCHASE \$ 50,340.13



CITY COMMISSION OF THE CITY OF WILDWOOD
EXECUTIVE SUMMARY

SUBJECT: Purchase of Eight (8) 2023 Ford Explorers for the Police Department

REQUESTED ACTION: Staff recommends approval.

CONTRACT: FSA20-VEH 18.0 Vendor/Entity: Duval Ford
Effective Date: Termination Date:
Managing Division/Department:

BUDGET IMPACT: Included in FY23 budget in line item 108-521-60-6400.

HISTORY/FACTS/ISSUES:

Fleet Services is requesting approval for the purchase of eight (8) Ford Explorers from Duval Ford for the total amount of \$484,375.44 for the Police Department. These vehicles are being purchased for new police officers within the police department.

These vehicles are budgeted items in FY 23 and will be paid for with Police impact fees identified in budget line item 108-521-60-6400. These will be purchased through state contract FSA20-VEH 18.0.

CITY OF WILDWOOD (MARKED)

Prepared for:		Contract Holder	DATE:
CITY OF WILDWOOD(MARKED)		DUVAL FLEET	10/4/22
STEVE WATSON		Bambi Darr	
352-330-1335		(Work) 904-381-6596	
swatson@wildwood-fl.gov		(Fax) 904-387-6816	
		Bambi.Darr@duvalfleet.com	
		5203 Waterside Dr. Jax, FL 32210	
PLEASE CONFIRM RECEIPT OF QUOTE VIA EMAIL			
<i>We appreciate your interest and the opportunity to quote. Pricing per FLORIDA SHERIFFS ASSOCIATION LIGHT VEHICLE CONTRACT FSA22-VEL30.0 Heavy Equipment and Trucks FSA22-VEH 20.0. If you have any questions regarding this quote please call! Note, Vehicle will be ordered white exterior unless specified on purchase order. Shipping and Invoicing instructions are required on agency purchase order.</i>			
Labor	Code	Equipment	Price
0	SPEC 226	2023 FORD POLICE INTERCEPTOR GAS AWD - K8A	\$ 41,361.00
0	99B.44U	3.3L TI-VCT V6 ENGINE	NC
0	INCL	POWER WINDOWS & DOOR LOCKS	NC
0	INCL	FRONT LICENSE BRACKET	NC
0	51R	DRIVER SIDE (LEFT HAND) SPOTLIGHT- UNITY LED	NC
0	INCL	BACKUP CAMERA	NC
0	55F	KEYLESS ENTRY	NC
0	INCL	FRONT HEADLAMP PRE-DRILL	NC
0	INCL	BLUETOOTH	NC
0	INCL	FACTORY WIG WAG HEADLIGHT FLASHERS	NC
0	52P	HIDDEN DOOR PLUNGER- INCLUDES REAR DOORS, LOCKS & WINDOWS INOPERABLE	\$ 159.00
0	19V	REAR CAMERA ON DEMAND	\$ 229.00
0	43D	COURTESY LAMP DISABLE	\$ 24.00
0	55B	BLIND SPOT INFORMATION SYSTEM	\$ 544.00
0	60A	WIRING GRILL/LAMP/SIREN/SPEAKERS	\$ 49.00
0	76P	PRE-COLLISION ASSIST	\$ 144.00
0	76R	REVERSE SENSING SYSTEM	\$ 274.00
0			
9	WPLB-LED 2	WHELEN 54" LEGACY DUO LIGHTBAR WITH FULL LED TAKEDOWN (SMOKE LENSES GB2...R/W B/W- FRONT R/A B/A- REAR & REAR CORNERS R/W B/W) SEE LGC14169	\$ 3,007.00
0	295SLSA6	295SLSA6 SIREN, LIGHT CONTROLLER	INCL
0	SA315P	100 WATT SPEAKER	INCL
2	MICRONS	(2) WHELEN MICRONS (SPLIT RED/BLUE) MOUNTED IN GRILLE	\$ 350.40
4	W-PILLAR	(6) WHELEN IONS PILLAR MOUNTED IN REAR (SPLIT RED/BLUE) RPWD50- DUO	\$ 1,154.00
2	VTX609*	(2) WHELEN LED VERTEX LIGHTS MOUNTED IN TAILLIGHTS (WHITE)	\$ 249.90
2	VTX609*	(2) WHELEN VERTEX PLACED IN PRE-DRILLED HEADLAMPS (SPLIT RED/BLUE)	\$ 249.90
0	W-FLASHER	TAIL LIGHT FLASHERS	\$ 94.00
4	SO RUNNER	DUAL RUNNER LIGHTS (RED/BLUE) SOUNDOFF- ENL160J-L & R	\$ 984.00
0			
0	CC-20-UV10-L8	TROY PRODUCTS 18" L-shaped console with 10" slope / 8" level with faceplates, 4" dual cup internal beverage holder, 4" shallow console tray, 2" face plate pre-punched w/ holes for (2) DC outlets & (1) dual-port USB module, & height adjustable swivel arm rest with 5"x8" foam pad that bolts to rear of console.	\$ 855.92
0	AC-PENPRTR-58-CC	HEIGHT-ADJUSTABLE PRINTER ARM REST W/ 5X8 PAD, BOLTS TO REAR OF CONSOLE REAR	\$ 661.25
0	CM-LT-1600	THEFT-DETERRENT LAPTOP TRAY FOR COMPUTERS UP TO 15" WX 11.5"H	NC
0	CC-SDMT-SL-LED	SIDE-MOUNT COMPUTER MOUNT WITH TROY'S UNIQUE SLIDE ARM	NC
0	GL-SC-6	HANDCUFF STYLE AR RIFLE LOCK WITH #2 KEY AND PUSH BUTTON OVERRIDE	\$ 445.00
0			
0	TP-E-SL6-US-SS	FRONT PARTITION WITH SLIDING WINDOW, SQUARE-HOLE BRACKET & WEAPON PANEL	\$ 1,250.56
0	KP-UV20-DAP-SS	PARTITION KICK PANELS	INCL
0	PS-20-UVFX-OS-RL	PLASTIC SEAT WITH OS BELTS, REAR PARTITION WITH POLY MAIN WINDOW, FIRE CUBBY ON DS	\$ 1,587.60
0	WG-20-FDUV-SET	DRIVER & PASSENGER SIDE WINDOW GUARDS, WELDED BARS, VERTICAL DESIGN	\$ 270.00
0	CP-UV20-UV-TRAY	TILT-UP CARGO MOUNT W/ GAS SHOCKS	\$ 688.80
0	AC-20-UV-CARGO	ELECTRONICS TRAY BOLTS TO CP-UV20-CARGO	INCL
0	AC-20-UV-HATCH	HATCH WINDOW SCREEN; SQUARE-HOLE PUNCHED	INCL
0			
0	STALKER2	STALKER RADAR, DUAL KA-BAND ANTENNA, DIRECTIONAL & SAME LANE WIRED/WIRELESS	\$ 2,238.00
0	MAGLIGHT	REMOTE, TUNING FORKS, VSS CABLE, CABLES & MOUNTS	
0		MAGLIGHT- RL7019 LED FLASHLIGHT	\$ 105.00
0	STOPTIX	9" STOP STICK KIT W/STORAGE BAG (INCL 3 STOP STICKS, 1 REPLACEMENT STICK, STORAGE BAG, CORD REEL & SLEEVE) (S3700K)	\$ 753.60
0	VV	VENT VISOR	\$ 210.00
0	TINTA	DEEP TINT WITH STRIP	\$ 365.00
0	TAG.TTO	NEW CITY TAG	\$ 173.00
0			
0	YZ	EXTERIOR: OXFORD WHITE	NC
0	96	INTERIOR: BLACK CLOTH FRONT/ REAR VINYL SEATS	NC
0		VINYL FLOOR	NC
0			
23	LABOR	Total labor hours per spec. Includes wire, loom, connectors, PDI and shop supplies:	\$90 \$ 2,070.00
ORDERS 1809-1812 & 7018-7021			
VENDOR COMMENTS			
UNIT COST			\$ 60,546.93
TOTAL QUANTITY		8	
TOTAL PURCHASE			\$ 484,375.44

CITY COMMISSION OF THE CITY OF WILDWOOD
EXECUTIVE SUMMARY

SUBJECT: Purchase of One (1) 2023 Ford Explorer K9 Unit for the Police Department

REQUESTED ACTION: Staff recommends approval.

CONTRACT: FSA-VEH 20.0 Vendor/Entity: Duval Ford
Effective Date: Termination Date:
Managing Division/Department:

BUDGET IMPACT: Included in FY23 budget in 001-521-60-6400.

HISTORY/FACTS/ISSUES:

Fleet Services is requesting approval for the purchase of one Ford Explorer K9 unit from Duval Ford for the amount of \$68,047.25 for the Police Department.

This vehicle is a budgeted item and will be paid for through budget line item 001-521-60-6400. This will be purchased through state contract FSA-VEH 20.0.

CITY OF WILDWOOD (K9)

Prepared for:		Contract Holder:		DATE:
CITY OF WILDWOOD (K9) STEVE WATSON 352-330-1335 swatson@wildwood-fl.gov		DUVAL FLEET Bambi Darr (Work) 904-381-6596 (Fax) 904-387-6816 Bambi.Darr@duvalfleet.com 5203 Waterside Dr. Jax, FL 32210		10/4/22
PLEASE COMPLETE EVERYTHING IN DUVAL VIA EMAIL				
		We appreciate your interest and the opportunity to quote. Pricing per FLORIDA SHERIFFS ASSOCIATION LIGHT VEHICLE CONTRACT FSA22-VEL30.0 Heavy Equipment and Trucks FSA22-VEH 20.0. If you have any questions regarding this quote please call! Note, Vehicle will be ordered white exterior unless specified on purchase order. Shipping and Invoicing instructions are required on agency purchase order.		
Labor	Code	Equipment	Price	
0	SPEC 226	2023 FORD POLICE INTERCEPTOR GAS AWD - K8A	\$	41,361.00
0	99B.44U	3.3L TI-VCT V6 ENGINE	NC	
0	INCL	POWER WINDOWS & DOOR LOCKS	NC	
0	INCL	FRONT LICENSE BRACKET	NC	
0	INCL	BACKUP CAMERA	NC	
0	55F	KEYLESS ENTRY	NC	
0	INCL	BLUETOOTH	NC	
0	51R	DRIVER SIDE (LEFT HAND) SPOTLIGHT- UNITY LED	NC	
0	INCL	FACTORY WIG WAG HEADLIGHT FLASHERS	NC	
0	19V	REAR CAMERA ON DEMAND	\$	229.00
0	52P	HIDDEN DOOR PLUNGER- INCLUDES REAR DOORS, LOCKS & WINDOWS INOPERABLE	\$	159.00
0	55B	BLIND SPOT INFORMATION SYSTEM	\$	544.00
0	60A	WIRING GRILL/LAMP/SIREN/SPEAKERS	\$	49.00
0	76P	PRE-COLLISION ASSIST	\$	144.00
0	76R	REVERSE SENSING SYSTEM	\$	274.00
0	17A	REAR A/C	\$	609.00
0				
9	WPLB-LED 2	WHELEN 54" LEGACY DUO LIGHTBAR WITH FULL LED TAKEDOWN (SMOKE LENSES GB2...R/W B/W- FRONT R/A B/A- REAR & REAR CORNERS R/W B/W) SEE LGC14169	\$	3,007.00
0	295SLSA6	295SLSA6 SIREN, LIGHT CONTROLLER	INCL	
0	SA315P	100 WATT SPEAKER	INCL	
2	MICRONS	(2) WHELEN MICRONS (SPLIT RED/BLUE) MOUNTED IN GRILLE	\$	350.40
4	W-PILLAR	(6) WHELEN IONS PILLAR MOUNTED IN REAR (SPLIT RED/BLUE) RPWD50- DUO	\$	1,154.00
2	VTX609*	(2) WHELEN LED VERTEX LIGHTS MOUNTED IN TAILLIGHTS (WHITE)	\$	249.90
2	VTX609*	(2) WHELEN VERTEX PLACED IN PRE-DRILLED HEADLAMPS (SPLIT RED/BLUE)	\$	249.90
0	W-FLASHER	TAIL LIGHT FLASHERS	\$	94.00
4	SO RUNNER	DUAL RUNNER LIGHTS (RED/BLUE) SOUNDOFF- ENL160J-L & R	\$	984.00
0				
0	CC-20-UV10-L8	TROY PRODUCTS 18" L-shaped console with 10" slope / 8" level with faceplates, 4" dual cup internal beverage holder, 4" shallow console tray, 2" face plate pre-punched w/ holes for (2) DC outlets & (1) dual-port USB module, & height adjustable swivel arm rest with 5"x8" foam pad that bolts to rear of console.	\$	855.92
0	AC-PENPRTR-58-CC	HEIGHT-ADJUSTABLE PRINTER ARM REST W/ 5X8 PAD, BOLTS TO REAR OF CONSOLE REAR	\$	661.25
0	CM-LT-1600	THEFT-DETERRENT LAPTOP TRAY FOR COMPUTERS UP TO 15" WX 11.5"H	NC	
0	CC-SDMT-SL-LED	SIDE-MOUNT COMPUTER MOUNT WITH TROY'S UNIQUE SLIDE ARM	NC	
0	GL-SC-6	HANDCUFF STYLE AR RIFLE LOCK WITH #2 KEY AND PUSH BUTTON OVERRIDE	\$	445.00
0				
0	EZ RIDER K9	K9- AMERICAN ALUMINUM- EZ RIDER K9 PLATFORM SYSTEM	\$	4,400.00
10	HA-2520 ACE K9	A. C. E K9 HEAT ALARM PRO: Temperature Alarm System Includes Horn Activation, Siren Activation, Light Activation and Dual Window Drop	\$	1,488.00
0	AWD-7040	ACE WATCH DOG: for use with Pro Alarm Systems AceWatchDogTM Server Service is \$168.00 Per Year and the First Year is Included with New Unit. More Info: www.acek9.com/awd.html	\$	1,078.80
0	HA-CMD-P	CARBON MONOXIDE DETECTOR & INTERFACE MODULE (HA-CMD-P)	\$	198.00
0	HA-SDM-D	SMOKE DETECTOR & INTERFACE MODULE	\$	125.94
0	HA-FKT10-P	OPTIONAL 10" FAN ACTIVATION MODULE, MANUAL SWITCH & MATERIALS	\$	286.80
0	HAP-EVS-K	ENGINE STALL SENSOR	\$	1,155.94
0	HA-RBM-27	REMOTE PAGER MODULE FOR HEAT ALARM PRO: With Roof Mount Antenna Kit, 10" Fiberglass Mast with mount, coax, & connector.	\$	390.00
0				
0	CP-UV20-UV-TRAY	TILT-UP CARGO MOUNT W/ GAS SHOCKS	\$	688.80
0	AC-20-UV-CARGO	ELECTRONICS TRAY BOLTS TO CP-UV20-CARGO	INCL	
0	AC-20-UV-HATCH	HATCH WINDOW SCREEN; SQUARE-HOLE PUNCHED	INCL	
0	STALKER2	STALKER RADAR, DUAL KA-BAND ANTENNA, DIRECTIONAL & SAME LANE WIRED/WIRELESS REMOTE, TUNING FORKS, VSS CABLE, CABLES & MOUNTS	\$	2,238.00
0	MAGLIGHT	MAGLIGHT- RL7019 LED FLASHLIGHT	\$	105.00
0	STOPTIX	9' STOP STICK KIT W/STORAGE BAG (INCL 3 STOP STICKS, 1 REPLACEMENT STICK, STORAGE BAG, CORD REEL & SLEEVE) (S3700K)	\$	753.60
0	VV	VENT VISOR	\$	210.00
0	TINTA	DEEP TINT WITH STRIP	\$	365.00
0	TAG.TTO	NEW CITY TAG	\$	173.00
0				
0	YZ	EXTERIOR: OXFORD WHITE	NC	
0	96	INTERIOR: BLACK CLOTH FRONT/ REAR VINYL SEATS	NC	
0		VINYL FLOOR	NC	
0				
33	LABOR	Total labor hours per spec. Includes wire, loom, connectors, PDI and shop supplies:	\$90	\$ 2,970.00
	VENDOR COMMENTS	ORDER # 1815		
UNIT COST			\$ 68,047.25	
TOTAL QUANTITY			1	
TOTAL PURCHASE			\$ 68,047.25	

CITY COMMISSION OF THE CITY OF WILDWOOD
EXECUTIVE SUMMARY

SUBJECT: Purchase of One (1) Forklift for the Fleet Services Department

REQUESTED ACTION: Staff recommends approval.

CONTRACT: FSA20-EQU18.0 Vendor/Entity: Southern States Toyota Lift
Effective Date: Termination Date:
Managing Division/Department:

BUDGET IMPACT: Included in FY 23 budget in 001-549-60-6400.

HISTORY/FACTS/ISSUES:

Fleet Services is requesting approval for the purchase of one (1) forklift from Southern States Toyota Lift for the amount of \$38,397.00. This forklift will be used at the Municipal Services Complex for various jobs and lifting needs.

This is a budgeted item and will be paid for through budget line item 001-549-60-6400. This will be purchased through state contract FSA20-EQU18.0.



FLORIDA LIFT
SYSTEMS, INC.
MATERIAL HANDLING SOLUTIONS • SINCE 1952
Southern States
TOYOTALIFT
Material Handling Equipment & Solutions



Southern States Toyotalift
560 Cynthia St
Jacksonville, FL 32254-3580
Phone: 904-764-7662
Fax: 904-764-1079

To: Florida Sheriff's Association m/f: City of Wildwood
2617 Mahan Drive 410 Gray Street
Tallahassee, FL 33308-5448 Wildwood, FL 34785
Attn: Steve Watson

Date: October 4, 2022
Our Ref: 41170101
Phone: 352-303-0459

FSA Contract FSA20-EQU18.0 Item 141 Cushion Tire Forklift

We respectfully submit this quotation for the following NEW Toyota Internal Combustion Lift Truck (1 each):

Toyota...Proud to be the world's #1 forklift manufacturer!

TOYOTA MODEL 8FGU25, Internal Combustion Lift Truck, quality engineered with the following specification:

- Pneumatic Tires
- LP Gas

This forklift is equipped with a 3-Way Catalytic Muffler System as standard equipment, and conforms to current Federal EPA and California ARB regulations for off-road large spark ignited engines.

SYSTEM OF ACTIVE STABILITY™ (SAS)

Toyota's industry exclusive System of Active Stability (SAS) helps reduce lift truck instability by electronically monitoring and controlling various functions of the lift truck.

- **Active Control Rear Stabilizer:** Various lift truck sensors simultaneously monitor vehicle speed, fork height, load weight, and vehicle yaw (or angular acceleration). Should the operator inadvertently place the truck in a potentially unstable lateral condition, the sensors trigger the SAS controller to activate the Active Control Rear Stabilizer to help reduce the likelihood of a lateral tip over. (Note: Does not apply to dual drive configured models)
- **Active Mast Function Controller (AMC):** Should the operator inadvertently place the lift truck in a potentially unstable longitudinal condition, these same sensors trigger the SAS controller to activate the AMC, which limits forward tilt and/or tilt back speed to help reduce the likelihood of a longitudinal tip over.



Photo may portray optional equipment not included in your quotation.

AUTOMATIC FORK LEVELING

Toyota's Automatic Fork Leveling feature increases productivity while reducing damage with a push of a button. By depressing the Automatic Fork Leveling button during forward tilt, operators are quickly and easily able to level the forks.

TOYOTA ENGINE

Engineered to the highest standards of quality, durability, and reliability, your Toyota 8-Series lift truck is outfitted with the industry's most respected industrial engines.

ULTRA COMFORT 4-WAY ADJUSTABLE, FULL SUSPENSION SEAT WITH NON CINCHING SEAT BELT

Operator comfort is taken to a new level with Toyota's Ultra Comfort 4-way adjustable, full suspension vinyl seat. With lumbar, weight, tilt, and almost 6 inches of fore/aft adjustability, your operators will be comfortable and

Mast	3-Stage (FSV) mast with full free lift provides excellent visibility to load and fork tips, while providing smooth, quiet and consistent operation. Mast specifications: Maximum Fork Height - 187" Overall Lowered Height 89.2" (Overhead Guard Height - 85.50") Free Lift - 37.2" with standard Load Backrest
-------------	--

Lifting Capacity	Base Model Capacity - 5,000 lbs. @ 24" load center Actual Capacity , based on quoted specifications, - 4,500 @24" load center
-------------------------	---

Actual capacity ratings stated above are based on standard features, options, and attachments available through Toyota at the time of quoting. Non-standard features, options, and attachments may affect actual capacity ratings. Please contact your Toyota sales representative for additional information.

Tilt	6 degrees forward and 6 degrees backwards
-------------	---

Carriage	ITA Hook Type, 42" Carriage
-----------------	-----------------------------

Forks	See below
--------------	-----------

Load Backrest	48" High Load Backrest
----------------------	------------------------

Attachments	See below
--------------------	-----------

Speeds	Travel Speed: 11.50 mph Lift Speed: 102 fpm
---------------	--

Engine	Toyota 2.2L 4Y-ECS Industrial Gasoline Engine 136 cubic inch displacement, 4 cylinder, overhead valve (OHV) Net Torque Rating: 118 @ 2200 rpm SAE ft-lb (LP Only) Net Torque Rating: 118 @ 2100 rpm SAE ft-lb (LP/G, GS, G/CNG) Net Horsepower Rating: 57 @ 2570 rpm SAE HP (LP Only) Net Horsepower Rating: 51 @ 2570 rpm SAE HP (LP/G, GS, G/CNG)
---------------	--

Transmission	Automatic Transmission 1 speed forward, 1 speed reverse standard.
---------------------	--

Steering	Load Sensing Hydrostatic Power Steering with Tilt Steering Column
-----------------	---

Wheels and Tires	Front Tires: 28x9-15-12PR (Pneumatic) Rear Tires: 6.50-10-10PR (Pneumatic)
-------------------------	---

Other

Outstanding

Toyota Features

- EPA/CARB Certified Engine with 3-Way Closed loop catalytic muffler system
- Operator Presence Sensing System (OPSS)
- Fully Stamped Steel Side Panels
- Technician Programmable Electronic Speed Control
- Overly Spacious Leg Room
- Weather Protected Electrical System
- Unparalleled Fork Tip Visibility
- Foot Activated Park Brake with High Mount Release
- Adjustable Headlights with Guards
- Electronic Shift Control
- 7" Cyclone Air Cleaner
- Fully Insulated Stamped Steel Engine Hood
- Dual Operator Assist Grips
- Oversized Cup Holder and Amenity Tray
- Heavy Duty, Non-Slip Rubber Floor Mat
- Automotive Style Headlight Switch

Some standard items listed within this quotation may be replaced or altered due to optional equipment.

Warranty

12 Months or 2,000 hours whichever occurs first: Basic

36 Months or 6,000 hours whichever occurs first: Powertrain

Warranty coverage for non-standard option components will be covered by the manufacturer of that component and not covered under the Toyota forklift standard or powertrain warranty.

We offer a Toyota factory authorized warranty on all new Toyota Industrial Equipment.



- STUDY REVEALS -

SAFEST LIFT TRUCK



SYSTEM OF ACTIVE STABILITY™ (SAS)

Toyota's industry exclusive System of Active Stability (SAS) helps reduce lift truck instability by electronically monitoring and controlling various functions of the lift truck.



Active Mast Function Controller (AMC): Should the operator inadvertently place the lift truck in a potentially unstable longitudinal condition, these same sensors trigger the SAS controller to activate the AMC, which limits forward tilt and/or tilt back speed to help reduce the likelihood of a longitudinal tip over.

Investment	Sheriff Association Price-	\$28,359	Each
	Price-Toyota Model 8FGCU20 as specified above under the Florida Sheriffs Association:		
	Up-grade option to 5,000lb capacity Pneumatic model 8FGU25...	\$5,848	Each
		<u>\$34,207</u>	
	11E911 Sidehifter with Hydraulics	\$1,392	
	11K21D Back-up Alarm	\$237	
	11J18G LED Amber Strobe	\$352	
	11FBF42B Solid Pneumatic Tires Front and Rear	\$1,837	
	11XA09 33# Steel LPG Tanks	\$237	
	K35A Tilt Cylinder Hole Seals	\$135	
	Your Delivered Florida Sheriffs Association Pricing	<u>\$38,397</u>	Each

Financing and Maintenance A broad range of competitive and flexible financing options are available through Toyota. Financing requires credit approval. Terms and conditions are subject to change.

In addition, Full Maintenance and Planned Maintenance programs are available.

Terms and Conditions Payment: Cash or Financed
Delivery: 10-12 Months upon receipt of PO
F.O.B.: Delivered
Prices are exclusive of any sales or use taxes now in force or which may be made effective in the future by any federal, state, or local governments.
Lease offerings subject to credit approval
Performance and specifications stated are based on specific testing and operating conditions.
Actual performance and specifications may vary based on application, option configuration, operating conditions, and environmental factors.

TERMS

1. QUOTATION: This proposal on behalf of Seller is an invitation for offers upon the terms stated herein. All orders and contracts that may result and be based upon such new materials is a quoted herein which Seller must purchase from other manufacturers are subject to prior acceptance of Seller order or contracts for such material by such manufacturers.
2. ACCEPTANCE: Seller hereby accepts Buyer's order for equipment described on the face hereof, but such acceptance is expressly conditional upon acceptance by Buyer of the terms set forth herein. Seller shall not be bound by any terms of Buyer's purchase order which provide conditions additional to or different from the terms hereof.
- The terms hereof shall survive (i) delivery of the equipment ordered hereunder, and (ii) the signing of an additional security agreement by Buyer and Seller relating to such equipment. If said terms conflict with such security agreement, the terms of the latter shall control.
3. PRICES: Prices stated herein are based on present costs. Such prices are subject to increase to Seller at any time prior to acceptance of your order by Seller to the extent necessary to cover Seller's increased costs applicable thereto.
4. TAXES: The amount of taxes stated on the face hereof, if any, is approximate only. Buyer is liable for the full amount of all taxes applicable to or as a result of this transaction, exclusive of franchise taxes and taxes measured by the net income of Seller. Buyer shall pay the amount of all such taxes as at any time requested by Seller as if originally added to the price. If Seller pays such taxes, Buyer shall reimburse Seller therefore.
5. PAYMENT: Partial shipments may be made and payments therefore shall become due in accordance with the terms hereof or as shipments are made and invoices rendered. The terms of sale herein are subject to credit approval and Seller may at any time prior to delivery modify the terms of payment originally specified to assure prompt payment for the equipment ordered.
6. DELAYS: Seller shall not be liable for loss or damage due to delay in delivery or manufacture, resulting from any cause beyond Seller's reasonable control, including but not limited to compliance with any regulation, orders, or instructions of any federal, state or municipal government or any department of agency thereof, acts of God, acts of omissions of the Buyer, acts of civil or military authority, fires, strikes, factory shutdowns, or alterations, embargos, war, riot, delay in transportation, or inability due to causes beyond the Seller's reasonable control to obtain necessary labor, manufacturing facilities or materials from the Seller's usual sources and any delays resulting from any such cause shall constitute a waiver of all claims for damages. In no event shall Buyer or Seller be liable for special or consequential damages.

7. CANCELLATION: Buyer may cancel its order, reduce quantities, revise specifications, or extend schedules only by mutual agreement as to a reasonable and proper cancellation charges which shall take into account expenses already incurred and commitments made by Seller, and Buyer shall indemnify Seller against any loss resulting there from.

8. SHIPMENT: Unless otherwise specifically agreed, all prices are for material packed for domestic shipment and delivery F.O.B. factory or point of shipment. Shipping dates are approximate and based on prompt receipt of all necessary information.

9. SECURITY INTEREST AND DEFAULT: Seller shall retain a security interest in the equipment delivered hereunder until the total selling price, including taxes, delivery and other charge, is paid in full by the Buyer, Buyer agrees to sign and deliver to Seller any additional security agreement required by Seller. If buyer shall fail or refuse to accept delivery of the equipment and parts ordered hereunder or shall default in the performance of any of the terms, covenants and conditions of this Agreement, Seller may retain the cash deposited or paid to it and for the equipment accepted by it on account on the sale price, if any, and apply the same toward payment of its damages. If equipment ordered has been delivered to Buyer and Seller at the time of default, Seller may declare the full amount due and payable without notice or demand and may repossess the equipment. Repossessions and disposition of equipment, and suit for any deficiency, shall be pursuant to applicable laws. The remedies provided herein in favor of Seller shall not be deemed exclusive, but shall be cumulative and shall be in addition to all other remedies in Seller's favor existing at law or in equity.

10. WARRANTY: Seller warrant each new product to be free from defects in material and workmanship under normal use and maintenance as herein provided. Seller's sole obligation under this warranty shall be limited to repairing, replacing or allowing credit for, at Seller's option any part which under normal and proper use and maintenance proves defective in material or workmanship within the period of time or the hours of operation specified by the original manufacturer, provided, however, that notice of any such defect and satisfactory proof thereof is promptly given by Buyer to Seller, and thereafter such part is returned to Seller, with transportation charges prepaid, and Seller's favor existing at low or in equity.

This warranty does not apply in respect of damage to any product or accessory or attachment thereof caused by overloading or their misuse, neglect or accident, nor does this warranty apply to any product or accessory or attachment thereof which has been repaired or altered in any way which, in the sole judgment of Seller, affects the performance, stability of general purpose for which it was manufactured.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES (EXCEPT OF TITLE), EXPRESSED OR IMPLIED, AND THERE IS NO IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL SELLER BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES.

USED PRODUCTS OTHER THAN REFURBISHED OR REBUILT INDUSTRIAL FOR TRUCKS ARE SOLD ON "AS IS" BASIS AND THERE IS NO IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE, UNLESS OTHERWISE EXPRESSLY STATED ON THE FACE OF THIS FORM.

This warranty does not apply to batteries, tires, distributor points, spark plugs or other trade accessories which are covered by the existing warranties, if any, of the respective manufacturers thereof.11. PATENTS: Seller shall defend, or in its sole discretion, effect settlement of any litigation or claim brought against Buyer so far as based on a contention that any product of Seller's design furnished hereunder constitutes an infringement of any United States patent, if notified promptly in writing and given authority, information and assistance (at Seller's expense) for the defense or settlement of same, and in such event Seller shall pay the judgment and any costs awarded against Buyer in any such litigation. The forgoing states the entire liability of Seller for patent infringement by said product.12. ARBITRATION: Any controversy or claim arising out of relating to Buyer's order, or any breach thereof, shall be settled in accordance with the Rules of the American Arbitration Association, and judgment upon the award may be entered in any Court having jurisdiction thereof.

Sincerely,
Southern States Toyotalift

Accepted:
Florida Sheriff's Association

Cash Price \$ _____

Financed Payment \$ _____ Per Month _____ Months

By: _____

By: _____

Name: Shane Polson

Name: _____

Title: FSA Administrator

Title: _____

Date: _____

CITY COMMISSION OF THE CITY OF WILDWOOD
EXECUTIVE SUMMARY

SUBJECT: Proclaim October 15, 2022 as White Cane Safety Day

REQUESTED ACTION: Staff recommends approval.

CONTRACT:

Vendor/Entity:

Effective Date:

Termination Date:

Managing Division/Department:

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

Please see the attached proclamation requested by The Visually Impaired Persons Support Group in The Villages proclaiming October 15, 2022, as White Cane Safety Day. Chairperson Donna Evans will speak on behalf of the group.



Proclamation

WHEREAS, according to the American Foundation for the Blind more than 500,000 of Florida's citizens have vision difficulties; and,

WHEREAS, persons with disabilities are a part of the community and have the right to safe and functional use of the streets, highways, sidewalks, walkways, public buildings, public facilities, places of public accommodation, places of amusement, and all other places to which the public is invited; and,

WHEREAS, the white cane gives persons who are blind and visually impaired the freedom to travel independently and to participate in the life of their communities; and,

WHEREAS, the white cane serves as a tangible reminder that persons who are blind and visually impaired are independent, self-reliant, mobile, and capable; and,

WHEREAS, the White Cane Law, FS316.1301, gives persons who are blind or visually impaired the same right as all citizens to the full and free use of the streets, highways, sidewalks, and other public places; and,

WHEREAS, by joint resolution approved on October 6, 1964 (Public Law 88-628, as amended), U.S. Congress designated October 15 of each year as White Cane Safety Day to recognize the contributions of Americans who are blind or have low vision.

NOW, THEREFORE, BE IT RESOLVED, by the City Commission of the City of Wildwood, Florida, that the 15th day of October 2022, be, and is hereby proclaimed as

WHITE CANE SAFETY DAY

in the City of Wildwood, Florida. We further encourage the citizens of this great city to be aware of the White Cane Law and their responsibility in upholding it, to be aware that persons with disabilities have much to offer, and their energy, creativity, and hard work can greatly strengthen our city and our economy, and to recognize that the white cane is an instrument of safety and independence for persons who are blind and visually impaired.

IN WITNESS WHEREOF, we have PASSED and DULY ADOPTED this 10th day of October 2022.

CITY COMMISSION
CITY OF WILDWOOD, FLORIDA

Ed Wolf, Mayor

ATTEST: _____
Susan Patterson, City Clerk

CITY COMMISSION OF THE CITY OF WILDWOOD
EXECUTIVE SUMMARY

SUBJECT: Quarterly Team Impact Award for Officer Garth Layne

REQUESTED ACTION: For informational purposes only.

CONTRACT:

Vendor/Entity:

Effective Date:

Termination Date:

Managing Division/Department:

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

Chief of Police Randall Parmer will present Officer Garth Layne with the Quarterly Team Impact Award.

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: **CDD 2208-001 Village CDD No. 15**

REQUESTED ACTION: Staff recommends approval.

CONTRACT:

Vendor/Entity:

Effective Date:

Termination Date:

Managing Division/Department:

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

The applicant is seeking approval from the City Commission to establish a Community Development District (CDD) for a portion of The Villages of Southern Oaks, to be referred to as the Village Community Development District No. 15.

The project consists of approximately 2,495.5 acres of land, including approximately 12,344 dwellings units, with a mix of housing types, designs and models.

A proposed infrastructure plan is included as an attachment with the Petition to Establish Village Community Development District No. 15. The landowner/CDD is proposing to construct the roadways, utilities (water and wastewater), amenities, drainage, landscaping and water bodies associated with the Project. The total estimated cost of these improvements is \$598,592,568.78. The CDD will own, operate and maintain the utilities, amenities, drainage facilities, landscaping and water bodies. The City of Wildwood will own, operate and maintain the roads within the development.

ORDINANCE NO. O2022-88

AN ORDINANCE OF THE CITY OF WILDWOOD, FLORIDA,
ESTABLISHING AND NAMING VILLAGE COMMUNITY
DEVELOPMENT DISTRICT NO. 15 IN ACCORDANCE WITH
CHAPTER 190 OF THE FLORIDA STATUTES;
DESCRIBING THE EXTERNAL BOUNDARIES OF THE
DISTRICT; GRANTING SPECIAL POWERS; NAMING THE
INITIAL MEMBERS OF THE DISTRICT'S BOARD OF
SUPERVISORS; PROVIDING FOR CONFLICT; PROVIDING
FOR SEVERABILITY; AND PROVIDING FOR AN
EFFECTIVE DATE.

WHEREAS, pursuant to Chapter 190, Florida Statutes, The Villages Development Company, LLC ("Petitioner"), has petitioned the City Commission of the City of Wildwood, Florida ("Commission"), to adopt an ordinance establishing the Village Community Development District No. 15 ("District"), pursuant to Chapter 190, Florida Statutes (2022); and,

WHEREAS, Petitioner is a Florida limited liability company authorized to conduct business in the State of Florida; and,

WHEREAS, pursuant to Chapter 190, all interested persons and affected units of general-purpose local government were afforded an opportunity to present oral and written comments on the petition for establishment ("Petition") at a duly noticed public hearing conducted by the Commission; and,

WHEREAS, upon consideration of the record established at that hearing, the Commission determined that the statements within the Petition are true and correct; that the establishment of the District is not inconsistent with any applicable element or portion of the state comprehensive plan or the local government comprehensive plan; that the land within the District is of sufficient size, is sufficiently compact, and sufficiently contiguous to be developable as a functionally interrelated community; that the District is the best alternative available for delivering community development services and facilities to the area served by the District; that the services and facilities of the District will not be incompatible with the capacity and uses of existing local and regional community development services and facilities and that the area to be served by the District is

amenable to separate special-district governance; and,

WHEREAS, establishment of the District will constitute a timely, efficient, effective, responsive and economic way to deliver community development services in the area described in the Petition.

NOW, THEREFORE, BE IT ENACTED AND ORDAINED by the City Commission of the City of Wildwood, Florida, as follows:

SECTION 1: RECITALS. That the recitals above are hereby incorporated as if fully set forth herein.

SECTION 2: AUTHORITY. This Ordinance is adopted in compliance with, and pursuant to, the Uniform Community Development District Act of 1980, Chapter 190, Florida Statutes (2021).

SECTION 3: DISTRICT NAME. There is hereby established a community development district situated within the City of Wildwood, Florida, which shall be known as the “Village Community Development District No. 15”.

SECTION 4: EXTERNAL BOUNDARIES OF THE DISTRICT. Encompassing approximately 2,495.6 acres, the external boundaries of the District are described in Exhibit A attached hereto.

SECTION 5: POWERS AND FUNCTIONS. The powers and functions of the District are described in Chapter 190, Florida Statutes. Consent is hereby given to the District’s Board of Supervisors to plan, establish, acquire, construct or reconstruct, enlarge or extend, equip, operate, and maintain systems and facilities described and authorized by section 190.012(3)(a), (d) and (e), Florida Statutes, as long as they do not conflict with systems and facilities provided by the City of Wildwood.

SECTION 6: BOARD OF SUPERVISORS. The five persons designated to serve as initial members of the District’s Board of Supervisors are as follows: Spencer Novak, Liz Rodriguez, Cooper Hage, Jennifer Chandler and Dayna Graham. All of the above-listed persons are residents of the State of Florida and citizens of the United States of America.

SECTION 7: SEVERABILITY. If any section, sentence, clause or phrase of this Ordinance, or any particular application thereof, is held to be invalid or unconstitutional by a Court of competent jurisdiction, then said holding shall in no way affect the validity

of the remaining portions of said Ordinance.

SECTION 8: EFFECTIVE DATE. This Ordinance shall take effect immediately upon its final adoption by the City Commission.

PASSED AND ORDAINED this ____ day of _____, 2022, by the City Commission of the City of Wildwood, Florida.

**CITY COMMISSION
CITY OF WILDWOOD, FLORIDA**

Ed Wolf, Mayor

ATTEST: _____
Susan Patterson, City Clerk

First Reading: _____

Second Reading: _____

Approved as to form:

City Attorney



NELSON MULLINS RILEY & SCARBOROUGH LLP
ATTORNEYS AND COUNSELORS AT LAW

Jo O. Thacker
T: 407.839.4230
jo.thacker@nelsonmullins.com

390 North Orange Avenue, Suite 1400
Orlando, FL 32801
T 407.839.4200 F 407.425.8377
nelsonmullins.com

August 25, 2022

VIA FEDEX

Mr. Jason F. McHugh
City Manager
City Hall
100 N Main St.
Wildwood, FL 34785

RE: Petition to Establish Village Community Development District No. 15

Dear Mr. McHugh:

Enclosed please find the following original documents for filing:

- Petition to Establish Village Community Development District No. 15; and
- Check No. 1006844 for \$15,000.00 for the filing fee.

If you have any question or comment, please contact me.

Sincerely,

A handwritten signature in black ink that reads 'Jo O. Thacker'.

Jo O. Thacker

Enclosures

**PETITION TO ESTABLISH
VILLAGE COMMUNITY DEVELOPMENT DISTRICT NO. 15**

Petitioner, The Villages Development Company, LLC, a Florida limited liability company, petitions the City of Wildwood, Florida (hereinafter referred to as “City”) pursuant to the Uniform Community Development District Act of 1980, Chapter 190, Florida Statutes, to adopt an ordinance to establish a Community Development District and to designate the boundaries of the District, and states as follows:

1. Petitioner is a Florida limited liability company with its principal place of business at 3619 Kiessel Road, The Villages, Florida 32163.
2. The boundary of the District comprises approximately 2495.6 acres. A map showing the location of the District is attached as **Exhibit 1**. All of the land in the proposed District is within the City.
3. A sketch and metes and bounds legal description of the external boundaries of the District is attached as **Exhibit 2**.
4. Attached as **Exhibit 3** is documentation constituting written consent to establishment of the District by the owners of the real property to be included in the District.
5. The five (5) persons designated to serve as the initial members of the Board of Supervisors of the District are named in **Exhibit 4** attached hereto.
6. The proposed name of the District is Village Community Development District No. 15.
7. The major trunk water mains, sewer interceptors, and outfalls currently in existence on the property within the District are identified on **Exhibit 5** attached hereto.
8. The proposed timetables and related estimates of cost to construct the District services and facilities, based upon available data, are attached as **Exhibit 6**.
9. All of the property to be included in the District, as shown in **Exhibit 7** will be developed pursuant to the approved development plan of The Villages of Southern Oaks (VOSO) Age Restricted Development.
10. The Statement of Estimated Regulatory Costs of the granting of this Petition and the establishment of the District is attached as **Exhibit 8**.

WHEREFORE, Petitioner respectfully requests the City to:

- A. Schedule a public hearing on September 26, 2022 to consider this Petition filed pursuant to the uniform procedures set forth in Section 190.005(2), Florida Statutes.

B. Grant the Petition and adopt an ordinance to establish the District and designate the boundary of the District, pursuant to Sections 190.005(2), Florida Statutes.

RESPECTFULLY SUBMITTED this 22nd day of August, 2022.

**THE VILLAGES DEVELOPMENT
COMPANY, LLC,**
a Florida limited liability company

By: VDC MANAGER, LLC,
a Florida limited liability company,
its Manager

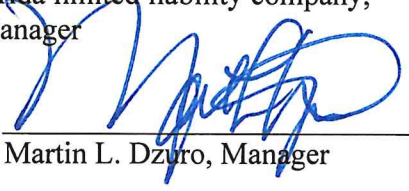
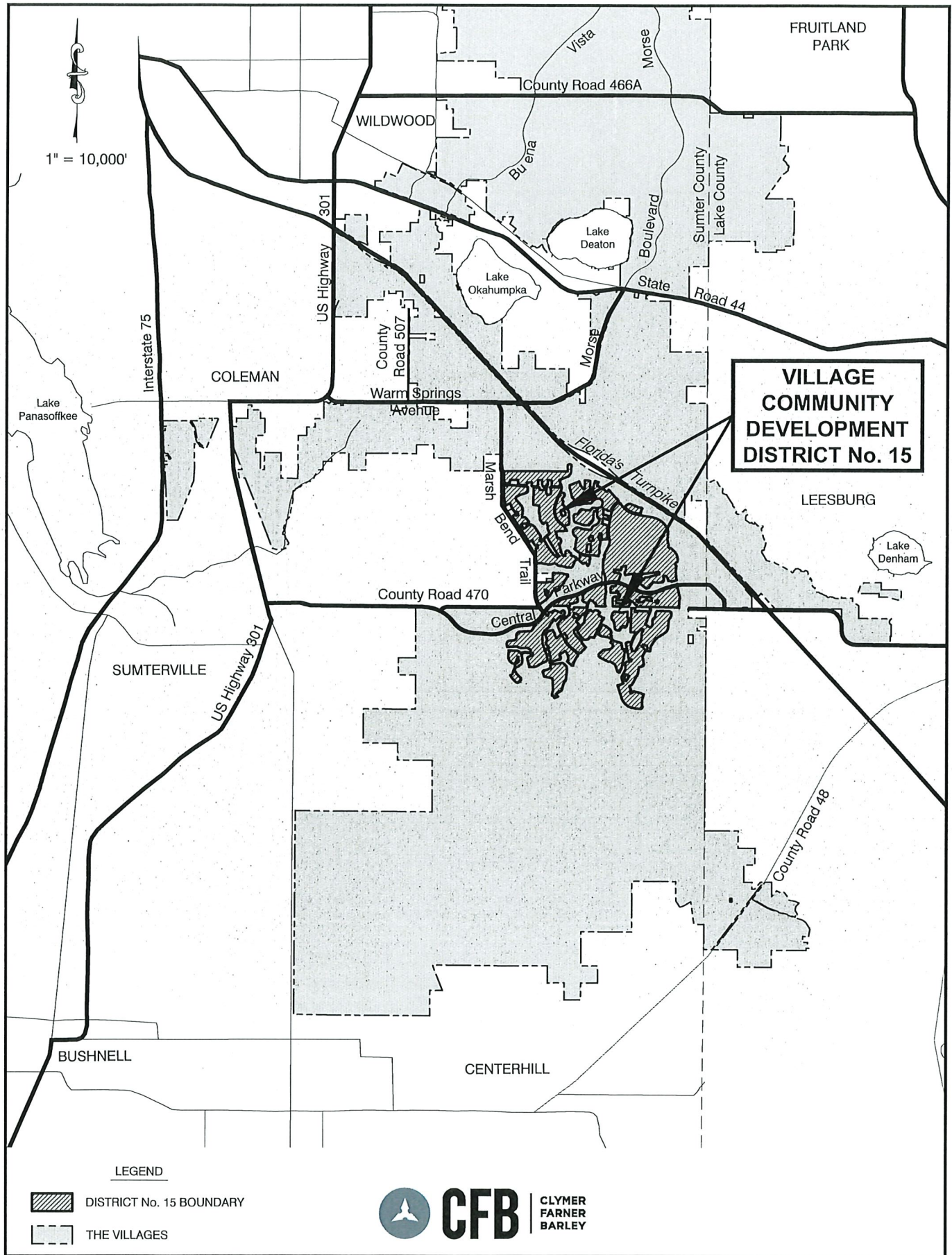
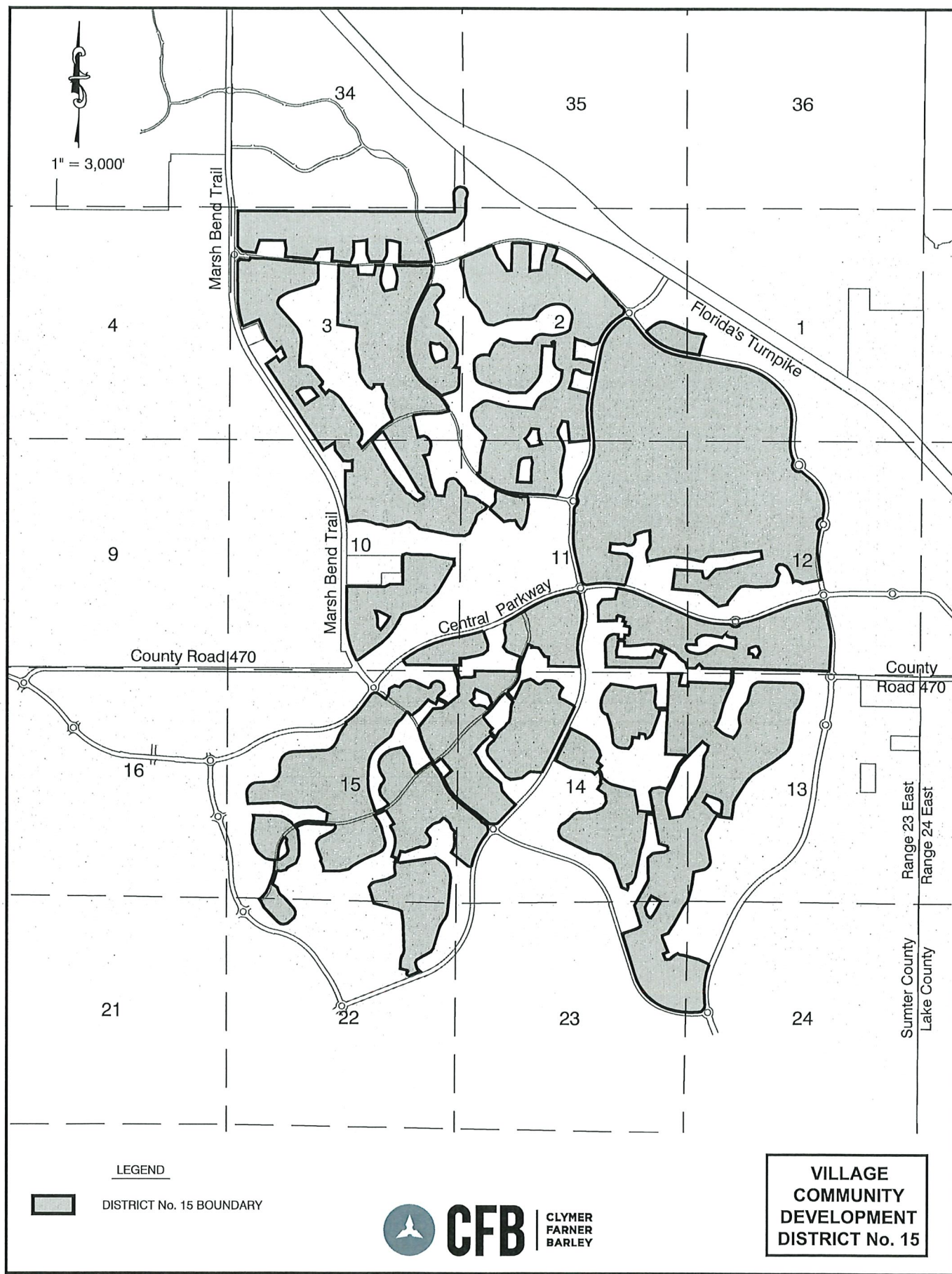
By: 
Martin L. Dzuro, Manager

EXHIBIT 1



GENERAL LOCATION MAP

EXHIBIT 2



VILLAGE COMMUNITY DEVELOPMENT DISTRICT No. 15

**METES AND BOUNDS LEGAL DESCRIPTION OF THE
VILLAGE COMMUNITY DEVELOPMENT DISTRICT 15
APPROXIMATELY 2495.6 ACRES**

A PARCEL OF LAND LYING WITHIN SECTIONS 34 AND 35, TOWNSHIP 19 SOUTH, RANGE 23 EAST, SECTIONS 2 AND 3, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, AND BEING A PORTION OF TRACT "H", VILLAGES OF SOUTHERN OAKS UNIT NO. 38, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 17, PAGES 40, 40A THROUGH 40H, INCLUSIVE, PUBLIC RECORDS OF SUMTER COUNTY, FLORIDA. SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHEAST CORNER OF AFORESAID TRACT "H"; THENCE ALONG THE EAST LINE THEREOF RUN N00°21'30"E, 147.94 FEET; THENCE DEPARTING SAID EAST LINE RUN N06°08'11"W, 70.45 FEET; THENCE N01°49'16"W, 140.10 FEET; THENCE N04°11'41"W, 70.22 FEET; THENCE N10°47'31"E, 32.04 FEET; THENCE N26°35'27"E, 68.22 FEET; THENCE N52°47'14"E, 76.80 FEET; THENCE N77°14'11"E, 53.33 FEET; THENCE S78°02'54"E, 91.05 FEET; THENCE S50°22'17"E, 53.33 FEET; THENCE S25°52'25"E, 88.47 FEET; THENCE S02°52'10"W, 70.06 FEET; THENCE S21°11'04"W, 74.90 FEET; THENCE S00°20'07"W, 287.29 FEET; THENCE S07°25'34"W, 92.34 FEET; THENCE S19°35'06"W, 93.02 FEET; THENCE S35°53'08"W, 153.16 FEET; THENCE S43°10'06"W, 105.72 FEET; THENCE S67°11'26"W, 790.25 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 863.50 FEET AND A CHORD BEARING AND DISTANCE OF S20°16'23"E, 95.51 FEET TO WHICH A RADIAL LINE BEARS N66°33'24"E; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 06°20'25", AN ARC DISTANCE OF 95.55 FEET TO THE POINT OF TANGENCY; THENCE S17°06'11"E, 254.47 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 863.50 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 10°11'14", AN ARC DISTANCE OF 153.53 FEET; THENCE ALONG A NON-TANGENT LINE RUN S86°53'15"W, 224.88 FEET; THENCE N89°20'19"W, 514.67 FEET; THENCE N00°39'41"E, 443.74 FEET; THENCE N75°22'03"W, 36.83 FEET; THENCE N75°31'49"W, 138.83 FEET; THENCE N82°18'30"W, 63.09 FEET; THENCE N89°49'34"W, 68.11 FEET; THENCE S00°10'26"W, 284.58 FEET; THENCE S10°51'17"W, 74.94 FEET; THENCE S29°26'18"W, 153.54 FEET; THENCE N89°26'57"W, 310.09 FEET; THENCE N22°08'52"W, 172.68 FEET; THENCE N05°23'55"W, 55.42 FEET; THENCE N00°10'26"E, 283.85 FEET; THENCE S71°32'44"W, 28.92 FEET; THENCE S81°34'36"W, 66.16 FEET; THENCE S80°59'53"W, 77.00 FEET; THENCE S87°28'24"W, 81.69 FEET; THENCE N89°49'34"W, 50.00 FEET; THENCE S00°10'26"W, 268.50 FEET; THENCE S09°13'59"W, 63.16 FEET; THENCE S23°52'42"W, 171.47 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 1,433.51 FEET AND A CHORD BEARING AND DISTANCE OF N86°37'30"W, 90.79 FEET TO WHICH A RADIAL LINE BEARS S01°33'38"W; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 03°37'45", AN ARC DISTANCE OF 90.80 FEET TO THE POINT OF TANGENCY; THENCE N84°48'37"W, 339.84 FEET; THENCE N05°11'23"E, 138.73 FEET; THENCE N00°29'02"W, 127.07 FEET; THENCE N10°56'26"E, 20.24 FEET; THENCE S85°30'53"W, 355.10 FEET; THENCE S01°51'33"W, 15.37 FEET; THENCE S12°25'28"W, 62.02 FEET; THENCE S28°44'02"W, 162.28 FEET; THENCE N84°48'37"W, 655.55 FEET; THENCE N05°11'23"E, 185.90 FEET; THENCE N10°14'38"W, 170.74 FEET; THENCE N00°10'26"E, 21.49 FEET; THENCE N89°49'34"W, 588.04 FEET; THENCE S17°28'50"W, 301.95 FEET; THENCE N84°40'44"W, 304.78 FEET; THENCE N45°31'40"W, 156.01 FEET; THENCE N00°08'27"W, 827.03 FEET TO THE SOUTH LINE OF THE SOUTHWEST 1/4 OF AFORESAID SECTION 34; THENCE ALONG SAID SOUTH LINE RUN S89°51'17"E, 2,384.76 FEET TO THE SOUTHWEST CORNER OF THE SOUTHEAST 1/4 OF SAID SECTION 34; THENCE

ALONG THE SOUTH LINE THEREOF RUN S89°47'59"E, 2,646.24 FEET TO THE POINT OF BEGINNING.

AND

A PARCEL OF LAND LYING WITHIN SECTIONS 3, 10 AND 11, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF AFORESAID SECTION 3; THENCE ALONG THE SOUTH LINE THEREOF RUN N89°45'28"W, 938.15 FEET; THENCE DEPARTING SAID SOUTH LINE RUN N00°14'32"E, 82.34 FEET TO THE POINT OF BEGINNING; THENCE N78°19'11"E, 141.25 FEET; THENCE S65°42'20"E, 67.57 FEET; THENCE S49°32'31"E, 57.41 FEET; THENCE S33°22'51"E, 67.64 FEET; THENCE S17°13'11"E, 54.93 FEET; THENCE S01°07'32"E, 63.72 FEET; THENCE S13°17'27"W, 192.89 FEET; THENCE S78°19'11"W, 126.74 FEET; THENCE S27°09'45"E, 139.21 FEET; THENCE S13°03'36"E, 585.50 FEET; THENCE S19°58'17"E, 52.26 FEET; THENCE S32°25'33"E, 76.50 FEET; THENCE S21°41'16"E, 48.37 FEET; THENCE S10°56'59"E, 73.01 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHERLY, HAVING A RADIUS OF 940.00 FEET AND A CHORD BEARING AND DISTANCE OF S86°22'05"E, 183.94 FEET TO WHICH A RADIAL LINE BEARS N01°58'58"W; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 11°13'48", AN ARC DISTANCE OF 184.24 FEET TO THE POINT OF TANGENCY; THENCE S80°45'11"E, 8.84 FEET; THENCE N09°14'49"E, 90.00 FEET; THENCE N11°33'44"E, 111.34 FEET; THENCE N02°17'37"E, 94.59 FEET; THENCE N29°37'03"E, 78.81 FEET; THENCE N55°19'10"E, 62.55 FEET; THENCE N81°01'16"E, 84.59 FEET; THENCE S73°16'37"E, 56.28 FEET; THENCE S51°15'55"E, 42.87 FEET; THENCE S37°59'35"E, 71.92 FEET; THENCE S41°09'38"E, 71.10 FEET; THENCE S44°20'59"E, 98.86 FEET; THENCE S22°52'25"E, 105.25 FEET; THENCE S05°46'26"W, 57.68 FEET; THENCE S09°14'49"W, 16.62 FEET; THENCE S78°40'22"E, 157.85 FEET; THENCE S71°34'09"E, 81.00 FEET; THENCE S59°44'08"E, 67.62 FEET; THENCE S53°45'23"E, 50.47 FEET; THENCE S37°47'57"E, 64.23 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 317.50 FEET AND A CHORD BEARING AND DISTANCE OF N37°10'41"E, 21.11 FEET TO WHICH A RADIAL LINE BEARS S50°55'02"E; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 03°48'36", AN ARC DISTANCE OF 21.11 FEET; THENCE ALONG A RADIAL LINE RUN S54°43'37"E, 165.00 FEET; THENCE S40°40'35"W, 90.87 FEET; THENCE S58°37'44"W, 90.53 FEET; THENCE S55°59'24"W, 65.29 FEET; THENCE S46°49'34"W, 64.69 FEET; THENCE S28°10'29"W, 64.94 FEET; THENCE S10°19'13"W, 65.53 FEET; THENCE S17°43'33"W, 59.96 FEET; THENCE S34°22'34"W, 67.35 FEET; THENCE S25°15'45"W, 78.01 FEET; THENCE S22°58'25"W, 128.21 FEET; THENCE S61°19'04"W, 127.02 FEET; THENCE N88°52'50"W, 243.55 FEET; THENCE N82°17'16"W, 79.71 FEET; THENCE N77°57'12"W, 79.71 FEET; THENCE N73°28'16"W, 76.62 FEET; THENCE N79°38'22"W, 415.06 FEET; THENCE N85°10'47"W, 87.39 FEET; THENCE N74°59'32"W, 88.92 FEET; THENCE N46°12'25"W, 171.49 FEET; THENCE N59°28'07"W, 59.10 FEET; THENCE N75°30'24"W, 58.09 FEET; THENCE S88°35'40"W, 58.09 FEET; THENCE S66°48'49"W, 71.58 FEET; THENCE S64°28'28"W, 76.50 FEET; THENCE S75°56'54"W, 74.89 FEET; THENCE S83°36'10"W, 149.48 FEET; THENCE S80°19'08"W, 75.35 FEET; THENCE N76°37'20"W, 77.24 FEET; THENCE N72°19'37"W, 89.83 FEET; THENCE N86°55'40"W, 103.31 FEET; THENCE N71°18'30"W, 129.90 FEET; THENCE N72°03'13"W, 71.18 FEET; THENCE N77°15'42"W, 70.30 FEET; THENCE N83°09'13"W, 69.50 FEET; THENCE N88°55'33"W, 67.45 FEET; THENCE S85°29'29"W, 67.44 FEET; THENCE S83°37'32"W, 213.58 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 3,125.00 FEET AND A CHORD BEARING AND DISTANCE OF N09°58'52"W, 331.40 FEET TO WHICH A RADIAL LINE BEARS N83°03'30"E; THENCE NORTHERLY ALONG THE ARC

OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 06°04'44", AN ARC DISTANCE OF 331.56 FEET; THENCE ALONG A NON-TANGENT LINE RUN N00°01'51"W, 851.31 FEET; THENCE N89°58'09"E, 160.00 FEET; THENCE N00°01'51"W, 180.54 FEET; THENCE N00°22'23"E, 57.37 FEET; THENCE S75°19'38"W, 70.06 FEET; THENCE N86°49'50"W, 138.89 FEET; THENCE N38°10'47"W, 309.10 FEET; THENCE N06°09'44"W, 175.03 FEET; THENCE S57°03'09"W, 315.99 FEET; THENCE N33°54'37"W, 825.87 FEET; THENCE N33°58'04"W, 1,400.02 FEET; THENCE N33°56'01"W, 169.30 FEET; THENCE N54°29'52"E, 298.22 FEET; THENCE S35°30'08"E, 130.80 FEET; THENCE N54°29'52"E, 169.07 FEET; THENCE N23°01'29"W, 103.03 FEET; THENCE S67°37'52"W, 4.07 FEET; THENCE N22°22'08"W, 101.13 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 106.50 FEET AND A CHORD BEARING AND DISTANCE OF N73°16'08"W, 46.74 FEET TO WHICH A RADIAL LINE BEARS S04°03'23"W; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 25°20'57", AN ARC DISTANCE OF 47.12 FEET; THENCE ALONG A NON-TANGENT LINE RUN S52°14'13"W, 118.34 FEET; THENCE N37°45'47"W, 295.00 FEET; THENCE N44°45'17"W, 36.34 FEET; THENCE N22°46'56"W, 516.69 FEET; THENCE S67°13'04"W, 410.12 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 2,860.00 FEET AND A CHORD BEARING AND DISTANCE OF N12°03'51"W, 556.24 FEET TO WHICH A RADIAL LINE BEARS S72°21'19"W; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 11°09'40", AN ARC DISTANCE OF 557.12 FEET TO THE POINT OF TANGENCY; THENCE N00°06'06"W, 948.49 FEET; THENCE N45°38'16"E, 76.37 FEET; THENCE S84°48'37"E, 204.56 FEET; THENCE N41°01'47"E, 56.13 FEET; THENCE N05°11'23"E, 15.00 FEET; THENCE S84°48'37"E, 125.11 FEET; THENCE N89°48'40"E, 170.69 FEET; THENCE S84°48'37"E, 1,289.13 FEET; THENCE S05°11'23"W, 15.00 FEET; THENCE S00°16'18"W, 357.53 FEET; THENCE S36°15'00"W, 124.90 FEET; THENCE S72°42'59"W, 596.90 FEET; THENCE S68°19'44"W, 68.89 FEET; THENCE S62°27'01"W, 72.61 FEET; THENCE S56°02'12"W, 155.84 FEET; THENCE S25°17'34"W, 60.21 FEET; THENCE S13°13'56"W, 57.65 FEET; THENCE S07°53'24"E, 56.50 FEET; THENCE S28°45'58"E, 56.52 FEET; THENCE S41°41'38"E, 637.36 FEET; THENCE S30°06'42"E, 86.81 FEET; THENCE S21°25'34"E, 86.60 FEET; THENCE S11°23'20"E, 86.60 FEET; THENCE S01°25'30"E, 86.61 FEET; THENCE S04°52'58"W, 422.04 FEET; THENCE S02°26'08"W, 59.98 FEET; THENCE S04°03'57"E, 86.22 FEET; THENCE N87°32'22"E, 155.59 FEET; THENCE S74°15'18"E, 116.79 FEET; THENCE S39°04'01"E, 420.83 FEET; THENCE S11°11'49"W, 56.04 FEET; THENCE S50°55'59"W, 76.91 FEET; THENCE S39°04'01"E, 224.01 FEET; THENCE N43°58'14"E, 112.45 FEET; THENCE S65°55'59"E, 83.46 FEET; THENCE S59°04'40"E, 83.32 FEET; THENCE S51°02'53"E, 83.32 FEET; THENCE S44°20'20"E, 83.49 FEET; THENCE S34°23'32"E, 860.94 FEET; THENCE S11°16'10"E, 116.60 FEET; THENCE S15°18'52"W, 116.67 FEET; THENCE S38°49'55"W, 106.08 FEET; THENCE S38°10'47"E, 154.65 FEET; THENCE N44°34'50"E, 511.57 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 1,660.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 15°14'59", AN ARC DISTANCE OF 441.82 FEET; THENCE ALONG A NON-TANGENT LINE RUN N25°09'31"W, 324.89 FEET; THENCE N11°56'14"W, 89.21 FEET; THENCE N02°00'22"W, 88.94 FEET; THENCE N08°25'09"E, 78.50 FEET; THENCE N05°27'10"W, 52.81 FEET; THENCE N26°33'41"W, 36.57 FEET; THENCE N35°10'46"W, 25.42 FEET; THENCE N26°03'25"W, 140.83 FEET; THENCE N00°39'41"E, 50.71 FEET; THENCE N89°20'19"W, 190.68 FEET; THENCE S00°39'41"W, 54.56 FEET; THENCE S52°12'05"W, 71.85 FEET; THENCE N68°39'54"W, 71.45 FEET; THENCE N42°48'51"W, 94.22 FEET; THENCE N33°24'33"W, 190.00 FEET; THENCE N23°51'05"W, 101.87 FEET; THENCE N04°13'52"W, 93.26 FEET; THENCE N00°41'08"W, 67.84 FEET; THENCE N04°19'01"W, 67.84 FEET; THENCE N07°56'54"W, 67.84 FEET; THENCE N11°34'47"W, 67.84 FEET; THENCE N14°49'07"W, 70.28 FEET; THENCE N11°50'32"W, 78.32 FEET; THENCE N06°44'18"W, 78.32 FEET; THENCE N01°38'03"W, 78.32 FEET; THENCE N04°53'35"E, 77.33 FEET; THENCE N05°26'19"E, 205.70 FEET; THENCE N10°52'30"W, 66.89 FEET; THENCE N00°39'41"E, 51.14 FEET; THENCE N81°37'49"W, 455.11 FEET; THENCE N00°39'41"E,

1,359.27 FEET; THENCE N05°11'23"E, 15.00 FEET; THENCE S84°48'37"E, 171.27 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 1,521.50 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 09°19'49", AN ARC DISTANCE OF 247.77 FEET TO THE POINT OF TANGENCY; THENCE N85°51'33"E, 23.29 FEET; THENCE S04°08'27"E, 15.00 FEET; THENCE S06°57'38"E, 179.94 FEET; THENCE S89°20'19"E, 353.86 FEET; THENCE N11°26'21"E, 163.69 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 225.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 08°34'29", AN ARC DISTANCE OF 33.67 FEET TO A POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 20.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 92°12'11", AN ARC DISTANCE OF 32.18 FEET TO A POINT OF CUSP; THENCE S89°20'19"E, 196.70 FEET; THENCE S00°39'41"W, 15.00 FEET; THENCE S11°26'21"W, 229.60 FEET; THENCE S08°52'05"W, 63.64 FEET; THENCE S00°47'05"E, 61.30 FEET; THENCE S10°41'25"E, 61.30 FEET; THENCE S20°31'17"E, 62.84 FEET; THENCE S23°47'21"E, 73.72 FEET; THENCE S35°50'48"E, 50.83 FEET; THENCE N78°42'56"E, 263.14 FEET; THENCE N02°43'09"W, 42.44 FEET; THENCE N17°10'02"E, 46.82 FEET; THENCE N13°33'19"E, 38.67 FEET; THENCE N09°34'25"E, 38.38 FEET; THENCE N05°04'48"E, 48.57 FEET; THENCE N00°34'21"E, 38.65 FEET; THENCE N03°24'29"W, 38.38 FEET; THENCE N07°54'03"W, 48.55 FEET; THENCE N12°24'31"W, 38.68 FEET; THENCE N16°23'26"W, 38.38 FEET; THENCE N21°47'11"W, 120.52 FEET; THENCE N00°39'41"E, 15.00 FEET; THENCE S89°20'19"E, 350.57 FEET; THENCE S87°42'07"E, 210.53 FEET; THENCE N82°59'49"E, 50.16 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 921.50 FEET AND A CHORD BEARING AND DISTANCE OF N87°58'58"E, 15.49 FEET TO WHICH A RADIAL LINE BEARS S01°32'09"E; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 00°57'47", AN ARC DISTANCE OF 15.49 FEET TO THE POINT OF TANGENCY; THENCE N87°30'04"E, 234.48 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 21.50 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 92°53'47", AN ARC DISTANCE OF 34.86 FEET TO A POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 872.50 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 24°00'56", AN ARC DISTANCE OF 365.71 FEET TO THE POINT OF TANGENCY; THENCE S24°24'47"W, 138.96 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 831.50 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 02°29'26", AN ARC DISTANCE OF 36.15 FEET TO THE POINT OF TANGENCY; THENCE S26°54'13"W, 454.26 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 1,621.50 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 17°54'17", AN ARC DISTANCE OF 506.71 FEET TO THE POINT OF TANGENCY; THENCE S08°59'57"W, 271.48 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 1,171.50 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 66°39'03", AN ARC DISTANCE OF 1,362.78 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 1,128.50 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 28°46'24", AN ARC DISTANCE OF 566.72 FEET TO THE POINT OF TANGENCY; THENCE S28°52'42"E, 121.96 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHERLY, HAVING A RADIUS OF 25.00 FEET AND A CHORD BEARING AND DISTANCE OF N67°57'15"W, 31.52 FEET TO WHICH A RADIAL LINE BEARS N61°07'20"E; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 78°09'09", AN ARC DISTANCE OF 34.10 FEET TO THE POINT OF TANGENCY; THENCE S72°58'12"W, 38.86 FEET TO

THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 1,030.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 19°33'49", AN ARC DISTANCE OF 351.69 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 1,600.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 15°45'21", AN ARC DISTANCE OF 439.99 FEET; THENCE ALONG A RADIAL LINE RUN S13°13'21"E, 520.67 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT A PARCEL OF LAND LYING WITHIN SECTIONS 3 AND 10, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF AFORESAID SECTION 3; THENCE ALONG THE SOUTH LINE THEREOF RUN N89°45'28"W, 1766.05 FEET; THENCE DEPARTING SAID SOUTH LINE RUN N00°14'32"E, 213.90 FEET TO THE POINT OF BEGINNING; THENCE S36°58'31"E, 63.58 FEET; THENCE S32°30'47"E, 67.18 FEET; THENCE S30°07'53"E, 272.82 FEET; THENCE S32°11'20"E, 613.14 FEET; THENCE S30°51'27"E, 615.37 FEET; THENCE S57°18'19"E, 107.34 FEET; THENCE S18°51'26"E, 88.17 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHERLY, HAVING A RADIUS OF 940.00 FEET AND A CHORD BEARING AND DISTANCE OF S68°48'23"W, 76.65 FEET TO WHICH A RADIAL LINE BEARS N18°51'26"W; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 04°40'23", AN ARC DISTANCE OF 76.67 FEET TO A POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 114.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 37°53'57", AN ARC DISTANCE OF 75.41 FEET; THENCE ALONG A RADIAL LINE RUN N61°25'46"W, 118.19 FEET; THENCE N48°41'31"W, 83.62 FEET; THENCE N47°18'38"W, 69.23 FEET; THENCE N65°51'01"W, 73.84 FEET; THENCE N44°48'27"W, 69.77 FEET; THENCE N23°46'14"W, 73.85 FEET; THENCE N42°18'23"W, 69.21 FEET; THENCE N41°03'19"W, 69.21 FEET; THENCE N39°48'16"W, 69.21 FEET; THENCE N38°33'12"W, 69.21 FEET; THENCE N37°18'08"W, 69.21 FEET; THENCE N36°03'05"W, 69.21 FEET; THENCE N34°48'01"W, 69.21 FEET; THENCE N33°32'57"W, 69.21 FEET; THENCE N32°17'54"W, 69.21 FEET; THENCE N31°05'47"W, 69.44 FEET; THENCE N30°46'32"W, 597.78 FEET; THENCE N44°34'50"E, 243.22 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 1,600.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 03°14'44", AN ARC DISTANCE OF 90.63 FEET TO THE POINT OF BEGINNING.

ALSO LESS AND EXCEPT A PARCEL OF LAND LYING WITHIN THE SOUTHWEST 1/4 OF SECTION 3, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF AFORESAID SECTION 3; THENCE ALONG THE SOUTH LINE THEREOF RUN N89°45'28"W, 2665.34 FEET TO THE SOUTHEAST CORNER OF THE SOUTHWEST 1/4 OF SAID SECTION 3; THENCE ALONG THE SOUTH LINE OF SAID SOUTHWEST 1/4 RUN N89°40'44"W, 604.73 FEET; THENCE DEPARTING SAID SOUTH LINE RUN N00°19'16"E, 1018.01 FEET TO THE POINT OF BEGINNING; THENCE S57°03'09"W, 359.82 FEET; THENCE N33°58'04"W, 352.37 FEET; THENCE N54°29'52"E, 150.30 FEET; THENCE N83°46'35"E, 50.32 FEET; THENCE N87°32'22"E, 140.00 FEET; THENCE S84°36'38"E, 30.51 FEET; THENCE S39°04'01"E, 247.84 FEET TO THE POINT OF BEGINNING.

AND

A PARCEL OF LAND LYING WITHIN THE EAST 1/2 OF SECTION 3, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF AFORESAID SECTION 3; SAID POINT BEARS S00°32'36"W, 5292.25 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 3; THENCE ALONG SAID LINE RUN N00°32'36"E, 1146.31 FEET; THENCE DEPARTING SAID LINE RUN N89°27'24"W, 118.17 FEET TO THE POINT OF BEGINNING; THENCE S71°25'52"W, 147.32 FEET; THENCE S74°16'23"W, 120.34 FEET; THENCE S47°05'07"W, 45.00 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 1,171.50 FEET AND A CHORD BEARING AND DISTANCE OF N50°16'59"W, 300.49 FEET TO WHICH A RADIAL LINE BEARS N47°05'07"E; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 14°44'13", AN ARC DISTANCE OF 301.32 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 1,128.50 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 66°39'03", AN ARC DISTANCE OF 1,312.76 FEET TO THE POINT OF TANGENCY; THENCE N08°59'57"E, 271.48 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 1,578.50 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 17°54'17", AN ARC DISTANCE OF 493.27 FEET TO THE POINT OF TANGENCY; THENCE N26°54'13"E, 446.14 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 831.50 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 04°44'01", AN ARC DISTANCE OF 68.70 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 927.50 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 04°33'55", AN ARC DISTANCE OF 73.90 FEET; THENCE ALONG A RADIAL LINE RUN S62°55'40"E, 39.00 FEET; THENCE N81°15'43"E, 133.73 FEET; THENCE S72°42'56"E, 71.52 FEET; THENCE S46°27'49"E, 73.81 FEET; THENCE S20°26'28"E, 70.28 FEET; THENCE S03°50'43"W, 64.35 FEET; THENCE S26°50'45"W, 63.25 FEET; THENCE S44°53'55"W, 147.45 FEET; THENCE S32°29'12"W, 129.79 FEET; THENCE S26°03'28"E, 191.69 FEET; THENCE S07°16'06"W, 115.65 FEET; THENCE S13°36'25"W, 75.00 FEET; THENCE S15°22'59"W, 90.74 FEET; THENCE S57°27'08"E, 176.57 FEET; THENCE S43°49'38"E, 303.44 FEET; THENCE S33°07'28"E, 204.19 FEET; THENCE S19°04'43"E, 92.31 FEET; THENCE S05°09'31"E, 90.89 FEET; THENCE S01°05'12"W, 140.00 FEET; THENCE S04°59'21"W, 102.76 FEET; THENCE S32°52'33"W, 117.66 FEET; THENCE S89°11'53"E, 120.00 FEET; THENCE S00°48'07"W, 360.00 FEET; THENCE S02°22'02"W, 40.01 FEET; THENCE S13°30'55"W, 40.10 FEET; THENCE S28°28'51"W, 53.65 FEET; THENCE S43°50'08"W, 42.53 FEET; THENCE S60°07'42"W, 59.92 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT A PARCEL OF LAND LYING WITHIN THE SOUTHEAST 1/4 OF SECTION 3, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF AFORESAID SECTION 3; SAID POINT BEARS S00°32'36"W, 5292.25 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 3; THENCE ALONG SAID LINE RUN N00°32'36"E, 1898.56 FEET; THENCE DEPARTING SAID LINE RUN N89°27'24"W, 307.68 FEET TO THE POINT OF BEGINNING; THENCE S70°25'25"W, 265.96 FEET; THENCE N32°58'15"W, 80.60 FEET; THENCE N25°13'17"W, 69.51 FEET; THENCE N18°58'24"W, 69.46 FEET; THENCE N12°43'33"W, 69.50 FEET; THENCE N06°28'29"W, 69.54 FEET; THENCE N00°29'56"W, 63.38 FEET; THENCE N07°28'14"E, 62.44 FEET; THENCE S77°31'45"E, 150.66 FEET; THENCE N79°00'32"E, 73.89 FEET; THENCE S44°04'57"E, 70.00 FEET; THENCE S43°49'38"E, 70.00

FEET; THENCE S38°53'08"E, 62.71 FEET; THENCE S13°08'01"E, 53.17 FEET; THENCE S02°18'35"W, 149.54 FEET TO THE POINT OF BEGINNING.

AND

A PARCEL OF LAND LYING WITHIN SECTIONS 2, 3 AND 11, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF AFORESAID SECTION 11; SAID POINT BEARS N89°02'15"W, 5385.32 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 11; THENCE ALONG SAID LINE RUN S89°02'15"E, 432.61 FEET; THENCE DEPARTING SAID LINE RUN S00°57'45"W, 737.38 FEET TO THE POINT OF BEGINNING; THENCE N47°06'34"E, 15.00 FEET; THENCE N84°13'51"E, 67.83 FEET; THENCE N02°33'45"E, 369.89 FEET; THENCE N11°14'29"E, 82.13 FEET; THENCE N14°35'21"E, 71.05 FEET; THENCE N14°37'19"E, 213.33 FEET; THENCE N22°51'39"E, 84.55 FEET; THENCE N31°49'01"W, 72.32 FEET; THENCE N41°39'30"W, 70.00 FEET; THENCE N44°07'39"W, 66.13 FEET; THENCE N51°21'49"W, 69.93 FEET; THENCE N43°47'49"W, 92.31 FEET; THENCE N29°46'13"W, 92.06 FEET; THENCE N16°35'24"W, 85.84 FEET; THENCE N12°09'34"W, 77.81 FEET; THENCE N00°12'16"W, 57.51 FEET; THENCE N19°56'06"E, 73.11 FEET; THENCE N65°00'08"W, 3.81 FEET; THENCE N24°59'52"E, 50.00 FEET; THENCE N54°46'54"E, 229.23 FEET; THENCE N64°28'09"E, 72.86 FEET; THENCE N82°57'51"E, 66.30 FEET; THENCE S80°30'02"E, 59.00 FEET; THENCE S74°21'28"E, 294.00 FEET; THENCE S74°21'47"E, 72.90 FEET; THENCE S77°27'28"E, 66.80 FEET; THENCE S83°05'27"E, 67.56 FEET; THENCE S85°01'40"E, 538.47 FEET; THENCE N20°12'02"E, 66.32 FEET; THENCE N26°06'31"E, 70.00 FEET; THENCE N27°19'45"E, 78.05 FEET; THENCE N37°09'04"E, 89.19 FEET; THENCE N49°07'38"E, 89.19 FEET; THENCE N61°06'11"E, 89.19 FEET; THENCE N68°33'23"E, 72.56 FEET; THENCE N67°30'06"E, 67.42 FEET; THENCE N59°45'58"E, 65.13 FEET; THENCE N51°07'47"E, 65.13 FEET; THENCE N42°29'37"E, 65.13 FEET; THENCE N33°51'27"E, 65.13 FEET; THENCE N25°13'17"E, 65.13 FEET; THENCE N16°35'06"E, 65.13 FEET; THENCE N07°55'44"E, 65.52 FEET; THENCE N03°54'18"E, 103.11 FEET; THENCE N74°44'55"W, 71.47 FEET; THENCE N58°52'40"W, 59.61 FEET; THENCE N42°36'29"W, 62.93 FEET; THENCE N26°44'14"W, 56.62 FEET; THENCE N11°31'10"W, 58.04 FEET; THENCE N01°34'58"E, 48.44 FEET; THENCE N03°54'18"E, 420.95 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 957.50 FEET AND A CHORD BEARING AND DISTANCE OF S87°33'16"W, 70.17 FEET TO WHICH A RADIAL LINE BEARS S04°32'43"E; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 04°11'59", AN ARC DISTANCE OF 70.18 FEET; THENCE ALONG A RADIAL LINE RUN S00°20'44"E, 110.00 FEET; THENCE N88°17'25"W, 76.57 FEET; THENCE N84°10'48"W, 76.57 FEET; THENCE S88°44'25"W, 71.70 FEET; THENCE S03°16'46"W, 645.78 FEET; THENCE S22°17'01"W, 89.92 FEET; THENCE S30°35'33"W, 89.13 FEET; THENCE S39°48'47"W, 76.44 FEET; THENCE S40°36'17"W, 168.38 FEET; THENCE S50°03'25"W, 148.50 FEET; THENCE S89°42'42"W, 370.78 FEET; THENCE N73°15'23"W, 277.60 FEET; THENCE N71°47'28"W, 420.78 FEET; THENCE N63°26'17"W, 59.20 FEET; THENCE N47°34'29"W, 60.35 FEET; THENCE N30°36'39"W, 67.37 FEET; THENCE N14°37'33"W, 53.02 FEET; THENCE N05°47'33"W, 73.04 FEET; THENCE N05°41'59"W, 177.72 FEET; THENCE N01°38'28"E, 55.33 FEET; THENCE N17°21'53"E, 63.13 FEET; THENCE N33°18'17"E, 56.95 FEET; THENCE N49°00'31"E, 61.36 FEET; THENCE N64°56'55"E, 58.71 FEET; THENCE N79°47'16"E, 53.12 FEET; THENCE N86°50'02"E, 39.06 FEET; THENCE N87°57'59"E, 75.38 FEET; THENCE S71°10'19"E, 41.24 FEET; THENCE N18°49'41"E, 92.00 FEET; THENCE N27°49'11"E, 203.70 FEET; THENCE N49°23'51"E, 167.77 FEET; THENCE S80°33'11"E, 112.64 FEET; THENCE S71°10'19"E, 127.78 FEET; THENCE S71°44'04"E, 56.79 FEET; THENCE S78°44'21"E, 56.49 FEET; THENCE S87°29'07"E, 59.47 FEET; THENCE N89°42'42"E, 305.50 FEET; THENCE S86°14'34"E, 29.47 FEET; THENCE N19°13'58"E, 70.61 FEET; THENCE

N33°30'24"E, 61.12 FEET; THENCE N46°49'55"E, 56.06 FEET; THENCE N59°13'58"E, 53.03 FEET;
 THENCE N71°31'02"E, 55.04 FEET; THENCE N83°55'06"E, 54.04 FEET; THENCE S82°08'22"E, 87.03
 FEET; THENCE S82°57'12"E, 67.33 FEET; THENCE S87°42'11"E, 67.33 FEET; THENCE
 N87°32'51"E, 67.33 FEET; THENCE N84°28'03"E, 20.00 FEET; THENCE N81°31'30"E, 63.44 FEET;
 THENCE N77°07'23"E, 61.38 FEET; THENCE N72°54'58"E, 57.91 FEET; THENCE N68°41'30"E, 61.88
 FEET; THENCE N64°07'12"E, 67.76 FEET; THENCE N46°55'29"E, 52.40 FEET; THENCE
 N16°46'19"E, 57.93 FEET; THENCE N10°21'40"E, 208.64 FEET; THENCE N00°31'18"E, 61.97 FEET;
 THENCE N13°41'23"W, 62.29 FEET; THENCE N27°40'45"W, 62.91 FEET; THENCE N38°47'05"W,
 63.95 FEET; THENCE N49°29'54"W, 63.95 FEET; THENCE N60°12'43"W, 63.95 FEET; THENCE
 N70°55'32"W, 63.95 FEET; THENCE N81°38'21"W, 63.95 FEET; THENCE S88°40'14"W, 65.77 FEET;
 THENCE S82°33'54"W, 66.71 FEET; THENCE S76°42'18"W, 66.71 FEET; THENCE S70°50'42"W,
 66.71 FEET; THENCE S64°54'16"W, 66.83 FEET; THENCE S57°29'17"W, 65.52 FEET; THENCE
 S49°32'13"W, 65.52 FEET; THENCE S41°35'08"W, 65.52 FEET; THENCE S33°39'19"W, 67.17 FEET;
 THENCE S39°38'20"W, 57.81 FEET; THENCE S55°30'35"W, 61.74 FEET; THENCE S71°23'50"W,
 57.94 FEET; THENCE S85°18'40"W, 51.54 FEET; THENCE S88°40'30"W, 350.00 FEET; THENCE
 S86°40'48"W, 67.38 FEET; THENCE S80°38'22"W, 66.98 FEET; THENCE S75°17'45"W, 66.98 FEET;
 THENCE S70°49'00"W, 291.05 FEET; THENCE N85°13'19"W, 118.78 FEET; THENCE N63°04'49"W,
 53.57 FEET; THENCE N47°13'36"W, 65.85 FEET; THENCE N26°28'29"W, 98.66 FEET; THENCE
 N19°55'35"W, 136.20 FEET; THENCE N30°31'52"W, 65.67 FEET; THENCE N36°53'20"W, 65.52
 FEET; THENCE N44°49'12"W, 66.66 FEET; THENCE N47°45'04"W, 70.00 FEET; THENCE
 N42°59'25"W, 87.16 FEET; THENCE N31°11'24"W, 89.46 FEET; THENCE N19°14'12"W, 89.47 FEET;
 THENCE N11°59'11"W, 421.91 FEET; THENCE N13°32'39"W, 67.29 FEET; THENCE N19°15'57"W,
 172.11 FEET; THENCE N05°48'31"E, 135.44 FEET; THENCE N22°22'30"W, 45.00 FEET; THENCE
 N67°37'30"E, 765.21 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE
 SOUTHERLY AND HAVING A RADIUS OF 1,578.50 FEET; THENCE EASTERLY ALONG THE
 ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 01°27'37", AN ARC DISTANCE OF
 40.23 FEET; THENCE ALONG A NON-TANGENT LINE RUN S22°22'30"E, 319.30 FEET; THENCE
 S39°54'44"E, 64.29 FEET; THENCE S39°29'05"E, 72.12 FEET; THENCE S37°31'22"E, 73.81 FEET;
 THENCE S35°20'14"E, 73.81 FEET; THENCE S33°01'19"E, 84.14 FEET; THENCE N87°38'54"E, 97.94
 FEET; THENCE N01°00'58"E, 640.51 FEET TO A POINT ON THE ARC OF A NON-TANGENT
 CURVE CONCAVE SOUTHERLY, HAVING A RADIUS OF 1,533.50 FEET AND A CHORD
 BEARING AND DISTANCE OF S87°25'08"E, 361.76 FEET TO WHICH A RADIAL LINE BEARS
 N04°11'34"W; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL
 ANGLE OF 13°32'52", AN ARC DISTANCE OF 362.60 FEET TO THE POINT OF TANGENCY ;
 THENCE S80°38'42"E, 70.45 FEET; THENCE S01°00'58"W, 626.97 FEET; THENCE N77°07'24"E,
 109.49 FEET; THENCE N87°38'54"E, 156.00 FEET; THENCE N02°35'09"E, 31.56 FEET; THENCE
 N03°21'08"E, 75.84 FEET; THENCE N07°00'13"E, 75.84 FEET; THENCE N10°39'18"E, 75.84 FEET;
 THENCE N14°18'23"E, 75.84 FEET; THENCE N17°57'28"E, 75.84 FEET; THENCE N21°36'33"E, 75.84
 FEET; THENCE N09°24'14"E, 109.26 FEET TO A POINT ON THE ARC OF A NON-TANGENT
 CURVE CONCAVE SOUTHERLY, HAVING A RADIUS OF 1,578.50 FEET AND A CHORD
 BEARING AND DISTANCE OF S75°35'35"E, 275.32 FEET TO WHICH A RADIAL LINE BEARS
 N09°24'14"E; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL
 ANGLE OF 10°00'23", AN ARC DISTANCE OF 275.67 FEET; THENCE ALONG A RADIAL LINE
 RUN S19°24'37"W, 137.53 FEET; THENCE S22°05'50"W, 67.67 FEET; THENCE S17°57'01"W, 67.67
 FEET; THENCE S18°23'02"W, 29.40 FEET; THENCE S72°24'26"E, 155.17 FEET; THENCE
 S61°33'44"E, 148.57 FEET; THENCE S55°59'27"E, 70.33 FEET; THENCE S55°15'41"E, 543.12 FEET;
 THENCE N46°52'15"E, 168.74 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE
 WESTERLY AND HAVING A RADIUS OF 25.00 FEET; THENCE NORTHERLY ALONG THE ARC
 OF SAID CURVE THROUGH A CENTRAL ANGLE OF 90°00'00", AN ARC DISTANCE OF 39.27
 FEET TO A POINT OF CUSP; THENCE S43°07'45"E, 548.25 FEET; THENCE S41°36'06"E, 150.05
 FEET; THENCE S43°07'45"E, 201.90 FEET TO THE POINT OF CURVATURE OF A CURVE

CONCAVE WESTERLY AND HAVING A RADIUS OF 21.50 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 43°13'46", AN ARC DISTANCE OF 16.22 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 48.50 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 86°27'32", AN ARC DISTANCE OF 73.19 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 21.50 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 43°13'46", AN ARC DISTANCE OF 16.22 FEET; THENCE ALONG A NON-TANGENT LINE RUN S43°07'53"E, 85.58 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 116.50 FEET AND A CHORD BEARING AND DISTANCE OF S28°00'07"E, 60.80 FEET TO WHICH A RADIAL LINE BEARS N46°52'15"E; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 30°15'16", AN ARC DISTANCE OF 61.52 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 123.00 FEET AND A CHORD BEARING AND DISTANCE OF S19°10'45"W, 34.41 FEET TO WHICH A RADIAL LINE BEARS N62°46'50"W; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 16°04'49", AN ARC DISTANCE OF 34.52 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 102.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 47°30'10", AN ARC DISTANCE OF 84.57 FEET TO THE POINT OF TANGENCY; THENCE S58°38'31"W, 32.06 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 1,200.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 39°50'44", AN ARC DISTANCE OF 834.52 FEET; THENCE ALONG A RADIAL LINE RUN N71°12'13"W, 15.00 FEET; THENCE S68°39'15"W, 94.95 FEET; THENCE S87°34'29"W, 68.37 FEET; THENCE N69°24'06"W, 68.26 FEET; THENCE N63°29'46"W, 66.94 FEET; THENCE N69°11'45"W, 66.80 FEET; THENCE N74°41'43"W, 62.25 FEET; THENCE N79°06'52"W, 58.72 FEET; THENCE N67°41'50"W, 84.21 FEET; THENCE S03°54'18"W, 470.23 FEET; THENCE S84°03'50"E, 54.34 FEET; THENCE N87°07'25"E, 91.39 FEET; THENCE S78°44'07"E, 83.28 FEET; THENCE S82°41'00"E, 71.74 FEET; THENCE S71°05'44"E, 185.02 FEET; THENCE S10°30'16"W, 277.60 FEET; THENCE N80°52'30"W, 163.81 FEET; THENCE N69°32'41"W, 80.31 FEET; THENCE N53°29'28"W, 73.03 FEET; THENCE N76°25'09"W, 60.20 FEET; THENCE S79°05'32"W, 60.50 FEET; THENCE S16°29'20"W, 122.08 FEET; THENCE S06°04'36"W, 76.68 FEET; THENCE S12°33'05"W, 80.99 FEET; THENCE S19°17'03"W, 152.30 FEET; THENCE S76°16'53"E, 458.61 FEET; THENCE S79°29'44"E, 15.00 FEET; THENCE S10°30'16"W, 117.68 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 1,500.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 16°00'05", AN ARC DISTANCE OF 418.92 FEET TO THE POINT OF TANGENCY; THENCE S05°29'50"E, 563.17 FEET; THENCE S84°30'10"W, 469.00 FEET; THENCE N05°29'50"W, 471.74 FEET; THENCE N81°52'37"W, 124.38 FEET; THENCE S25°17'46"W, 160.58 FEET; THENCE S28°03'56"W, 64.40 FEET; THENCE S03°25'57"W, 63.77 FEET; THENCE S20°02'48"E, 63.16 FEET; THENCE S26°42'45"E, 206.55 FEET; THENCE S19°36'07"E, 94.36 FEET; THENCE S03°47'31"E, 96.83 FEET; THENCE S11°09'35"W, 359.01 FEET; THENCE S10°55'58"W, 68.77 FEET; THENCE S04°26'08"W, 64.62 FEET; THENCE S03°56'17"E, 208.40 FEET; THENCE S03°36'15"E, 75.88 FEET; THENCE S07°45'51"W, 60.55 FEET; THENCE S23°42'02"W, 59.50 FEET; THENCE S26°20'45"W, 157.76 FEET; THENCE S09°07'37"W, 15.00 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHERLY, HAVING A RADIUS OF 3,449.50 FEET AND A CHORD BEARING AND DISTANCE OF N84°53'48"W, 484.07 FEET TO WHICH A RADIAL LINE BEARS N09°07'37"E; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 08°02'49", AN ARC DISTANCE OF 484.47 FEET TO THE POINT OF TANGENCY; THENCE N88°55'12"W, 232.82 FEET; THENCE N87°52'45"W, 120.20

FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 1,112.50 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 08°55'37", AN ARC DISTANCE OF 173.33 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 128.50 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 06°43'57", AN ARC DISTANCE OF 15.10 FEET TO THE POINT OF TANGENCY; THENCE N85°41'07"W, 77.08 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 127.09 FEET AND A CHORD BEARING AND DISTANCE OF N79°23'23"W, 23.61 FEET TO WHICH A RADIAL LINE BEARS S05°16'47"W; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 10°39'39", AN ARC DISTANCE OF 23.65 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 1,130.78 FEET AND A CHORD BEARING AND DISTANCE OF N72°27'01"W, 25.26 FEET TO WHICH A RADIAL LINE BEARS S16°54'35"W; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 01°16'47", AN ARC DISTANCE OF 25.26 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 1,171.50 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 02°29'27", AN ARC DISTANCE OF 50.93 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 1,478.50 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 31°24'37", AN ARC DISTANCE OF 810.53 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT A PARCEL OF LAND LYING WITHIN THE NORTHWEST 1/4 OF SECTION 11, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF AFORESAID SECTION 11; SAID POINT BEARS N89°02'15"W, 5385.32 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 11; THENCE ALONG SAID LINE RUN S89°02'15"E, 1421.90 FEET; THENCE DEPARTING SAID LINE RUN S00°57'45"W, 482.37 FEET TO THE POINT OF BEGINNING; THENCE N15°10'10"E, 57.51 FEET; THENCE N41°14'50"E, 55.17 FEET; THENCE N66°55'37"E, 55.24 FEET; THENCE N84°33'52"E, 137.63 FEET; THENCE N85°16'07"E, 39.83 FEET; THENCE S15°58'04"E, 133.76 FEET; THENCE S10°39'48"W, 110.74 FEET; THENCE S07°24'26"W, 65.52 FEET; THENCE S01°04'48"W, 277.03 FEET; THENCE N88°55'12"W, 330.04 FEET; THENCE N06°18'03"E, 440.86 FEET TO THE POINT OF BEGINNING.

ALSO LESS AND EXCEPT A PARCEL OF LAND LYING WITHIN SECTIONS 2 AND 11, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF AFORESAID SECTION 11; SAID POINT BEARS N89°02'15"W, 5385.32 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 11; THENCE ALONG SAID LINE RUN S89°02'15"E, 1806.95 FEET; THENCE DEPARTING SAID LINE RUN S00°57'45"W, 69.08 FEET TO THE POINT OF BEGINNING; THENCE S80°42'14"W, 65.29 FEET; THENCE S85°48'38"W, 83.48 FEET; THENCE N22°44'10"W, 56.32 FEET; THENCE N38°18'50"W, 72.20 FEET; THENCE N37°56'06"W, 78.26 FEET; THENCE N50°21'46"E, 69.17 FEET; THENCE N36°00'30"E, 80.60 FEET; THENCE N28°31'29"E, 80.60 FEET; THENCE N21°34'32"E, 59.58 FEET; THENCE S85°01'40"E, 144.87 FEET; THENCE S71°26'23"E, 18.34 FEET; THENCE S01°09'29"W, 79.40 FEET; THENCE S05°28'21"E, 79.40 FEET; THENCE S12°06'11"E, 79.40 FEET; THENCE S17°05'59"E, 40.29 FEET; THENCE S27°30'51"E, 67.81 FEET; THENCE S74°01'56"W, 131.30 FEET TO THE POINT OF BEGINNING.

AND

A PARCEL OF LAND LYING WITHIN THE NORTHWEST 1/4 OF SECTION 11, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF AFORESAID SECTION 11; SAID POINT BEARS N89°02'15"W, 5385.32 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 11; THENCE ALONG SAID LINE RUN S89°02'15"E, 776.02 FEET; THENCE DEPARTING SAID LINE RUN S00°57'45"W, 1523.39 FEET TO THE POINT OF BEGINNING; THENCE N42°38'48"E, 155.14 FEET; THENCE N12°54'05"E, 24.24 FEET; THENCE N01°47'08"W, 172.60 FEET; THENCE N16°12'03"E, 102.03 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 1,521.50 FEET AND A CHORD BEARING AND DISTANCE OF S70°08'16"E, 220.91 FEET TO WHICH A RADIAL LINE BEARS S24°01'31"W; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 08°19'34", AN ARC DISTANCE OF 221.10 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 1,128.50 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 02°08'38", AN ARC DISTANCE OF 42.23 FEET; THENCE ALONG A NON-TANGENT LINE RUN S70°02'59"E, 88.72 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 503.50 FEET AND A CHORD BEARING AND DISTANCE OF S75°03'21"E, 87.85 FEET TO WHICH A RADIAL LINE BEARS S19°56'55"W; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 10°00'33", AN ARC DISTANCE OF 87.96 FEET TO A POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 1,181.50 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 02°27'32", AN ARC DISTANCE OF 50.71 FEET; THENCE ALONG A NON-TANGENT LINE RUN N85°57'36"E, 26.47 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 1,176.50 FEET AND A CHORD BEARING AND DISTANCE OF S84°24'26"E, 25.67 FEET TO WHICH A RADIAL LINE BEARS S06°13'04"W; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 01°15'00", AN ARC DISTANCE OF 25.67 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 21.50 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 42°06'44", AN ARC DISTANCE OF 15.80 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 48.50 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 87°33'16", AN ARC DISTANCE OF 74.11 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 21.50 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 41°33'15", AN ARC DISTANCE OF 15.59 FEET TO THE POINT OF TANGENCY; THENCE S88°55'12"E, 89.16 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 46.50 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 90°00'00", AN ARC DISTANCE OF 73.04 FEET TO THE POINT OF TANGENCY; THENCE S01°04'48"W, 48.74 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 203.50 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 17°10'07", AN ARC DISTANCE OF 60.98 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 196.50 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 11°34'01", AN ARC DISTANCE OF 39.67 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHERLY,

HAVING A RADIUS OF 5.00 FEET AND A CHORD BEARING AND DISTANCE OF N69°22'40"W, 2.13 FEET TO WHICH A RADIAL LINE BEARS N32°56'02"E; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 24°37'24", AN ARC DISTANCE OF 2.15 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 47.54 FEET AND A CHORD BEARING AND DISTANCE OF N72°43'01"W, 11.46 FEET TO WHICH A RADIAL LINE BEARS S10°21'33"W; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 13°50'53", AN ARC DISTANCE OF 11.49 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 184.00 FEET AND A CHORD BEARING AND DISTANCE OF S00°59'12"W, 45.59 FEET TO WHICH A RADIAL LINE BEARS N83°52'14"E; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 14°13'57", AN ARC DISTANCE OF 45.71 FEET TO THE POINT OF TANGENCY; THENCE S08°06'11"W, 268.67 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 484.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 34°09'21", AN ARC DISTANCE OF 288.53 FEET; THENCE ALONG A NON-TANGENT LINE RUN N43°14'28"W, 107.47 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 224.03 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 39°42'15", AN ARC DISTANCE OF 155.24 FEET; THENCE ALONG A NON-TANGENT LINE RUN S84°24'59"W, 90.50 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 50.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 24°43'08", AN ARC DISTANCE OF 21.57 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 50.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 31°07'08", AN ARC DISTANCE OF 27.16 FEET TO THE POINT OF TANGENCY; THENCE S78°00'59"W, 140.50 FEET; THENCE N48°18'33"W, 426.66 FEET; THENCE N06°29'39"E, 39.70 FEET TO THE POINT OF BEGINNING.

AND

A PARCEL OF LAND LYING WITHIN SECTIONS 1 AND 2, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE SOUTHWEST 1/4 OF AFORESAID SECTION 1; THENCE ALONG THE WEST LINE THEREOF RUN S00°04'11"E, 352.31 FEET; THENCE DEPARTING SAID WEST LINE RUN N89°55'49"E, 300.14 FEET TO THE POINT OF BEGINNING; THENCE S15°49'23"W, 277.92 FEET; THENCE N79°33'28"W, 437.08 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 1,400.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 38°54'59", AN ARC DISTANCE OF 950.91 FEET; THENCE ALONG A NON-TANGENT LINE RUN N52°01'18"E, 220.18 FEET; THENCE N57°25'03"E, 86.47 FEET; THENCE N69°08'41"E, 97.63 FEET; THENCE N90°00'00"E, 105.68 FEET; THENCE S74°34'36"E, 91.24 FEET; THENCE S68°30'04"E, 483.60 FEET; THENCE S64°45'22"E, 64.59 FEET; THENCE S72°39'35"E, 66.01 FEET; THENCE S77°25'00"E, 63.22 FEET; THENCE S84°34'28"E, 173.40 FEET; THENCE S45°46'06"E, 71.45 FEET; THENCE S34°52'34"W, 57.08 FEET; THENCE S19°18'17"W, 125.08 FEET TO THE POINT OF BEGINNING.

AND

A PARCEL OF LAND LYING WITHIN SECTIONS 1, 2, 11 AND 12, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA; BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE SOUTHEAST 1/4 OF AFORESAID SECTION 2; THENCE ALONG THE EAST LINE THEREOF RUN N00°04'11"W, 1076.00 FEET; THENCE DEPARTING SAID EAST LINE RUN S89°55'49"W, 2264.16 FEET TO THE POINT OF BEGINNING; THENCE N10°30'16"E, 1,118.00 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 1,100.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 48°08'15", AN ARC DISTANCE OF 924.18 FEET; THENCE ALONG A NON-TANGENT LINE RUN N58°34'03"E, 32.05 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHERLY, HAVING A RADIUS OF 102.00 FEET AND A CHORD BEARING AND DISTANCE OF N82°23'36"E, 82.16 FEET TO WHICH A RADIAL LINE BEARS N31°21'29"W; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 47°30'10", AN ARC DISTANCE OF 84.57 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 120.99 FEET AND A CHORD BEARING AND DISTANCE OF S79°39'21"E, 25.14 FEET TO WHICH A RADIAL LINE BEARS S16°18'27"W; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 11°55'36", AN ARC DISTANCE OF 25.18 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 102.00 FEET AND A CHORD BEARING AND DISTANCE OF S61°49'08"E, 82.16 FEET TO WHICH A RADIAL LINE BEARS N04°25'47"E; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 47°30'10", AN ARC DISTANCE OF 84.57 FEET TO THE POINT OF TANGENCY; THENCE S38°04'03"E, 342.25 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 1,500.00 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 41°29'24", AN ARC DISTANCE OF 1,086.21 FEET TO THE POINT OF TANGENCY; THENCE S79°33'28"E, 1,407.59 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 1,668.00 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 43°37'03", AN ARC DISTANCE OF 1,269.79 FEET TO A POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 903.53 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 39°31'09", AN ARC DISTANCE OF 623.20 FEET TO THE POINT OF TANGENCY; THENCE S03°34'44"W, 497.22 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 862.34 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 29°02'22", AN ARC DISTANCE OF 437.06 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 152.22 FEET AND A CHORD BEARING AND DISTANCE OF S35°18'54"E, 295.17 FEET TO WHICH A RADIAL LINE BEARS N49°29'25"W; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 151°38'58", AN ARC DISTANCE OF 402.89 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 862.42 FEET AND A CHORD BEARING AND DISTANCE OF S49°57'25"E, 143.94 FEET TO WHICH A RADIAL LINE BEARS S44°49'49"W; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 09°34'27", AN ARC DISTANCE OF 144.11 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 1,160.72 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 17°36'34", AN ARC DISTANCE OF 356.74 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 823.24 FEET AND A CHORD BEARING AND DISTANCE OF S12°10'06"E, 694.92 FEET TO WHICH

A RADIAL LINE BEARS N52°52'00"E; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 49°55'49", AN ARC DISTANCE OF 717.41 FEET TO THE POINT OF TANGENCY; THENCE S12°47'49"W, 58.01 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 152.22 FEET AND A CHORD BEARING AND DISTANCE OF S12°47'49"W, 287.55 FEET TO WHICH A RADIAL LINE BEARS N06°22'43"W; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 141°38'57", AN ARC DISTANCE OF 376.33 FEET; THENCE ALONG A NON-TANGENT LINE RUN S12°47'49"W, 30.32 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 1,826.83 FEET AND A CHORD BEARING AND DISTANCE OF S01°57'43"W, 682.42 FEET TO WHICH A RADIAL LINE BEARS N77°16'24"W; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 21°31'46", AN ARC DISTANCE OF 686.45 FEET TO THE POINT OF TANGENCY; THENCE S08°48'10"E, 440.20 FEET; THENCE S77°31'50"W, 434.95 FEET; THENCE N47°33'46"W, 33.68 FEET; THENCE N69°13'20"W, 74.86 FEET; THENCE N78°02'44"W, 78.66 FEET; THENCE S61°20'58"W, 51.08 FEET; THENCE N14°35'27"W, 127.74 FEET; THENCE N23°41'18"W, 157.03 FEET; THENCE N34°55'31"W, 103.31 FEET; THENCE N63°41'28"W, 106.67 FEET; THENCE N88°44'32"W, 89.72 FEET; THENCE S44°22'51"W, 62.01 FEET; THENCE S10°07'59"W, 84.04 FEET; THENCE S37°37'12"E, 124.34 FEET; THENCE S24°33'23"W, 49.81 FEET; THENCE S19°23'59"W, 56.39 FEET; THENCE S06°47'41"W, 83.32 FEET; THENCE S34°18'34"W, 78.70 FEET; THENCE S58°52'21"W, 55.27 FEET; THENCE S78°41'35"W, 40.27 FEET; THENCE S87°33'18"W, 356.47 FEET; THENCE N85°10'25"W, 268.26 FEET; THENCE S77°54'55"W, 94.33 FEET; THENCE S49°00'54"W, 86.03 FEET; THENCE S37°59'18"W, 379.42 FEET; THENCE S09°44'10"W, 53.41 FEET; THENCE S77°26'16"W, 214.36 FEET; THENCE N51°36'20"W, 556.97 FEET; THENCE N85°12'39"W, 636.49 FEET; THENCE N06°18'12"E, 452.43 FEET; THENCE S86°50'47"E, 635.95 FEET; THENCE S11°20'26"E, 142.38 FEET; THENCE S53°09'13"E, 39.62 FEET; THENCE S87°12'35"E, 40.67 FEET; THENCE N61°08'03"E, 65.62 FEET; THENCE N39°15'21"E, 139.35 FEET; THENCE N49°08'11"E, 107.43 FEET; THENCE N83°59'46"E, 94.64 FEET; THENCE N83°52'34"E, 148.48 FEET; THENCE N75°08'11"E, 131.21 FEET; THENCE N74°41'32"E, 446.30 FEET; THENCE N74°56'10"E, 278.06 FEET; THENCE N07°57'32"W, 68.32 FEET; THENCE N07°30'08"W, 95.14 FEET; THENCE N19°11'36"W, 15.11 FEET; THENCE S86°00'45"W, 160.64 FEET; THENCE S79°52'31"W, 148.27 FEET; THENCE N90°00'00"W, 101.24 FEET; THENCE S83°26'56"W, 130.26 FEET; THENCE S78°59'25"W, 139.49 FEET; THENCE S82°42'45"W, 210.75 FEET; THENCE S85°27'58"W, 353.51 FEET; THENCE S60°39'47"W, 34.20 FEET; THENCE S42°45'49"W, 66.78 FEET; THENCE S33°31'33"W, 52.85 FEET; THENCE N87°01'19"W, 71.13 FEET; THENCE N75°32'07"W, 176.40 FEET; THENCE N81°37'45"W, 234.44 FEET; THENCE N85°02'04"W, 215.09 FEET; THENCE S85°34'37"W, 96.56 FEET; THENCE S80°01'59"W, 250.99 FEET; THENCE S77°36'00"W, 260.33 FEET; THENCE N12°55'28"W, 148.01 FEET; THENCE N00°41'28"E, 55.05 FEET; THENCE N14°18'21"E, 61.89 FEET; THENCE N39°40'51"E, 65.50 FEET; THENCE N21°04'44"E, 75.63 FEET; THENCE N02°21'35"W, 112.85 FEET; THENCE N00°59'50"W, 228.86 FEET; THENCE S79°46'54"W, 130.86 FEET; THENCE S73°39'26"W, 127.29 FEET; THENCE S66°21'05"W, 117.40 FEET; THENCE S11°41'49"E, 107.89 FEET; THENCE S14°20'04"W, 64.35 FEET; THENCE S40°09'00"W, 60.74 FEET; THENCE S63°33'05"W, 51.20 FEET; THENCE S84°48'36"W, 87.54 FEET; THENCE N63°47'51"W, 98.63 FEET; THENCE S83°15'14"W, 100.96 FEET; THENCE N86°52'52"W, 133.07 FEET; THENCE N81°17'59"W, 74.16 FEET; THENCE S06°27'00"W, 199.89 FEET; THENCE S77°13'37"E, 161.17 FEET; THENCE S88°50'13"E, 140.90 FEET; THENCE S80°49'25"E, 111.72 FEET; THENCE S49°08'58"E, 153.85 FEET; THENCE S09°25'30"W, 138.01 FEET; THENCE S16°13'59"W, 495.23 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHERLY, HAVING A RADIUS OF 2,133.00 FEET AND A CHORD BEARING AND DISTANCE OF N89°32'07"W, 879.08 FEET TO WHICH A RADIAL LINE BEARS N12°21'24"E; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 23°47'02", AN ARC DISTANCE OF 885.43 FEET TO THE POINT OF TANGENCY; THENCE S78°34'22"W, 4.78

FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 102.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 47°30'13", AN ARC DISTANCE OF 84.57 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 123.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 05°00'23", AN ARC DISTANCE OF 10.75 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 102.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 47°30'10", AN ARC DISTANCE OF 84.57 FEET TO THE POINT OF TANGENCY; THENCE N11°25'38"W, 51.64 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 5,808.98 FEET AND A CHORD BEARING AND DISTANCE OF N13°23'12"W, 538.82 FEET TO WHICH A RADIAL LINE BEARS N79°16'18"E; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 05°18'59", AN ARC DISTANCE OF 539.01 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 1,450.00 FEET AND A CHORD BEARING AND DISTANCE OF N07°29'30"W, 433.91 FEET TO WHICH A RADIAL LINE BEARS S73°54'11"W; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 17°12'37", AN ARC DISTANCE OF 435.55 FEET TO THE POINT OF TANGENCY; THENCE N01°06'49"E, 613.23 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 1,100.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 02°14'01", AN ARC DISTANCE OF 42.88 FEET TO A POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 102.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 52°06'03", AN ARC DISTANCE OF 92.75 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 123.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 87°05'47", AN ARC DISTANCE OF 186.97 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 102.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 49°10'53", AN ARC DISTANCE OF 87.55 FEET TO THE POINT OF TANGENCY; THENCE N17°31'58"E, 148.10 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 1,570.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 14°28'14", AN ARC DISTANCE OF 396.52 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 1,200.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 37°30'02", AN ARC DISTANCE OF 785.41 FEET TO THE POINT OF TANGENCY; THENCE N05°29'50"W, 579.77 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 1,400.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 16°00'05", AN ARC DISTANCE OF 390.99 FEET TO THE POINT OF BEGINNING.

AND

A PARCEL OF LAND LYING WITHIN THE EAST 1/2 OF SECTION 10, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE SOUTHEAST 1/4 OF AFORESAID SECTION 10; THENCE ALONG THE SOUTH LINE THEREOF RUN N89°43'47"W, 1851.02 FEET; THENCE DEPARTING SAID SOUTH LINE RUN N00°16'13"E, 583.65 FEET TO THE POINT OF BEGINNING; THENCE N37°00'42"W, 0.48 FEET; THENCE S54°25'52"W, 576.70 FEET; THENCE S61°56'37"W,

45.00 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 2,003.00 FEET AND A CHORD BEARING AND DISTANCE OF N14°02'47"W, 969.79 FEET TO WHICH A RADIAL LINE BEARS S61°56'37"W; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 28°01'09", AN ARC DISTANCE OF 979.52 FEET; THENCE ALONG A NON-TANGENT LINE RUN N00°02'37"W, 205.64 FEET TO THE EAST RIGHT OF WAY LINE OF MARSH BEND TRAIL; THENCE ALONG SAID EAST RIGHT OF WAY LINE RUN N00°01'49"W, 568.65 FEET; THENCE DEPARTING SAID EAST RIGHT OF WAY LINE RUN S89°43'27"E, 887.29 FEET; THENCE N64°51'19"E, 140.69 FEET; THENCE S89°43'27"E, 285.15 FEET; THENCE N00°04'03"W, 681.01 FEET; THENCE N70°33'59"E, 85.77 FEET; THENCE S80°23'16"E, 131.83 FEET; THENCE S86°58'09"E, 70.10 FEET; THENCE N88°27'54"E, 70.02 FEET; THENCE S88°44'04"E, 292.22 FEET; THENCE S79°02'03"E, 81.13 FEET; THENCE S73°20'34"E, 70.07 FEET; THENCE S77°03'41"E, 70.02 FEET; THENCE S80°46'15"E, 70.26 FEET; THENCE S80°58'55"E, 70.28 FEET; THENCE S80°52'35"E, 132.01 FEET; THENCE N88°54'35"E, 64.61 FEET; THENCE S01°22'35"E, 165.48 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 767.50 FEET AND A CHORD BEARING AND DISTANCE OF S89°57'24"W, 35.71 FEET TO WHICH A RADIAL LINE BEARS S01°22'35"E; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 02°39'57", AN ARC DISTANCE OF 35.71 FEET; THENCE ALONG A NON-TANGENT LINE RUN S30°10'11"W, 535.51 FEET; THENCE S31°03'43"W, 74.23 FEET; THENCE S33°16'31"W, 76.29 FEET; THENCE S38°37'06"W, 76.32 FEET; THENCE S43°54'09"W, 76.28 FEET; THENCE S45°15'40"W, 291.23 FEET; THENCE S55°45'49"W, 79.68 FEET; THENCE S60°00'12"W, 79.52 FEET; THENCE S65°51'04"W, 79.52 FEET; THENCE S73°06'30"W, 79.45 FEET; THENCE S75°13'43"W, 141.32 FEET; THENCE S71°09'02"W, 61.97 FEET; THENCE S49°52'17"W, 57.19 FEET; THENCE S27°34'39"W, 61.61 FEET; THENCE S25°23'35"W, 74.23 FEET; THENCE S27°59'48"W, 74.23 FEET; THENCE S30°36'30"W, 74.23 FEET; THENCE S33°13'13"W, 74.23 FEET; THENCE S35°49'55"W, 74.23 FEET; THENCE S38°26'37"W, 74.23 FEET; THENCE S41°03'19"W, 74.23 FEET; THENCE S43°41'36"W, 75.71 FEET; THENCE S47°21'28"W, 132.56 FEET; THENCE S51°20'22"W, 93.73 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT A PARCEL OF LAND LYING WITHIN THE SOUTHEAST 1/4 OF SECTION 10, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE SOUTHEAST 1/4 OF AFORESAID SECTION 10; THENCE ALONG THE SOUTH LINE THEREOF RUN N89°43'47"W, 1806.22 FEET; THENCE DEPARTING SAID SOUTH LINE RUN N00°16'13"E, 943.49 FEET TO THE POINT OF BEGINNING; THENCE N47°30'17"W, 82.66 FEET; THENCE N07°19'08"W, 60.51 FEET; THENCE N00°08'21"E, 122.52 FEET; THENCE N08°58'43"W, 78.16 FEET; THENCE N19°07'31"W, 126.00 FEET; THENCE S89°43'27"E, 7.93 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 225.00 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 26°05'53", AN ARC DISTANCE OF 102.49 FEET TO THE POINT OF TANGENCY; THENCE S63°37'33"E, 250.76 FEET; THENCE S28°49'38"W, 64.37 FEET; THENCE S31°16'30"W, 59.49 FEET; THENCE S33°49'09"W, 59.49 FEET; THENCE S36°10'14"W, 59.49 FEET; THENCE S38°37'06"W, 59.49 FEET; THENCE S41°04'00"W, 64.48 FEET TO THE POINT OF BEGINNING.

AND

A PARCEL OF LAND LYING WITHIN SECTIONS 10, 11, 14, 15 AND 22, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF THE NORTHWEST 1/4 OF AFORESAID SECTION 14; THENCE ALONG THE WEST LINE THEREOF RUN N00°12'36"E, 785.67 FEET; THENCE DEPARTING SAID WEST LINE RUN S89°47'24"E, 395.22 FEET TO THE POINT OF BEGINNING; THENCE S33°44'56"E, 113.44 FEET; THENCE S26°54'12"E, 189.08 FEET; THENCE S37°42'25"E, 158.80 FEET; THENCE S47°48'47"E, 260.14 FEET; THENCE S49°21'43"E, 51.76 FEET; THENCE S50°54'39"E, 170.98 FEET; THENCE S10°10'19"E, 181.67 FEET; THENCE S41°34'40"E, 220.81 FEET; THENCE S46°04'26"E, 232.00 FEET; THENCE S43°55'34"W, 539.15 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 450.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 06°02'48", AN ARC DISTANCE OF 47.49 FEET TO A POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 102.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 50°31'46", AN ARC DISTANCE OF 89.95 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 123.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 23°05'54", AN ARC DISTANCE OF 49.59 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 102.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 51°41'06", AN ARC DISTANCE OF 92.01 FEET TO THE POINT OF TANGENCY; THENCE N50°54'40"W, 381.47 FEET; THENCE N56°59'59"W, 150.82 FEET; THENCE N50°54'40"W, 335.18 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 1,148.50 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 30°25'01", AN ARC DISTANCE OF 609.71 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 781.50 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 02°08'16", AN ARC DISTANCE OF 29.16 FEET; THENCE ALONG A RADIAL LINE RUN N67°22'05"E, 25.00 FEET; THENCE N48°42'38"E, 216.49 FEET; THENCE N39°21'58"W, 377.36 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 2,030.00 FEET AND A CHORD BEARING AND DISTANCE OF S53°35'32"W, 96.83 FEET TO WHICH A RADIAL LINE BEARS S37°46'29"E; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 02°44'00", AN ARC DISTANCE OF 96.84 FEET TO THE POINT OF TANGENCY; THENCE S54°57'32"W, 86.85 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 20.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 91°23'55", AN ARC DISTANCE OF 31.90 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 2,068.50 FEET AND A CHORD BEARING AND DISTANCE OF N24°49'38"W, 832.75 FEET TO WHICH A RADIAL LINE BEARS S53°33'37"W; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 23°13'31", AN ARC DISTANCE OF 838.48 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 831.50 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 07°52'50", AN ARC DISTANCE OF 114.37 FEET; THENCE ALONG A RADIAL LINE RUN N68°54'17"E, 25.00 FEET; THENCE N38°09'22"E, 517.24 FEET; THENCE N86°03'14"E, 219.18 FEET; THENCE N52°02'26"E, 121.02 FEET; THENCE N37°57'34"W, 3.58 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 182.50 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 26°45'13", AN ARC DISTANCE OF 85.22 FEET TO THE POINT OF TANGENCY; THENCE N64°42'47"W, 153.33 FEET; THENCE S25°17'13"W, 110.00 FEET; THENCE N64°42'47"W, 140.00 FEET; THENCE N56°17'18"W, 60.65 FEET; THENCE S42°23'07"W, 295.89 FEET; THENCE S52°24'09"W, 209.55 FEET; THENCE

S47°59'33"W, 25.00 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE
 SOUTHWESTERLY, HAVING A RADIUS OF 831.50 FEET AND A CHORD BEARING AND
 DISTANCE OF N46°47'22"W, 138.63 FEET TO WHICH A RADIAL LINE BEARS N47°59'33"E;
 THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL
 ANGLE OF 09°33'50", AN ARC DISTANCE OF 138.79 FEET TO THE POINT OF TANGENCY;
 THENCE S38°25'44"W, 43.00 FEET; THENCE S36°16'49"W, 188.95 FEET; THENCE S54°35'03"W,
 64.65 FEET; THENCE S37°08'27"W, 39.02 FEET; THENCE S34°51'21"W, 39.18 FEET; THENCE
 S32°16'32"W, 49.12 FEET; THENCE S29°42'00"W, 39.01 FEET; THENCE S27°07'27"W, 49.14 FEET;
 THENCE S24°32'53"W, 39.02 FEET; THENCE S22°15'47"W, 39.18 FEET; THENCE S18°30'18"W,
 65.41 FEET; THENCE S31°55'14"W, 42.09 FEET; THENCE S44°51'06"W, 45.30 FEET; THENCE
 S56°32'46"W, 70.31 FEET; THENCE S51°14'40"W, 249.07 FEET; THENCE S47°08'12"W, 66.56 FEET;
 THENCE S41°05'03"W, 66.55 FEET; THENCE S34°57'20"W, 66.55 FEET; THENCE S28°49'37"W,
 66.55 FEET; THENCE S22°41'54"W, 66.55 FEET; THENCE S16°34'10"W, 66.55 FEET; THENCE
 S10°26'22"W, 66.62 FEET; THENCE S06°43'38"W, 69.14 FEET; THENCE S05°11'15"W, 69.14 FEET;
 THENCE S03°38'51"W, 69.14 FEET; THENCE S02°06'27"W, 69.14 FEET; THENCE S00°34'03"W,
 69.14 FEET; THENCE S00°58'21"E, 69.14 FEET; THENCE S02°30'44"E, 69.14 FEET; THENCE
 S04°15'15"E, 68.64 FEET; THENCE S07°23'57"E, 68.10 FEET; THENCE S10°52'49"E, 71.31 FEET;
 THENCE S14°33'21"E, 75.90 FEET; THENCE S18°04'56"E, 76.73 FEET; THENCE S18°48'19"E, 304.12
 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHWESTERLY,
 HAVING A RADIUS OF 1,220.00 FEET AND A CHORD BEARING AND DISTANCE OF
 N61°59'14"E, 362.21 FEET TO WHICH A RADIAL LINE BEARS S19°28'33"E; THENCE
 NORTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF
 17°04'26", AN ARC DISTANCE OF 363.55 FEET; THENCE ALONG A NON-TANGENT LINE RUN
 N42°32'55"W, 212.25 FEET; THENCE N38°22'15"W, 92.33 FEET; THENCE N12°21'30"W, 118.41
 FEET; THENCE N19°23'05"E, 118.42 FEET; THENCE N41°18'46"E, 80.71 FEET; THENCE
 N24°32'46"E, 48.94 FEET; THENCE N10°26'41"W, 55.50 FEET; THENCE N33°55'03"W, 68.10 FEET;
 THENCE N28°06'02"W, 83.54 FEET; THENCE N19°45'43"W, 83.54 FEET; THENCE N11°23'58"W,
 84.02 FEET; THENCE N05°55'04"E, 113.50 FEET; THENCE N30°21'20"E, 95.67 FEET; THENCE
 N41°54'54"E, 86.60 FEET; THENCE N52°10'12"E, 86.60 FEET; THENCE N62°25'30"E, 86.60 FEET;
 THENCE N73°59'07"E, 86.45 FEET; THENCE N78°22'08"E, 214.65 FEET; THENCE S30°40'00"E,
 276.33 FEET; THENCE S14°16'42"E, 240.90 FEET; THENCE S37°09'04"E, 178.03 FEET TO A POINT
 ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS
 OF 630.00 FEET AND A CHORD BEARING AND DISTANCE OF N49°17'53"E, 124.28 FEET TO
 WHICH A RADIAL LINE BEARS N46°21'45"W; THENCE NORTHEASTERLY ALONG THE ARC
 OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 11°19'17", AN ARC DISTANCE OF 124.48
 FEET TO THE POINT OF TANGENCY; THENCE N54°57'32"E, 299.02 FEET TO THE POINT OF
 CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 20.00 FEET;
 THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF
 88°39'21", AN ARC DISTANCE OF 30.95 FEET TO A POINT ON THE ARC OF A NON-TANGENT
 CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 2,111.50 FEET AND A CHORD
 BEARING AND DISTANCE OF S36°55'41"E, 238.01 FEET TO WHICH A RADIAL LINE BEARS
 S56°18'10"W; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A
 CENTRAL ANGLE OF 06°27'42", AN ARC DISTANCE OF 238.13 FEET TO THE POINT OF
 REVERSE CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS
 OF 738.50 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A
 CENTRAL ANGLE OF 19°39'53", AN ARC DISTANCE OF 253.46 FEET TO THE POINT OF
 REVERSE CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS
 OF 1,191.50 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH
 A CENTRAL ANGLE OF 30°25'01", AN ARC DISTANCE OF 632.54 FEET TO THE POINT OF
 TANGENCY; THENCE S50°54'40"E, 335.23 FEET; THENCE S49°23'01"E, 150.05 FEET; THENCE
 S50°54'40"E, 201.93 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE

SOUTHWESTERLY AND HAVING A RADIUS OF 21.50 FEET; THENCE SOUTHEASTERLY
 ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 43°13'46", AN ARC
 DISTANCE OF 16.22 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE
 NORTHEASTERLY AND HAVING A RADIUS OF 48.50 FEET; THENCE SOUTHEASTERLY
 ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 86°27'32", AN ARC
 DISTANCE OF 73.19 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE
 SOUTHERLY AND HAVING A RADIUS OF 21.50 FEET; THENCE EASTERLY ALONG THE ARC
 OF SAID CURVE THROUGH A CENTRAL ANGLE OF 43°13'46", AN ARC DISTANCE OF 16.22
 FEET; THENCE ALONG A NON-TANGENT LINE RUN S50°54'49"E, 74.72 FEET TO A POINT ON
 THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF
 102.00 FEET AND A CHORD BEARING AND DISTANCE OF S23°10'11"E, 94.96 FEET TO WHICH
 A RADIAL LINE BEARS N39°05'20"E; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID
 CURVE, THROUGH A CENTRAL ANGLE OF 55°28'58", AN ARC DISTANCE OF 98.77 FEET TO
 THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A
 RADIUS OF 123.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH
 A CENTRAL ANGLE OF 12°59'08", AN ARC DISTANCE OF 27.88 FEET TO THE POINT OF
 REVERSE CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF
 102.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL
 ANGLE OF 47°30'10", AN ARC DISTANCE OF 84.57 FEET TO THE POINT OF TANGENCY;
 THENCE S39°05'20"W, 21.02 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE
 SOUTHEASTERLY AND HAVING A RADIUS OF 1,675.00 FEET; THENCE SOUTHWESTERLY
 ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 28°51'08", AN ARC
 DISTANCE OF 843.47 FEET; THENCE ALONG A RADIAL LINE RUN N79°45'48"W, 76.28 FEET;
 THENCE N50°54'40"W, 506.40 FEET; THENCE N29°30'01"E, 124.67 FEET; THENCE N06°48'11"E,
 135.12 FEET; THENCE N05°48'28"W, 119.44 FEET; THENCE N13°13'35"E, 6.67 FEET; THENCE
 N02°04'17"E, 51.69 FEET; THENCE N13°13'35"E, 39.81 FEET; THENCE N04°37'44"E, 27.32 FEET;
 THENCE N52°53'02"W, 43.39 FEET; THENCE N45°31'12"W, 60.30 FEET; THENCE N18°03'51"W,
 119.39 FEET; THENCE N45°26'02"W, 170.58 FEET; THENCE N81°32'04"W, 34.55 FEET; THENCE
 S45°14'47"W, 119.99 FEET; THENCE S72°20'04"W, 86.28 FEET; THENCE S68°27'01"W, 76.48 FEET;
 THENCE S47°13'40"W, 67.47 FEET; THENCE S48°10'26"W, 88.32 FEET; THENCE S27°25'05"W,
 100.86 FEET; THENCE S37°23'07"E, 160.72 FEET; THENCE S01°25'41"E, 92.93 FEET; THENCE
 S25°17'17"W, 63.51 FEET; THENCE S57°29'46"W, 79.70 FEET; THENCE S70°19'36"W, 63.60 FEET;
 THENCE N80°14'16"W, 80.38 FEET; THENCE S70°19'36"W, 372.08 FEET; THENCE N81°54'45"W,
 104.02 FEET; THENCE S17°14'09"W, 235.33 FEET TO THE POINT OF CURVATURE OF A CURVE
 CONCAVE EASTERLY AND HAVING A RADIUS OF 475.00 FEET; THENCE SOUTHERLY
 ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 05°24'20", AN ARC
 DISTANCE OF 44.81 FEET; THENCE ALONG A NON-TANGENT LINE RUN N85°16'00"E, 60.38
 FEET; THENCE N81°43'01"E, 848.69 FEET; THENCE S57°31'06"E, 91.01 FEET; THENCE
 S56°08'03"E, 70.00 FEET; THENCE S50°56'12"E, 86.88 FEET; THENCE S40°32'42"E, 86.81 FEET;
 THENCE S30°09'26"E, 86.81 FEET; THENCE S19°46'11"E, 86.81 FEET; THENCE S09°22'56"E, 86.81
 FEET; THENCE S02°15'43"W, 85.61 FEET; THENCE S05°32'25"W, 717.18 FEET; THENCE
 S12°40'29"W, 73.90 FEET; THENCE S24°36'20"W, 89.27 FEET; THENCE S36°14'34"W, 79.43 FEET;
 THENCE S35°08'27"W, 67.62 FEET; THENCE S28°36'47"W, 66.04 FEET; THENCE S21°45'00"W,
 66.05 FEET; THENCE S16°27'09"W, 484.36 FEET; THENCE S38°13'07"W, 84.35 FEET; THENCE
 S60°02'46"W, 381.51 FEET; THENCE S20°59'51"W, 69.90 FEET; THENCE S10°24'19"E, 69.78 FEET;
 THENCE S22°16'30"E, 78.10 FEET; THENCE S47°55'56"E, 89.28 FEET; THENCE S68°48'02"W,
 260.64 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE
 NORTHEASTERLY, HAVING A RADIUS OF 50.00 FEET AND A CHORD BEARING AND
 DISTANCE OF N31°36'34"W, 99.47 FEET TO WHICH A RADIAL LINE BEARS S25°44'05"E;
 THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL
 ANGLE OF 168°15'03", AN ARC DISTANCE OF 146.83 FEET TO THE POINT OF REVERSE

CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 45.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 41°18'38", AN ARC DISTANCE OF 32.45 FEET; THENCE ALONG A NON-TANGENT LINE RUN N76°27'22"W, 191.56 FEET; THENCE N03°07'53"E, 64.04 FEET; THENCE N01°12'01"W, 72.15 FEET; THENCE N10°24'06"E, 79.53 FEET; THENCE N16°23'49"E, 74.63 FEET; THENCE N27°39'39"E, 69.82 FEET; THENCE N15°14'48"E, 65.66 FEET; THENCE N02°03'55"W, 668.34 FEET; THENCE N07°28'09"W, 248.56 FEET; THENCE N63°10'57"W, 90.63 FEET; THENCE N75°42'31"W, 579.61 FEET; THENCE N17°10'45"W, 395.84 FEET; THENCE N37°27'53"E, 53.03 FEET; THENCE N43°12'38"E, 66.01 FEET; THENCE N66°08'16"E, 51.51 FEET; THENCE N78°09'40"E, 210.35 FEET; THENCE N75°13'42"E, 58.20 FEET; THENCE N70°58'10"E, 58.20 FEET; THENCE N66°39'06"E, 58.20 FEET; THENCE N62°20'01"E, 58.21 FEET; THENCE N57°56'56"E, 86.94 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 525.00 FEET AND A CHORD BEARING AND DISTANCE OF N00°52'38"W, 326.44 FEET TO WHICH A RADIAL LINE BEARS S71°00'35"W; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 36°13'35", AN ARC DISTANCE OF 331.94 FEET TO THE POINT OF TANGENCY; THENCE N17°14'09"E, 62.28 FEET; THENCE N72°45'51"W, 110.00 FEET; THENCE N17°14'09"E, 140.00 FEET; THENCE N16°48'28"E, 68.44 FEET; THENCE N11°28'58"E, 65.34 FEET; THENCE N04°51'10"E, 65.34 FEET; THENCE N01°46'39"W, 65.34 FEET; THENCE N08°24'28"W, 65.34 FEET; THENCE N15°02'16"W, 65.34 FEET; THENCE N21°40'05"W, 65.34 FEET; THENCE N28°17'54"W, 65.35 FEET; THENCE N31°37'15"W, 52.04 FEET; THENCE N01°27'29"W, 20.62 FEET; THENCE N58°07'39"E, 99.34 FEET; THENCE N31°52'21"W, 355.48 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 20.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 87°40'56", AN ARC DISTANCE OF 30.61 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 1,280.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 10°44'58", AN ARC DISTANCE OF 240.14 FEET TO THE POINT OF TANGENCY; THENCE S71°11'41"W, 21.20 FEET; THENCE S29°05'21"E, 85.12 FEET; THENCE S39°09'54"E, 58.03 FEET; THENCE S30°17'59"E, 89.42 FEET; THENCE S22°00'23"E, 82.16 FEET; THENCE S15°09'50"E, 77.49 FEET; THENCE S13°39'49"E, 210.00 FEET; THENCE S13°49'09"E, 101.52 FEET; THENCE S07°04'10"W, 67.99 FEET; THENCE S22°56'25"W, 62.57 FEET; THENCE S38°48'40"W, 59.03 FEET; THENCE S52°21'13"W, 26.92 FEET; THENCE S56°46'39"W, 83.53 FEET; THENCE S63°56'47"W, 83.40 FEET; THENCE S69°52'32"W, 73.34 FEET; THENCE S68°28'28"W, 68.81 FEET; THENCE S66°28'24"W, 68.81 FEET; THENCE S64°28'21"W, 68.81 FEET; THENCE S62°28'18"W, 68.81 FEET; THENCE S60°28'15"W, 68.81 FEET; THENCE S58°28'12"W, 68.81 FEET; THENCE S60°25'02"W, 90.87 FEET; THENCE S51°24'47"W, 127.69 FEET; THENCE S78°22'10"W, 214.25 FEET; THENCE S89°42'27"W, 377.37 FEET; THENCE N00°17'33"W, 72.53 FEET; THENCE N20°45'41"W, 80.23 FEET; THENCE N26°15'05"W, 90.24 FEET; THENCE N19°06'45"E, 57.65 FEET; THENCE N17°24'04"W, 13.68 FEET; THENCE N24°38'31"W, 53.88 FEET; THENCE N19°00'41"W, 84.86 FEET; THENCE N20°51'43"W, 117.25 FEET; THENCE N08°53'56"W, 109.47 FEET; THENCE N77°33'32"W, 1.07 FEET; THENCE N12°26'28"E, 53.33 FEET; THENCE N41°20'19"E, 101.93 FEET; THENCE N62°57'25"E, 350.00 FEET; THENCE N38°49'58"E, 75.89 FEET; THENCE N00°17'21"W, 80.27 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 1,530.00 FEET AND A CHORD BEARING AND DISTANCE OF N88°55'10"W, 73.15 FEET TO WHICH A RADIAL LINE BEARS S00°17'21"E; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 02°44'22", AN ARC DISTANCE OF 73.15 FEET TO THE POINT OF TANGENCY; THENCE N87°32'59"W, 557.04 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 370.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 27°43'43", AN ARC DISTANCE OF 179.06 FEET TO THE POINT OF TANGENCY; THENCE S64°43'18"W, 121.37 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE

SOUTHEASTERLY AND HAVING A RADIUS OF 720.00 FEET; THENCE SOUTHWESTERLY
 ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 00°20'21", AN ARC
 DISTANCE OF 4.26 FEET TO THE POINT OF TANGENCY; THENCE S25°32'17"E, 10.09 FEET;
 THENCE S36°22'33"E, 73.53 FEET; THENCE S06°00'29"E, 249.08 FEET; THENCE S05°25'21"E, 58.52
 FEET; THENCE S00°01'47"W, 153.83 FEET; THENCE S02°30'53"W, 123.36 FEET; THENCE
 S22°02'57"W, 182.10 FEET; THENCE S61°39'13"W, 224.97 FEET; THENCE S34°03'10"W, 66.18
 FEET; THENCE S76°37'49"W, 54.98 FEET; THENCE S26°22'23"E, 1.03 FEET; THENCE
 S76°37'49"W, 64.34 FEET; THENCE N85°24'30"W, 97.02 FEET TO A POINT ON THE ARC OF A
 NON-TANGENT CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 880.00 FEET AND A
 CHORD BEARING AND DISTANCE OF S14°48'58"W, 187.03 FEET TO WHICH A RADIAL LINE
 BEARS S81°17'03"E; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A
 CENTRAL ANGLE OF 12°12'02", AN ARC DISTANCE OF 187.39 FEET TO THE POINT OF
 TANGENCY; THENCE S20°54'59"W, 134.90 FEET; THENCE S53°24'45"E, 139.30 FEET; THENCE
 S19°08'17"E, 77.61 FEET; THENCE S22°05'45"E, 65.29 FEET; THENCE S43°20'19"E, 58.82 FEET;
 THENCE S50°54'56"E, 73.47 FEET; THENCE S45°58'13"E, 77.35 FEET; THENCE S41°14'15"E, 278.68
 FEET; THENCE S26°40'26"E, 77.53 FEET; THENCE S02°34'32"W, 64.73 FEET; THENCE
 S25°40'41"W, 89.23 FEET; THENCE S48°45'45"W, 190.83 FEET; THENCE S76°36'53"W, 93.30 FEET;
 THENCE N80°30'39"W, 62.94 FEET; THENCE N57°40'31"W, 80.41 FEET; THENCE N44°18'22"W,
 467.21 FEET; THENCE N27°49'14"W, 164.17 FEET; THENCE N34°53'59"W, 60.04 FEET; THENCE
 N55°06'01"E, 42.09 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE
 NORTHWESTERLY AND HAVING A RADIUS OF 470.00 FEET; THENCE NORTHEASTERLY
 ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 34°11'02", AN ARC
 DISTANCE OF 280.41 FEET TO THE POINT OF TANGENCY; THENCE N20°54'59"E, 272.50 FEET
 TO THE POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS
 OF 820.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A
 CENTRAL ANGLE OF 16°19'29", AN ARC DISTANCE OF 233.63 FEET TO THE POINT OF
 TANGENCY; THENCE N04°35'30"E, 176.85 FEET; THENCE N85°24'30"W, 135.00 FEET; THENCE
 N73°50'39"W, 97.94 FEET; THENCE N50°20'55"W, 212.58 FEET; THENCE N38°49'31"W, 75.49
 FEET; THENCE N24°38'48"W, 176.96 FEET; THENCE N15°01'24"W, 50.49 FEET; THENCE
 N05°30'35"W, 146.17 FEET; THENCE N05°17'12"E, 225.98 FEET; THENCE N08°57'03"E, 147.79
 FEET; THENCE N12°23'15"W, 80.32 FEET; THENCE S88°31'32"E, 561.76 FEET; THENCE
 S79°33'47"E, 83.93 FEET; THENCE S71°41'08"E, 83.81 FEET; THENCE S58°22'38"E, 167.03 FEET;
 THENCE S45°35'09"E, 124.73 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE
 CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 780.00 FEET AND A CHORD BEARING
 AND DISTANCE OF N64°01'09"E, 19.12 FEET TO WHICH A RADIAL LINE BEARS N26°40'59"W;
 THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL
 ANGLE OF 01°24'17", AN ARC DISTANCE OF 19.12 FEET TO THE POINT OF TANGENCY;
 THENCE N64°43'18"E, 121.37 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE
 SOUTHERLY AND HAVING A RADIUS OF 430.00 FEET; THENCE EASTERLY ALONG THE ARC
 OF SAID CURVE THROUGH A CENTRAL ANGLE OF 27°43'43", AN ARC DISTANCE OF 208.10
 FEET TO THE POINT OF TANGENCY; THENCE S87°32'59"E, 402.17 FEET TO THE POINT OF
 CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 20.00
 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL
 ANGLE OF 90°00'00", AN ARC DISTANCE OF 31.42 FEET TO THE POINT OF TANGENCY;
 THENCE N02°27'01"E, 23.29 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE
 EASTERLY AND HAVING A RADIUS OF 1,025.00 FEET; THENCE NORTHERLY ALONG THE
 ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 08°56'07", AN ARC DISTANCE OF
 159.85 FEET; THENCE ALONG A NON-TANGENT LINE RUN N60°02'38"W, 240.97 FEET; THENCE
 N63°56'34"W, 50.68 FEET; THENCE S87°31'27"W, 420.00 FEET; THENCE N86°59'23"W, 95.97
 FEET; THENCE N70°43'21"W, 323.94 FEET; THENCE N81°51'05"W, 51.24 FEET; THENCE
 S87°31'27"W, 722.62 FEET; THENCE N14°23'41"W, 71.26 FEET; THENCE N04°14'19"W, 156.74

FEET; THENCE N00°19'00"W, 39.50 FEET; THENCE N12°59'30"E, 63.33 FEET; THENCE
 N25°52'54"E, 52.46 FEET; THENCE N38°46'18"E, 63.67 FEET; THENCE N51°39'38"E, 47.83 FEET;
 THENCE N64°32'59"E, 79.05 FEET; THENCE N86°36'27"E, 371.82 FEET; THENCE N70°30'04"E,
 64.93 FEET; THENCE N55°40'41"E, 87.70 FEET; THENCE N36°44'29"E, 65.65 FEET; THENCE
 N25°21'22"E, 66.45 FEET; THENCE N11°45'52"E, 62.52 FEET; THENCE N01°12'34"W, 64.16 FEET;
 THENCE N05°10'10"W, 82.56 FEET; THENCE N13°04'40"E, 98.21 FEET; THENCE N29°06'29"E,
 97.72 FEET; THENCE N46°48'47"E, 97.72 FEET; THENCE N64°31'04"E, 97.72 FEET; THENCE
 N81°31'28"E, 92.21 FEET; THENCE N87°31'27"E, 700.00 FEET; THENCE N86°15'15"E, 66.62 FEET;
 THENCE N74°48'14"E, 62.40 FEET; THENCE N61°24'31"E, 62.40 FEET; THENCE N48°00'42"E, 62.41
 FEET; THENCE N36°56'31"E, 65.78 FEET; THENCE N30°42'43"E, 66.57 FEET; THENCE
 N24°34'54"E, 66.57 FEET; THENCE N20°21'01"E, 72.86 FEET; THENCE N24°26'38"E, 78.14 FEET;
 THENCE N29°32'53"E, 78.15 FEET; THENCE N34°17'16"E, 66.99 FEET; THENCE N38°39'46"E, 66.99
 FEET; THENCE N41°57'19"E, 33.85 FEET; THENCE N31°48'39"W, 45.00 FEET TO A POINT ON THE
 ARC OF A NON-TANGENT CURVE CONCAVE NORTHWESTERLY, HAVING A RADIUS OF
 1,400.00 FEET AND A CHORD BEARING AND DISTANCE OF N47°00'43"E, 542.77 FEET TO
 WHICH A RADIAL LINE BEARS S31°48'39"E; THENCE NORTHEASTERLY ALONG THE ARC OF
 SAID CURVE, THROUGH A CENTRAL ANGLE OF 22°21'17", AN ARC DISTANCE OF 546.23 FEET
 TO THE POINT OF TANGENCY; THENCE N35°50'04"E, 346.34 FEET TO THE POINT OF
 CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 102.00
 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL
 ANGLE OF 47°30'10", AN ARC DISTANCE OF 84.57 FEET TO THE POINT OF REVERSE
 CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 123.00 FEET;
 THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF
 06°15'48", AN ARC DISTANCE OF 13.45 FEET TO THE POINT OF REVERSE CURVATURE OF A
 CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 102.00 FEET; THENCE EASTERLY
 ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 49°12'24", AN ARC
 DISTANCE OF 87.60 FEET TO THE POINT OF TANGENCY; THENCE S53°43'11"E, 210.94 FEET;
 THENCE N36°16'49"E, 120.00 FEET; THENCE N07°21'31"E, 141.52 FEET; THENCE N58°44'42"E,
 141.50 FEET; THENCE S72°29'17"E, 119.86 FEET; THENCE N42°23'07"E, 156.33 FEET; THENCE
 N71°50'22"E, 130.73 FEET; THENCE S78°30'05"E, 103.20 FEET; THENCE S64°42'47"E, 372.27 FEET;
 THENCE N69°45'53"E, 48.12 FEET; THENCE N18°14'48"E, 81.35 FEET; THENCE N43°56'55"E, 59.17
 FEET; THENCE N69°39'01"E, 85.47 FEET; THENCE S84°38'52"E, 59.17 FEET; THENCE
 S58°56'46"E, 85.47 FEET; THENCE S33°14'39"E, 59.17 FEET; THENCE S07°32'32"E, 118.30 FEET;
 THENCE S44°26'50"W, 104.09 FEET; THENCE S52°47'03"W, 67.64 FEET; THENCE S25°17'13"W,
 65.20 FEET; THENCE S64°42'47"E, 174.00 FEET TO THE POINT OF CURVATURE OF A CURVE
 CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 217.50 FEET; THENCE
 SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF
 26°45'13", AN ARC DISTANCE OF 101.56 FEET TO THE POINT OF TANGENCY; THENCE
 S37°57'34"E, 5.58 FEET; THENCE N52°02'26"E, 329.93 FEET TO A POINT ON THE ARC OF A NON-
 TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 275.00 FEET AND A CHORD
 BEARING AND DISTANCE OF N07°44'38"W, 173.37 FEET TO WHICH A RADIAL LINE BEARS
 S63°52'57"W; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A
 CENTRAL ANGLE OF 36°44'50", AN ARC DISTANCE OF 176.37 FEET TO THE POINT OF
 REVERSE CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF
 467.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL
 ANGLE OF 39°26'47", AN ARC DISTANCE OF 321.52 FEET TO THE POINT OF REVERSE
 CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 375.00 FEET;
 THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF
 29°22'00", AN ARC DISTANCE OF 192.20 FEET TO THE POINT OF TANGENCY; THENCE
 N00°33'00"E, 29.62 FEET; THENCE N89°43'47"W, 1,113.42 FEET; THENCE N36°57'12"W, 133.50
 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHEASTERLY,

HAVING A RADIUS OF 2,823.00 FEET AND A CHORD BEARING AND DISTANCE OF N66°15'48"E, 1,290.88 FEET TO WHICH A RADIAL LINE BEARS N36°57'12"W; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 26°26'01", AN ARC DISTANCE OF 1,302.40 FEET TO THE POINT OF TANGENCY; THENCE N79°28'48"E, 195.27 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 3,850.00 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 07°39'22", AN ARC DISTANCE OF 514.46 FEET; THENCE ALONG A RADIAL LINE RUN S18°10'34"E, 169.34 FEET; THENCE S20°46'30"E, 88.91 FEET; THENCE S18°25'14"E, 70.00 FEET; THENCE S02°06'38"W, 134.36 FEET; THENCE S49°52'38"W, 141.47 FEET; THENCE S74°34'25"W, 71.51 FEET; THENCE S75°30'47"W, 71.51 FEET; THENCE S76°27'10"W, 71.51 FEET; THENCE S77°23'32"W, 71.51 FEET; THENCE S78°19'55"W, 71.51 FEET; THENCE S79°16'18"W, 71.51 FEET; THENCE N89°27'00"W, 92.08 FEET; THENCE S00°33'00"W, 163.67 FEET; THENCE N89°33'46"W, 110.00 FEET; THENCE S00°33'00"W, 29.87 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 325.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 29°22'00", AN ARC DISTANCE OF 166.58 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 517.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 13°30'58", AN ARC DISTANCE OF 121.96 FEET; THENCE ALONG A NON-TANGENT LINE RUN N77°10'06"E, 96.90 FEET; THENCE S89°51'45"E, 173.91 FEET; THENCE N72°59'49"E, 80.34 FEET; THENCE N00°08'15"E, 123.88 FEET; THENCE S89°27'00"E, 985.68 FEET; THENCE N03°57'33"E, 90.98 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 530.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 18°09'57", AN ARC DISTANCE OF 168.04 FEET; THENCE N22°07'30"E, 86.23 FEET; THENCE N67°52'30"W, 339.61 FEET; THENCE N38°12'07"W, 138.57 FEET; THENCE N22°07'30"E, 128.07 FEET; THENCE N02°36'40"E, 112.74 FEET; THENCE N15°37'48"W, 70.00 FEET; THENCE N08°42'16"W, 94.12 FEET; THENCE N12°32'05"E, 116.01 FEET; THENCE N25°55'27"W, 64.61 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 3,850.00 FEET AND A CHORD BEARING AND DISTANCE OF N60°45'03"E, 446.60 FEET TO WHICH A RADIAL LINE BEARS S25°55'27"E; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 06°39'00", AN ARC DISTANCE OF 446.85 FEET TO THE POINT OF TANGENCY; THENCE N57°25'33"E, 130.76 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 2,850.00 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 21°08'48", AN ARC DISTANCE OF 1,051.88 FEET TO THE POINT OF TANGENCY; THENCE N78°34'22"E, 168.30 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 102.00 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 47°30'06", AN ARC DISTANCE OF 84.56 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 123.00 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 05°00'16", AN ARC DISTANCE OF 10.74 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 102.00 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 47°30'10", AN ARC DISTANCE OF 84.57 FEET TO THE POINT OF TANGENCY; THENCE S11°25'38"E, 229.96 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 1,096.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 25°21'21", AN ARC DISTANCE OF 485.03 FEET TO THE POINT OF TANGENCY; THENCE S13°55'42"W, 204.65 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 1,196.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID

CURVE THROUGH A CENTRAL ANGLE OF 23°07'45", AN ARC DISTANCE OF 482.80 FEET TO THE POINT OF TANGENCY; THENCE S09°12'03"E, 221.89 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 1,750.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 01°10'19", AN ARC DISTANCE OF 35.79 FEET; THENCE ALONG A RADIAL LINE RUN S81°58'16"W, 15.00 FEET; THENCE N89°27'00"W, 726.63 FEET; THENCE N00°32'29"E, 214.99 FEET; THENCE N82°39'38"W, 90.62 FEET; THENCE N37°05'53"W, 125.16 FEET; THENCE N29°43'53"W, 60.72 FEET; THENCE N43°47'54"W, 61.91 FEET; THENCE N82°51'08"W, 14.47 FEET; THENCE N82°51'35"W, 70.32 FEET; THENCE S87°42'34"W, 72.45 FEET; THENCE N12°38'30"E, 38.26 FEET; THENCE N67°52'30"W, 91.96 FEET; THENCE S22°07'30"W, 426.64 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 470.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 18°09'57", AN ARC DISTANCE OF 149.01 FEET TO THE POINT OF TANGENCY; THENCE S03°57'33"W, 104.55 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 555.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 54°18'33", AN ARC DISTANCE OF 526.07 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 970.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 00°19'16", AN ARC DISTANCE OF 5.44 FEET TO A POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 20.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 92°42'54", AN ARC DISTANCE OF 32.36 FEET TO THE POINT OF TANGENCY; THENCE S34°46'03"E, 72.71 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 375.00 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 22°14'48", AN ARC DISTANCE OF 145.60 FEET; THENCE ALONG A NON-TANGENT LINE RUN N25°10'57"E, 449.15 FEET; THENCE N72°25'02"E, 195.99 FEET; THENCE S64°49'03"E, 83.35 FEET; THENCE S48°52'20"E, 72.80 FEET; THENCE S64°52'35"E, 69.32 FEET; THENCE N86°39'04"E, 40.12 FEET; THENCE N55°00'26"E, 134.76 FEET; THENCE N89°54'59"E, 152.21 FEET; THENCE S77°43'47"E, 110.24 FEET; THENCE S47°17'30"E, 208.81 FEET; THENCE S32°28'40"W, 73.88 FEET; THENCE S20°25'28"W, 119.42 FEET; THENCE S13°18'50"E, 73.74 FEET; THENCE S69°37'49"E, 87.06 FEET; THENCE S61°53'26"E, 307.29 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 1,750.00 FEET AND A CHORD BEARING AND DISTANCE OF S24°23'41"W, 114.69 FEET TO WHICH A RADIAL LINE BEARS S67°29'00"E; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 03°45'21", AN ARC DISTANCE OF 114.72 FEET TO THE POINT OF TANGENCY; THENCE S26°16'21"W, 1,356.79 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 2,950.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 04°51'12", AN ARC DISTANCE OF 249.89 FEET; THENCE ALONG A RADIAL LINE RUN N58°52'26"W, 15.00 FEET; THENCE N86°19'51"W, 252.33 FEET; THENCE S61°26'27"W, 59.63 FEET; THENCE S52°02'14"W, 190.98 FEET; THENCE S83°10'20"W, 53.78 FEET; THENCE S78°51'08"W, 101.14 FEET; THENCE S85°43'14"W, 112.35 FEET; THENCE N64°06'39"W, 124.97 FEET; THENCE N39°38'20"W, 559.53 FEET; THENCE N38°08'22"W, 82.95 FEET; THENCE N15°38'53"W, 118.41 FEET; THENCE N16°05'37"E, 118.41 FEET; THENCE N43°53'03"E, 98.08 FEET; THENCE N50°19'40"E, 68.94 FEET; THENCE N29°01'37"E, 65.34 FEET; THENCE N60°58'23"W, 36.83 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 825.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 05°16'12", AN ARC DISTANCE OF 75.88 FEET; THENCE ALONG A NON-TANGENT LINE RUN S49°39'30"W, 226.83

FEET; THENCE S45°13'29"W, 67.82 FEET; THENCE S40°47'35"W, 67.84 FEET; THENCE S38°09'22"W, 179.73 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT A PARCEL OF LAND LYING WITHIN THE NORTHWEST 1/4 OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF THE NORTHWEST 1/4 OF AFORESAID SECTION 14; THENCE ALONG THE WEST LINE THEREOF RUN N00°12'36"E, 1255.77 FEET; THENCE DEPARTING SAID WEST LINE RUN S89°47'24"E, 744.27 FEET TO THE POINT OF BEGINNING; THENCE N39°15'53"E, 110.00 FEET; THENCE N47°51'28"W, 66.77 FEET; THENCE N42°06'10"W, 69.01 FEET; THENCE N37°57'34"W, 217.18 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 1,530.00 FEET AND A CHORD BEARING AND DISTANCE OF N42°56'35"E, 444.57 FEET TO WHICH A RADIAL LINE BEARS S38°42'11"E; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 16°42'27", AN ARC DISTANCE OF 446.15 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 970.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 17°55'41", AN ARC DISTANCE OF 303.52 FEET TO A POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 20.00 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 92°42'54", AN ARC DISTANCE OF 32.36 FEET; THENCE S34°46'03"E, 72.71 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 425.00 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 23°10'10", AN ARC DISTANCE OF 171.86 FEET; THENCE ALONG A NON-TANGENT LINE RUN S25°10'57"W, 96.19 FEET; THENCE S05°29'30"W, 294.01 FEET; THENCE S11°12'03"W, 90.13 FEET; THENCE S50°09'20"W, 72.80 FEET; THENCE S35°34'41"W, 83.79 FEET; THENCE S50°45'26"W, 176.91 FEET; THENCE S29°01'37"W, 135.07 FEET; THENCE N60°58'23"W, 42.05 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 775.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 10°14'16", AN ARC DISTANCE OF 138.48 FEET TO THE POINT OF BEGINNING.

ALSO LESS AND EXCEPT A PARCEL OF LAND LYING WITHIN THE NORTHWEST 1/4 OF SECTION 14, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF THE NORTHWEST 1/4 OF AFORESAID SECTION 14; THENCE ALONG THE WEST LINE THEREOF RUN N00°12'36"E, 1973.96 FEET; THENCE DEPARTING SAID WEST LINE RUN S89°47'24"E, 298.94 FEET TO THE POINT OF BEGINNING; THENCE N52°20'49"E, 101.67 FEET; THENCE N04°44'34"W, 113.96 FEET; THENCE N24°27'06"E, 101.13 FEET; THENCE S67°15'29"E, 91.82 FEET; THENCE S66°36'18"E, 220.32 FEET; THENCE S36°15'29"E, 68.43 FEET; THENCE S18°33'58"E, 141.56 FEET; THENCE S53°04'15"E, 20.00 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHWESTERLY, HAVING A RADIUS OF 1,470.00 FEET AND A CHORD BEARING AND DISTANCE OF S40°16'17"W, 171.40 FEET TO WHICH A RADIAL LINE BEARS S53°04'15"E; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 06°41'03", AN ARC DISTANCE OF 171.49 FEET; THENCE ALONG A NON-TANGENT LINE RUN N45°59'49"W, 92.74 FEET; THENCE N77°25'01"W, 125.62 FEET; THENCE S79°50'54"W, 75.68 FEET; THENCE N71°50'59"W, 54.18 FEET; THENCE N41°11'42"W, 54.10 FEET; THENCE N37°39'11"W, 64.87 FEET TO THE POINT OF BEGINNING.

ALSO LESS AND EXCEPT A PARCEL OF LAND LYING WITHIN THE SOUTHWEST 1/4 OF SECTION 15, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF THE SOUTHEAST 1/4 OF AFORESAID SECTION 15; THENCE ALONG THE EAST LINE THEREOF RUN S00°13'06"W, 1188.46 FEET; THENCE DEPARTING SAID EAST LINE RUN N89°46'54"W, 4009.75 FEET TO THE POINT OF BEGINNING; THENCE S41°09'05"E, 86.54 FEET; THENCE S10°44'49"W, 76.87 FEET; THENCE S12°32'18"E, 190.31 FEET; THENCE S18°25'22"W, 82.25 FEET; THENCE S47°11'55"W, 34.82 FEET; THENCE S53°04'00"W, 168.99 FEET; THENCE S88°13'15"W, 42.86 FEET; THENCE N85°24'30"W, 10.00 FEET; THENCE N04°35'30"E, 154.44 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 720.00 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 32°28'09", AN ARC DISTANCE OF 408.02 FEET TO THE POINT OF BEGINNING.

AND

A PARCEL OF LAND LYING WITHIN SECTIONS 11, 12, 13, 14, 23 AND 24, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF AFORESAID SECTION 11; SAID POINT BEARS S89°27'00"E, 5370.67 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION 11; THENCE ALONG SAID LINE RUN N89°27'00"W, 1918.66 FEET; THENCE DEPARTING SAID LINE RUN N00°33'00"E, 135.00 FEET TO THE POINT OF BEGINNING; THENCE N01°50'38"W, 566.52 FEET; THENCE N14°18'41"E, 60.19 FEET; THENCE N30°10'56"E, 61.74 FEET; THENCE N46°03'11"E, 58.92 FEET; THENCE N61°55'26"E, 61.74 FEET; THENCE N77°47'41"E, 58.97 FEET; THENCE S85°25'09"E, 100.99 FEET; THENCE S01°03'57"W, 110.09 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 2,682.50 FEET AND A CHORD BEARING AND DISTANCE OF S87°19'53"E, 150.06 FEET TO WHICH A RADIAL LINE BEARS S04°16'17"W; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 03°12'20", AN ARC DISTANCE OF 150.08 FEET; THENCE ALONG A RADIAL LINE RUN N01°03'57"E, 108.14 FEET; THENCE S86°37'26"E, 109.41 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 967.50 FEET AND A CHORD BEARING AND DISTANCE OF N04°24'16"E, 193.65 FEET TO WHICH A RADIAL LINE BEARS S88°39'38"W; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 11°29'15", AN ARC DISTANCE OF 193.98 FEET; THENCE ALONG A RADIAL LINE RUN N79°51'07"W, 131.55 FEET; THENCE N15°48'25"E, 88.01 FEET; THENCE N71°37'43"W, 66.00 FEET; THENCE N18°22'17"E, 95.00 FEET; THENCE N71°37'43"W, 91.38 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 482.50 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 08°51'12", AN ARC DISTANCE OF 74.56 FEET; THENCE ALONG A RADIAL LINE RUN S09°31'05"W, 121.88 FEET; THENCE S88°00'19"W, 277.84 FEET; THENCE S88°43'18"W, 145.00 FEET; THENCE N01°16'42"W, 371.55 FEET; THENCE N38°30'16"E, 161.72 FEET; THENCE N88°00'19"E, 196.07 FEET; THENCE N82°38'43"E, 107.80 FEET; THENCE N11°32'08"E, 203.62 FEET; THENCE N07°51'30"E, 45.00 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHERLY, HAVING A RADIUS OF 2,033.00 FEET AND A CHORD BEARING AND DISTANCE OF S74°12'44"E, 560.92 FEET TO WHICH A RADIAL LINE BEARS N07°51'30"E; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 15°51'32", AN ARC DISTANCE OF 562.71 FEET TO

THE POINT OF TANGENCY; THENCE S66°16'58"E, 1,240.78 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 2,133.00 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 25°17'44", AN ARC DISTANCE OF 941.70 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 102.00 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 45°20'18", AN ARC DISTANCE OF 80.71 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 123.00 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 99°29'22", AN ARC DISTANCE OF 213.58 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 102.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 45°20'18", AN ARC DISTANCE OF 80.71 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 2,133.00 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 11°14'36", AN ARC DISTANCE OF 418.57 FEET TO THE POINT OF TANGENCY; THENCE N68°21'57"E, 702.31 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 900.00 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 08°41'44", AN ARC DISTANCE OF 136.59 FEET TO THE POINT OF TANGENCY; THENCE N77°03'41"E, 150.03 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 812.00 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 03°00'24", AN ARC DISTANCE OF 42.61 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHERLY AND HAVING A RADIUS OF 3,931.00 FEET; THENCE EASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 05°08'16", AN ARC DISTANCE OF 352.50 FEET TO A POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 148.00 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 81°27'18", AN ARC DISTANCE OF 210.41 FEET; THENCE ALONG A NON-TANGENT LINE RUN S20°03'47"E, 189.52 FEET; THENCE S10°45'06"E, 425.25 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 1,150.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 13°36'38", AN ARC DISTANCE OF 273.18 FEET TO THE POINT OF TANGENCY; THENCE S02°51'31"W, 645.97 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 102.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 36°27'15", AN ARC DISTANCE OF 64.90 FEET; THENCE ALONG A RADIAL LINE RUN N50°41'14"W, 31.13 FEET; THENCE N88°54'07"W, 2,174.29 FEET; THENCE S01°05'53"W, 197.32 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 513.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 24°39'52", AN ARC DISTANCE OF 220.83 FEET TO THE POINT OF TANGENCY; THENCE S25°45'45"W, 194.53 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 1,822.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 14°00'47", AN ARC DISTANCE OF 445.62 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 1,013.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 21°02'24", AN ARC DISTANCE OF 371.99 FEET; THENCE ALONG A RADIAL LINE RUN S57°12'38"E, 42.00 FEET; THENCE S49°18'39"E, 146.14 FEET; THENCE S58°23'56"E, 66.38 FEET; THENCE S61°27'00"E, 66.37 FEET; THENCE S71°06'41"E, 135.60 FEET; THENCE S51°07'01"E, 36.57 FEET; THENCE N42°35'53"E, 75.69 FEET; THENCE N36°21'06"E, 65.37 FEET; THENCE N29°02'18"E, 65.37 FEET; THENCE N21°43'30"E, 65.37 FEET; THENCE N14°24'42"E, 65.37 FEET; THENCE N13°44'36"W, 57.56 FEET; THENCE N07°57'48"W,

88.30 FEET; THENCE N03°06'42"E, 88.29 FEET; THENCE N14°11'12"E, 88.29 FEET; THENCE N25°15'41"E, 88.29 FEET; THENCE N36°20'11"E, 88.29 FEET; THENCE N42°35'44"E, 69.09 FEET; THENCE N34°31'05"E, 59.60 FEET; THENCE N13°48'24"E, 312.74 FEET; THENCE N26°16'36"E, 30.80 FEET; THENCE N37°48'27"E, 59.13 FEET; THENCE N53°40'42"E, 61.74 FEET; THENCE N69°32'57"E, 59.11 FEET; THENCE N83°09'22"E, 30.72 FEET; THENCE S88°54'07"E, 876.48 FEET; THENCE S56°27'57"E, 91.17 FEET; THENCE S40°52'17"E, 61.74 FEET; THENCE S25°00'02"E, 58.92 FEET; THENCE S09°07'47"E, 65.02 FEET; THENCE S08°28'42"W, 134.95 FEET; THENCE S14°34'39"W, 87.59 FEET; THENCE S25°40'17"W, 87.57 FEET; THENCE S36°46'37"W, 87.57 FEET; THENCE S36°04'13"W, 61.84 FEET; THENCE S20°45'50"W, 60.97 FEET; THENCE S06°44'37"W, 702.82 FEET; THENCE S17°40'45"W, 92.20 FEET; THENCE S31°15'25"W, 92.06 FEET; THENCE S45°13'45"W, 91.62 FEET; THENCE S51°59'08"W, 280.00 FEET; THENCE S52°33'54"W, 75.58 FEET; THENCE S58°07'52"W, 424.38 FEET; THENCE S56°41'12"W, 67.99 FEET; THENCE S52°19'19"W, 67.51 FEET; THENCE S47°53'15"W, 67.51 FEET; THENCE S43°27'11"W, 67.51 FEET; THENCE S39°01'07"W, 67.51 FEET; THENCE S34°36'35"W, 67.51 FEET; THENCE S31°53'24"W, 419.73 FEET; THENCE S31°34'46"W, 62.25 FEET; THENCE S07°57'44"W, 389.88 FEET; THENCE N82°02'16"W, 267.35 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 400.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 12°24'12", AN ARC DISTANCE OF 86.59 FEET; THENCE ALONG A NON-TANGENT LINE RUN S29°47'41"W, 489.95 FEET; THENCE S05°21'52"W, 55.63 FEET; THENCE S12°20'59"E, 417.06 FEET; THENCE S07°12'36"E, 102.09 FEET; THENCE S10°51'58"E, 65.63 FEET; THENCE S05°42'12"W, 30.87 FEET; THENCE S21°34'27"W, 58.92 FEET; THENCE S37°26'42"W, 61.74 FEET; THENCE S53°18'57"W, 59.11 FEET; THENCE S62°10'11"W, 30.92 FEET; THENCE S77°03'02"W, 259.22 FEET; THENCE S07°59'49"W, 282.97 FEET; THENCE S08°46'12"W, 73.71 FEET; THENCE S12°05'44"W, 75.70 FEET; THENCE S16°06'12"W, 267.72 FEET; THENCE S38°49'18"W, 150.70 FEET; THENCE S28°28'13"W, 402.50 FEET; THENCE S30°38'41"W, 73.82 FEET; THENCE S33°22'45"W, 74.55 FEET; THENCE S31°08'18"W, 161.52 FEET; THENCE S69°29'10"W, 149.39 FEET; THENCE S07°07'49"E, 57.99 FEET; THENCE S21°55'47"E, 345.99 FEET; THENCE S68°04'13"W, 120.00 FEET; THENCE S21°55'47"E, 76.45 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 425.00 FEET; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 11°14'55", AN ARC DISTANCE OF 83.44 FEET; THENCE ALONG A RADIAL LINE RUN N56°49'18"E, 35.88 FEET; THENCE S89°40'32"E, 60.13 FEET; THENCE N40°01'41"E, 55.91 FEET; THENCE N53°36'13"E, 79.41 FEET; THENCE N61°15'56"E, 87.77 FEET; THENCE S57°52'22"E, 49.32 FEET; THENCE S81°11'18"E, 83.52 FEET; THENCE S75°33'13"E, 376.07 FEET; THENCE S65°05'23"E, 255.20 FEET; THENCE S68°44'45"E, 15.00 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 1,750.00 FEET AND A CHORD BEARING AND DISTANCE OF S08°08'13"W, 794.30 FEET TO WHICH A RADIAL LINE BEARS N68°44'45"W; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 26°14'03", AN ARC DISTANCE OF 801.28 FEET TO THE POINT OF TANGENCY; THENCE S04°58'48"E, 162.42 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 102.00 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 47°30'10", AN ARC DISTANCE OF 84.57 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 123.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 14°08'22", AN ARC DISTANCE OF 30.35 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 102.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 56°42'33", AN ARC DISTANCE OF 100.96 FEET TO THE POINT OF TANGENCY; THENCE S85°05'32"W, 48.99 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 1,762.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID

CURVE THROUGH A CENTRAL ANGLE OF 22°36'11", AN ARC DISTANCE OF 695.11 FEET TO A POINT OF COMPOUND CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 1,187.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 54°49'42", AN ARC DISTANCE OF 1,135.88 FEET TO THE POINT OF TANGENCY; THENCE N17°28'35"W, 1,025.81 FEET TO A POINT OF CUSP OF A CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 20.00 FEET AND A CHORD BEARING AND DISTANCE OF S62°28'35"E, 28.28 FEET TO WHICH A RADIAL LINE BEARS S72°31'25"W; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 90°00'00", AN ARC DISTANCE OF 31.42 FEET TO THE POINT OF TANGENCY; THENCE N72°31'25"E, 210.97 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 987.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 14°35'08", AN ARC DISTANCE OF 251.26 FEET; THENCE ALONG A RADIAL LINE RUN N32°03'43"W, 42.00 FEET; THENCE N17°28'35"W, 461.75 FEET; THENCE N29°28'46"E, 592.22 FEET; THENCE N25°13'27"E, 75.78 FEET; THENCE N01°23'54"W, 516.58 FEET; THENCE N47°33'16"E, 151.18 FEET; THENCE N75°09'50"E, 52.64 FEET; THENCE N83°46'50"E, 70.67 FEET; THENCE N85°00'11"E, 141.79 FEET; THENCE N64°38'24"E, 96.79 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 2,555.00 FEET AND A CHORD BEARING AND DISTANCE OF N04°38'34"E, 95.84 FEET TO WHICH A RADIAL LINE BEARS N86°25'55"W; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 02°08'58", AN ARC DISTANCE OF 95.85 FEET TO THE POINT OF TANGENCY; THENCE N74°26'42"W, 216.58 FEET; THENCE N10°23'26"W, 685.16 FEET; THENCE N85°59'38"W, 151.09 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHERLY AND HAVING A RADIUS OF 2,150.00 FEET; THENCE WESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 00°23'22", AN ARC DISTANCE OF 14.61 FEET; THENCE ALONG A NON-TANGENT LINE RUN S06°40'59"W, 561.91 FEET; THENCE S08°53'15"W, 74.61 FEET; THENCE S14°12'55"W, 76.68 FEET; THENCE S18°01'33"W, 76.43 FEET; THENCE S21°25'07"W, 72.85 FEET; THENCE S11°02'30"W, 626.19 FEET; THENCE S29°07'34"W, 149.64 FEET; THENCE S69°56'02"W, 116.53 FEET; THENCE S20°03'58"E, 23.48 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 106.50 FEET; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 43°28'54", AN ARC DISTANCE OF 80.82 FEET TO THE POINT OF TANGENCY; THENCE S23°24'56"W, 23.66 FEET; THENCE N66°35'04"W, 142.91 FEET; THENCE N14°30'11"W, 43.35 FEET; THENCE N20°00'10"W, 486.43 FEET; THENCE N28°38'09"W, 61.59 FEET; THENCE N48°54'14"W, 61.54 FEET; THENCE N57°15'13"W, 208.37 FEET; THENCE N60°42'34"W, 65.29 FEET; THENCE N70°32'54"W, 64.40 FEET; THENCE N80°22'36"W, 65.70 FEET; THENCE N79°24'46"W, 81.90 FEET; THENCE N71°55'45"W, 81.90 FEET; THENCE N65°18'36"W, 76.47 FEET; THENCE N64°08'01"W, 592.27 FEET; THENCE N55°10'18"W, 46.43 FEET; THENCE N39°18'03"W, 61.74 FEET; THENCE N23°25'48"W, 58.94 FEET; THENCE N07°30'26"W, 62.10 FEET; THENCE N08°24'57"E, 58.94 FEET; THENCE N24°17'12"E, 61.74 FEET; THENCE N40°09'27"E, 59.04 FEET; THENCE N56°26'27"E, 30.95 FEET; THENCE N58°03'25"E, 72.94 FEET; THENCE N53°48'07"E, 67.20 FEET; THENCE N48°48'58"E, 67.20 FEET; THENCE N43°49'44"E, 137.90 FEET; THENCE N64°19'42"E, 67.01 FEET; THENCE N80°11'57"E, 58.78 FEET; THENCE S84°24'36"E, 30.39 FEET; THENCE S86°39'31"E, 67.36 FEET; THENCE N88°37'48"E, 67.37 FEET; THENCE N83°56'10"E, 67.37 FEET; THENCE N79°14'32"E, 67.37 FEET; THENCE N74°32'53"E, 67.37 FEET; THENCE N69°51'15"E, 67.37 FEET; THENCE N65°09'37"E, 67.37 FEET; THENCE N64°34'09"E, 66.77 FEET; THENCE N35°39'47"E, 128.66 FEET; THENCE N14°52'37"E, 47.69 FEET; THENCE N10°05'56"W, 168.55 FEET; THENCE N56°45'25"W, 210.00 FEET; THENCE N32°55'57"E, 133.63 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE EASTERLY, HAVING A RADIUS OF 106.50 FEET AND A CHORD BEARING AND DISTANCE OF N01°59'58"W, 59.27 FEET TO WHICH A RADIAL LINE BEARS S71°50'36"W; THENCE NORTHERLY ALONG THE ARC OF SAID

CURVE, THROUGH A CENTRAL ANGLE OF 32°18'53", AN ARC DISTANCE OF 60.07 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 282.50 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 51°55'57", AN ARC DISTANCE OF 256.06 FEET; THENCE ALONG A RADIAL LINE RUN S52°13'32"W, 110.00 FEET; THENCE N47°37'41"W, 59.04 FEET; THENCE N67°20'55"W, 61.48 FEET; THENCE N81°58'58"W, 414.72 FEET; THENCE N71°04'06"W, 90.62 FEET; THENCE N63°43'39"W, 363.37 FEET; THENCE N26°16'21"E, 824.70 FEET; THENCE S63°43'39"E, 362.22 FEET; THENCE S59°12'07"E, 78.94 FEET; THENCE S52°55'24"E, 78.94 FEET; THENCE S47°28'07"E, 78.94 FEET; THENCE S42°00'50"E, 78.94 FEET; THENCE S36°33'36"E, 78.92 FEET; THENCE S31°12'30"E, 90.87 FEET; THENCE S15°09'35"E, 59.34 FEET; THENCE S16°48'30"E, 67.82 FEET; THENCE S26°16'21"W, 172.06 FEET; THENCE S57°20'16"E, 68.77 FEET; THENCE S48°45'20"E, 63.33 FEET; THENCE S40°49'15"W, 110.00 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 317.50 FEET AND A CHORD BEARING AND DISTANCE OF S22°58'04"E, 217.85 FEET TO WHICH A RADIAL LINE BEARS N46°58'06"E; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 40°07'40", AN ARC DISTANCE OF 222.36 FEET; THENCE ALONG A NON-TANGENT LINE RUN S52°07'52"E, 141.68 FEET; THENCE S57°04'03"E, 70.00 FEET; THENCE S62°19'06"E, 56.72 FEET; THENCE S75°47'18"E, 551.82 FEET; THENCE S10°05'56"E, 476.80 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 2,100.00 FEET AND A CHORD BEARING AND DISTANCE OF S82°57'54"E, 221.93 FEET TO WHICH A RADIAL LINE BEARS S10°03'51"W; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 06°03'29", AN ARC DISTANCE OF 222.04 FEET TO THE POINT OF TANGENCY; THENCE S85°59'38"E, 138.25 FEET; THENCE N10°23'26"W, 483.94 FEET; THENCE N39°41'03"E, 100.44 FEET; THENCE N81°11'29"E, 163.93 FEET; THENCE S78°45'29"E, 131.11 FEET; THENCE S63°59'03"E, 42.00 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 521.50 FEET AND A CHORD BEARING AND DISTANCE OF N28°14'49"E, 40.60 FEET TO WHICH A RADIAL LINE BEARS N63°59'03"W; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 04°27'43", AN ARC DISTANCE OF 40.61 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 2,243.69 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 11°40'12", AN ARC DISTANCE OF 456.99 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 521.50 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 24°57'37", AN ARC DISTANCE OF 227.19 FEET TO THE POINT OF TANGENCY; THENCE N43°46'06"E, 184.29 FEET; THENCE N46°13'54"W, 25.00 FEET; THENCE N88°02'51"W, 463.39 FEET; THENCE N01°57'09"E, 744.11 FEET; THENCE N06°51'05"E, 70.26 FEET; THENCE N01°57'09"E, 208.91 FEET; THENCE N90°00'00"W, 186.91 FEET; THENCE S00°40'58"W, 86.91 FEET; THENCE S20°19'36"W, 509.64 FEET; THENCE S44°14'14"W, 77.15 FEET; THENCE S60°06'29"W, 58.92 FEET; THENCE S75°58'44"W, 30.87 FEET; THENCE N14°01'16"W, 109.80 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 106.50 FEET AND A CHORD BEARING AND DISTANCE OF S87°23'21"W, 42.14 FEET TO WHICH A RADIAL LINE BEARS S14°01'16"E; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 22°49'14", AN ARC DISTANCE OF 42.42 FEET TO THE POINT OF TANGENCY; THENCE N81°12'02"W, 83.31 FEET; THENCE S08°47'58"W, 110.00 FEET; THENCE N81°12'02"W, 148.74 FEET; THENCE S02°51'26"W, 93.72 FEET; THENCE S10°30'25"W, 55.11 FEET; THENCE S24°34'05"W, 62.39 FEET; THENCE S41°35'10"W, 87.68 FEET; THENCE N85°26'04"W, 151.76 FEET; THENCE N75°13'43"W, 54.21 FEET; THENCE N73°53'56"W, 44.50 FEET; THENCE N57°59'09"W, 62.00 FEET; THENCE N42°06'54"W, 82.71 FEET; THENCE N06°37'12"W, 224.63 FEET; THENCE N08°56'20"W, 68.70 FEET; THENCE N11°15'29"W, 68.70 FEET; THENCE

N13°34'38"W, 68.70 FEET; THENCE N15°53'46"W, 68.70 FEET; THENCE N18°12'55"W, 68.70 FEET; THENCE N20°32'03"W, 112.41 FEET; THENCE N73°58'59"W, 47.75 FEET; THENCE N49°19'43"W, 82.12 FEET; THENCE N20°12'02"W, 82.95 FEET; THENCE N04°43'42"W, 71.04 FEET; THENCE N04°20'49"E, 83.38 FEET; THENCE N12°12'31"E, 82.77 FEET; THENCE N20°04'23"E, 82.77 FEET; THENCE N27°56'02"E, 82.70 FEET; THENCE N34°21'57"E, 52.71 FEET; THENCE N40°48'47"E, 171.01 FEET; THENCE S81°12'02"E, 531.64 FEET; THENCE S59°59'37"E, 32.47 FEET; THENCE N83°10'07"E, 70.00 FEET; THENCE N75°16'40"E, 70.67 FEET; THENCE N83°10'07"E, 343.33 FEET; THENCE S06°49'53"E, 145.00 FEET; THENCE S06°16'35"W, 243.35 FEET; THENCE S17°16'04"E, 151.15 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHERLY, HAVING A RADIUS OF 275.00 FEET AND A CHORD BEARING AND DISTANCE OF N82°41'33"E, 69.96 FEET TO WHICH A RADIAL LINE BEARS N14°36'54"W; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 14°36'54", AN ARC DISTANCE OF 70.15 FEET TO THE POINT OF TANGENCY; THENCE N90°00'00"E, 188.62 FEET; THENCE N01°57'09"E, 692.71 FEET; THENCE N05°32'58"W, 107.56 FEET; THENCE S89°27'00"E, 317.77 FEET; THENCE S14°48'38"W, 221.31 FEET; THENCE S01°28'20"W, 65.00 FEET; THENCE S88°02'51"E, 200.68 FEET; THENCE N01°58'55"E, 89.17 FEET; THENCE S88°02'51"E, 954.63 FEET; THENCE S70°16'31"E, 25.00 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 470.00 FEET AND A CHORD BEARING AND DISTANCE OF N10°24'41"E, 152.12 FEET TO WHICH A RADIAL LINE BEARS S70°16'31"E; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 18°37'36", AN ARC DISTANCE OF 152.80 FEET TO THE POINT OF TANGENCY; THENCE N01°05'53"E, 197.32 FEET; THENCE N88°54'07"W, 670.94 FEET; THENCE N24°37'05"E, 7.66 FEET; THENCE N44°09'30"W, 124.66 FEET; THENCE S52°54'57"W, 28.60 FEET; THENCE S40°39'03"W, 100.00 FEET; THENCE N88°58'27"W, 190.30 FEET; THENCE N18°20'40"W, 139.44 FEET; THENCE N77°15'38"W, 16.56 FEET; THENCE N55°49'52"W, 74.71 FEET; THENCE N51°32'18"W, 83.64 FEET; THENCE N40°18'40"W, 94.06 FEET; THENCE N37°41'28"W, 54.15 FEET; THENCE N66°16'58"W, 91.83 FEET; THENCE N50°20'14"W, 72.80 FEET; THENCE N66°16'58"W, 141.12 FEET; THENCE S23°43'02"W, 142.00 FEET; THENCE S66°16'58"E, 110.00 FEET; THENCE S23°43'02"W, 332.40 FEET; THENCE N89°27'00"W, 1,253.48 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT A PARCEL OF LAND LYING WITHIN THE SOUTHEAST 1/4 OF SECTION 11, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF AFORESAID SECTION 11; SAID POINT BEARS S89°27'00"E, 5370.67 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION 11; THENCE ALONG SAID LINE RUN N89°27'00"W, 1673.33 FEET; THENCE DEPARTING SAID LINE RUN N00°33'00"E, 371.52 FEET TO THE POINT OF BEGINNING; THENCE N01°50'38"W, 140.06 FEET; THENCE N12°01'50"E, 144.21 FEET; THENCE N04°14'06"E, 92.23 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 2,717.50 FEET AND A CHORD BEARING AND DISTANCE OF S87°21'07"E, 150.52 FEET TO WHICH A RADIAL LINE BEARS S04°14'06"W; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 03°10'27", AN ARC DISTANCE OF 150.54 FEET; THENCE ALONG A RADIAL LINE RUN S01°03'39"W, 110.00 FEET; THENCE S89°37'18"E, 67.38 FEET; THENCE N88°58'28"E, 71.15 FEET; THENCE N87°31'14"E, 72.35 FEET; THENCE N86°03'16"E, 72.35 FEET; THENCE N84°35'18"E, 72.35 FEET; THENCE N83°07'20"E, 72.36 FEET; THENCE N82°16'42"E, 69.95 FEET; THENCE N86°30'56"E, 67.01 FEET; THENCE S88°10'05"E, 67.01 FEET; THENCE N84°40'12"E, 61.06 FEET; THENCE S88°38'01"E, 16.18 FEET; THENCE S81°41'51"E, 60.82 FEET; THENCE S72°35'53"E, 59.06 FEET; THENCE S68°15'11"E, 64.40 FEET; THENCE S23°43'02"W, 142.37 FEET; THENCE N66°16'58"W, 110.07 FEET; THENCE S23°43'02"W, 184.28 FEET; THENCE N89°27'00"W, 82.53 FEET; THENCE S74°36'16"W, 72.80 FEET; THENCE N89°27'00"W, 350.00

FEET; THENCE N73°30'17"W, 72.80 FEET; THENCE N89°27'00"W, 259.38 FEET TO THE POINT OF BEGINNING.

ALSO LESS AND EXCEPT A PARCEL OF LAND LYING WITHIN SECTIONS 11 AND 12, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF AFORESAID SECTION 12; SAID POINT BEARS N88°54'07"W, 5396.47 FEET FROM THE SOUTHEAST CORNER OF SAID SECTION 12; THENCE ALONG SAID LINE RUN S88°54'07"E, 1092.12 FEET; THENCE DEPARTING SAID LINE RUN N01°05'53"E, 601.93 FEET TO THE POINT OF BEGINNING; THENCE N83°35'05"W, 25.00 FEET; THENCE N78°13'27"W, 277.64 FEET; THENCE N79°46'13"W, 95.81 FEET; THENCE S80°15'28"W, 96.50 FEET; THENCE S60°16'41"W, 95.79 FEET; THENCE S53°46'06"W, 81.75 FEET; THENCE S57°18'12"W, 63.43 FEET; THENCE S66°37'58"W, 63.43 FEET; THENCE S75°57'44"W, 63.43 FEET; THENCE S85°17'29"W, 63.43 FEET; THENCE N85°22'45"W, 63.43 FEET; THENCE N76°03'00"W, 63.43 FEET; THENCE N79°17'57"W, 66.20 FEET; THENCE N57°23'29"W, 65.78 FEET; THENCE N30°36'39"W, 60.11 FEET; THENCE N11°45'36"W, 49.08 FEET; THENCE N26°38'29"E, 52.07 FEET; THENCE S89°00'58"E, 220.83 FEET; THENCE N04°06'02"W, 108.97 FEET; THENCE N42°16'03"E, 61.80 FEET; THENCE N54°51'59"E, 61.95 FEET; THENCE N70°11'20"E, 61.91 FEET; THENCE N79°28'02"E, 62.13 FEET; THENCE S86°42'11"E, 63.71 FEET; THENCE S84°49'48"E, 72.82 FEET; THENCE S79°37'35"E, 256.59 FEET; THENCE N49°25'07"E, 102.40 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE NORTHERLY, HAVING A RADIUS OF 50.00 FEET AND A CHORD BEARING AND DISTANCE OF S79°52'14"E, 38.07 FEET TO WHICH A RADIAL LINE BEARS S32°30'14"W; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 44°44'55", AN ARC DISTANCE OF 39.05 FEET; THENCE ALONG A RADIAL LINE RUN S12°14'42"E, 37.75 FEET; THENCE S75°17'25"E, 63.55 FEET; THENCE S83°39'42"E, 118.35 FEET; THENCE N86°24'26"E, 25.00 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE WESTERLY, HAVING A RADIUS OF 1,470.00 FEET AND A CHORD BEARING AND DISTANCE OF S01°24'41"W, 256.44 FEET TO WHICH A RADIAL LINE BEARS N86°24'26"E; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 10°00'28", AN ARC DISTANCE OF 256.77 FEET TO THE POINT OF BEGINNING.

ALSO LESS AND EXCEPT A PARCEL OF LAND LYING WITHIN THE SOUTHWEST 1/4 OF SECTION 12, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF AFORESAID SECTION 12; SAID POINT BEARS N88°54'07"W, 5396.47 FEET FROM THE SOUTHEAST CORNER OF SAID SECTION 12; THENCE ALONG SAID LINE RUN S88°54'07"E, 1601.03 FEET; THENCE DEPARTING SAID LINE RUN N01°05'53"E, 416.20 FEET TO THE POINT OF BEGINNING; THENCE N88°54'07"W, 90.00 FEET; THENCE N01°05'53"E, 20.00 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 60.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 90°00'00", AN ARC DISTANCE OF 94.25 FEET TO THE POINT OF TANGENCY; THENCE N88°54'07"W, 54.68 FEET; THENCE N01°05'53"E, 82.38 FEET; THENCE N05°40'23"E, 41.76 FEET; THENCE N70°54'47"E, 153.69 FEET; THENCE S80°42'40"E, 60.91 FEET; THENCE S22°25'56"E, 124.49 FEET; THENCE S19°12'41"W, 62.41 FEET; THENCE S35°10'55"W, 59.76 FEET; THENCE S01°05'53"W, 25.40 FEET TO THE POINT OF BEGINNING.

ALSO LESS AND EXCEPT A PARCEL OF LAND LYING WITHIN SECTIONS 13 AND 14, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHWEST 1/4 OF AFORESAID SECTION 13; THENCE ALONG SAID WEST LINE RUN S00°10'20"W, 1564.40 FEET; THENCE DEPARTING SAID WEST LINE RUN S89°49'40"E, 343.10 FEET TO THE POINT OF BEGINNING; THENCE S46°13'54"E, 42.00 FEET; THENCE S56°09'06"E, 128.58 FEET; THENCE S12°47'04"W, 118.73 FEET; THENCE S33°21'16"W, 128.95 FEET; THENCE S13°53'48"W, 92.33 FEET; THENCE S01°31'26"E, 82.40 FEET; THENCE S00°38'20"E, 68.28 FEET; THENCE S02°26'09"W, 68.28 FEET; THENCE S05°30'37"W, 68.28 FEET; THENCE S08°35'06"W, 68.28 FEET; THENCE S11°39'35"W, 68.28 FEET; THENCE S14°44'03"W, 68.28 FEET; THENCE S17°48'32"W, 68.28 FEET; THENCE S20°53'01"W, 68.28 FEET; THENCE S23°57'29"W, 68.28 FEET; THENCE S27°01'58"W, 68.28 FEET; THENCE S29°33'16"W, 141.43 FEET TO A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 875.00 FEET AND A CHORD BEARING AND DISTANCE OF N65°20'16"W, 15.27 FEET TO WHICH A RADIAL LINE BEARS N25°09'44"E; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 01°00'00", AN ARC DISTANCE OF 15.27 FEET; THENCE ALONG A RADIAL LINE RUN S24°09'44"W, 50.00 FEET; THENCE S29°47'41"W, 347.26 FEET; THENCE S23°20'58"W, 70.45 FEET; THENCE S37°39'54"W, 57.75 FEET; THENCE S79°36'34"W, 277.71 FEET; THENCE N10°23'26"W, 129.32 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY AND HAVING A RADIUS OF 1,021.50 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 09°03'40", AN ARC DISTANCE OF 161.55 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 478.50 FEET; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 49°55'47", AN ARC DISTANCE OF 416.98 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 2,286.69 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 11°40'12", AN ARC DISTANCE OF 465.75 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHEASTERLY AND HAVING A RADIUS OF 478.50 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 24°57'37", AN ARC DISTANCE OF 208.45 FEET TO THE POINT OF TANGENCY; THENCE N43°46'06"E, 682.18 FEET TO THE POINT OF BEGINNING.

ALSO LESS AND EXCEPT A PARCEL OF LAND LYING WITHIN THE SOUTHWEST 1/4 OF SECTION 13, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHWEST 1/4 OF AFORESAID SECTION 13; THENCE ALONG SAID WEST LINE RUN S00°10'20"W, 2639.78 FEET TO THE NORTHWEST CORNER OF THE SOUTHWEST 1/4 OF SAID SECTION 13; THENCE ALONG THE WEST LINE OF SAID SOUTHWEST 1/4 RUN S00°08'08"W, 162.90 FEET; THENCE DEPARTING SAID WEST LINE RUN S89°51'52"E, 457.99 FEET TO THE POINT OF BEGINNING; THENCE S68°27'36"E, 291.94 FEET; THENCE S55°03'01"E, 66.75 FEET; THENCE S21°39'19"E, 80.52 FEET; THENCE S07°57'44"W, 235.90 FEET; THENCE N82°02'16"W, 12.35 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 350.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 50°28'21", AN ARC DISTANCE OF 308.32 FEET TO THE POINT OF REVERSE CURVATURE OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 275.00 FEET; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 28°38'23", AN ARC DISTANCE OF 137.46 FEET TO THE POINT OF TANGENCY;

THENCE N60°12'19"W, 64.90 FEET; THENCE N29°47'41"E, 186.47 FEET TO THE POINT OF BEGINNING.

ALSO LESS AND EXCEPT A PARCEL OF LAND LYING WITHIN SECTIONS 14 AND 23, TOWNSHIP 20 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHWEST 1/4 OF AFORESAID SECTION 13; THENCE ALONG SAID WEST LINE RUN S00°10'20"W, 2639.78 FEET TO THE NORTHEAST CORNER OF THE SOUTHEAST 1/4 OF SAID SECTION 14; THENCE ALONG THE EAST LINE OF SAID SOUTHEAST 1/4 RUN S00°08'08"W, 2503.66 FEET; THENCE DEPARTING SAID EAST LINE RUN N89°51'52"W, 826.78 FEET TO THE POINT OF BEGINNING; THENCE S61°31'47"E, 254.36 FEET; THENCE S28°28'13"W, 237.66 FEET TO THE POINT OF CURVATURE OF A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 987.00 FEET; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 13°03'20", AN ARC DISTANCE OF 224.90 FEET; THENCE ALONG A RADIAL LINE RUN N48°28'27"W, 42.20 FEET; THENCE N41°56'27"W, 68.56 FEET; THENCE N17°28'35"W, 135.43 FEET; THENCE N03°21'53"W, 50.93 FEET; THENCE N26°08'38"E, 69.98 FEET; THENCE N29°28'46"E, 220.78 FEET TO THE POINT OF BEGINNING.

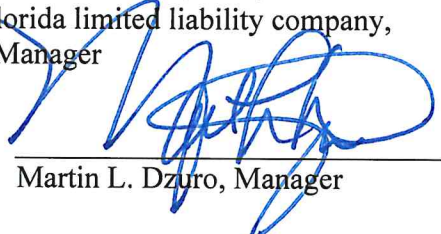
EXHIBIT 3

**CONSENT TO THE ESTABLISHMENT OF
VILLAGE COMMUNITY DEVELOPMENT DISTRICT NO. 15**

The undersigned, being the owner of the property described in Exhibit 2 to the Petition to Establish Village Community Development District No. 15, hereby consent to the Petition to Establish Village Community Development District No. 15, dated the 22nd of August, 2022.

**THE VILLAGES DEVELOPMENT
COMPANY, LLC,**
a Florida limited liability company

By: VDC MANAGER, LLC,
a Florida limited liability company,
its Manager

By: 

Martin L. Dzuro, Manager

EXHIBIT 4

**BOARD OF SUPERVISORS
VILLAGE COMMUNITY DEVELOPMENT DISTRICT NO. 15**

1. Supervisor/Chair – Spencer Novak
2. Supervisor/Vice Chair – Liz Rodriguez
3. Supervisor/Secretary-Treasurer – Cooper Hage
4. Supervisor – Jennifer Chandler
5. Supervisor – Dayna Graham

EXHIBIT 5

**MAJOR TRUNK WATER MAINS, SEWER INTERCEPTIONS AND OUTFALLS
VILLAGE COMMUNITY DEVELOPMENT DISTRICT NO. 15**

EXHIBIT 5

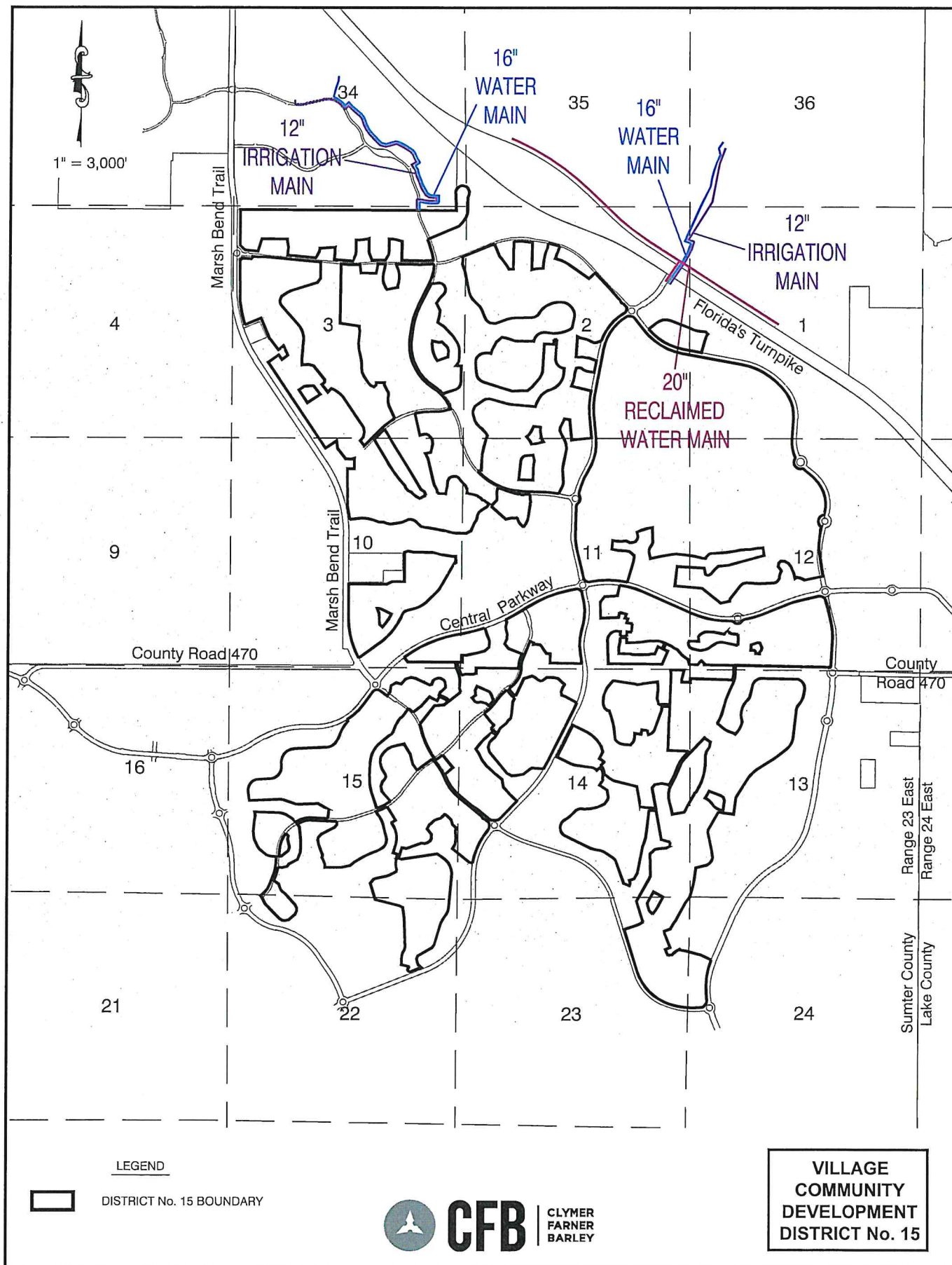


EXHIBIT 6

PROPOSED TIME TABLES AND RELATED ESTIMATES OF COST¹ OF THE DISTRICT SERVICES AND FACILITIES VILLAGE COMMUNITY DEVELOPMENT DISTRICT NO. 15

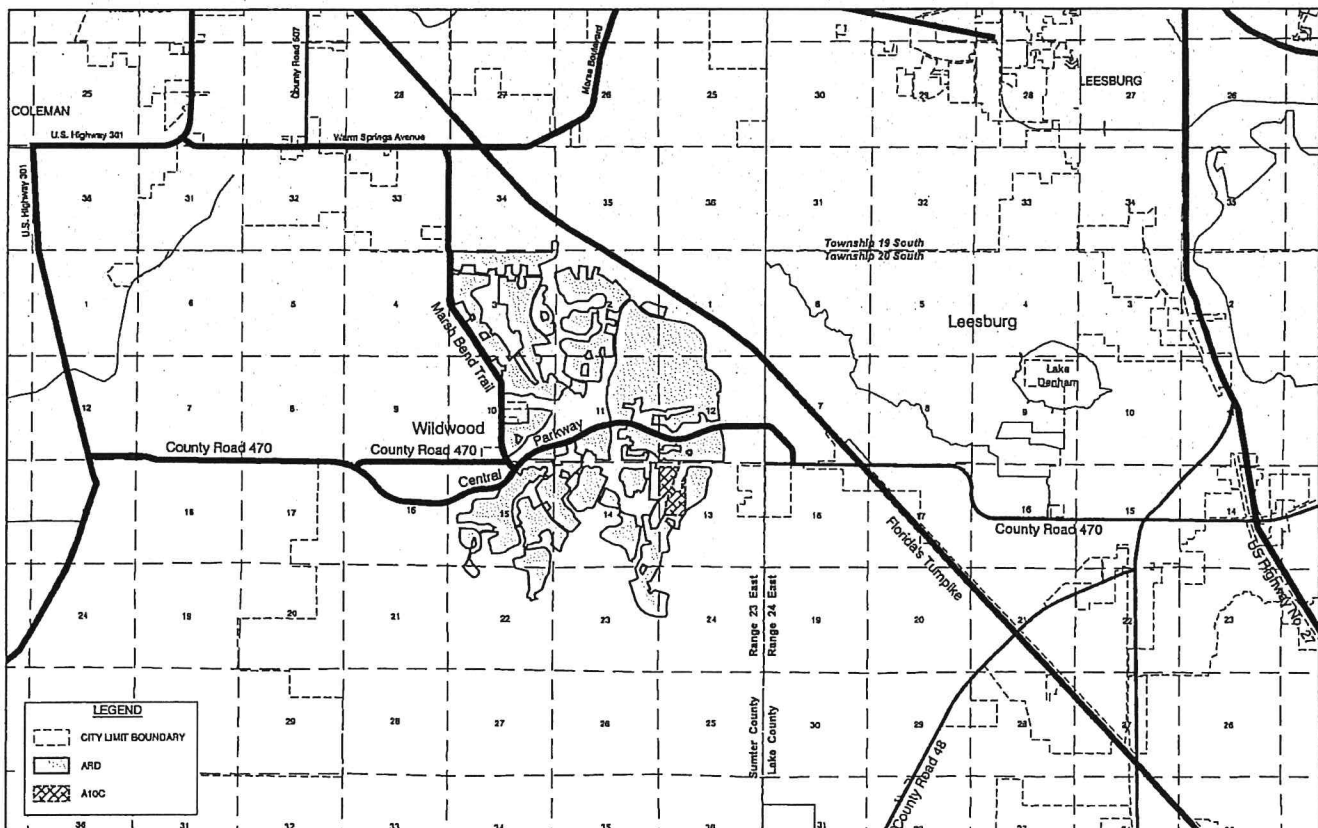
ITEM	ANTICIPATED SCHEDULE	ESTIMATED COST
Subdivision Infrastructure Roads & Drainage	2022-2028	\$99,434,476.34
Collector Road Infrastructure Roads & Drainage	2022-2028	\$17,509,807.76
Multi-Use Trails & Paths, Golf Cart Bridges & Tunnels	2022-2028	\$31,973,066.95
Landscaping & Irrigation in Common Areas ²	2022-2028	\$64,758,631.88
Boundary Security Buffers/Walls & Fencing in Common Areas	2022-2028	\$19,256,948.36
Master Earthwork and Stormwater Collection Systems	2022-2028	\$356,967,303.00
Wetland & Wildlife Mitigation/Protection Measures	2022-2028	\$2,887,500.00
Project Entry Features	2022-2028	\$5,804,835.49
TOTAL:		\$598,592,568.78

¹ Costs are preliminary in nature and are subject to change. Costs include engineering and contingencies.

² The irrigation system beyond the point of delivery serving common areas will be owned and maintained by the District, with water purchased pursuant to a bulk water agreement. The master irrigation system up to the point of delivery will be funded by the Utility.

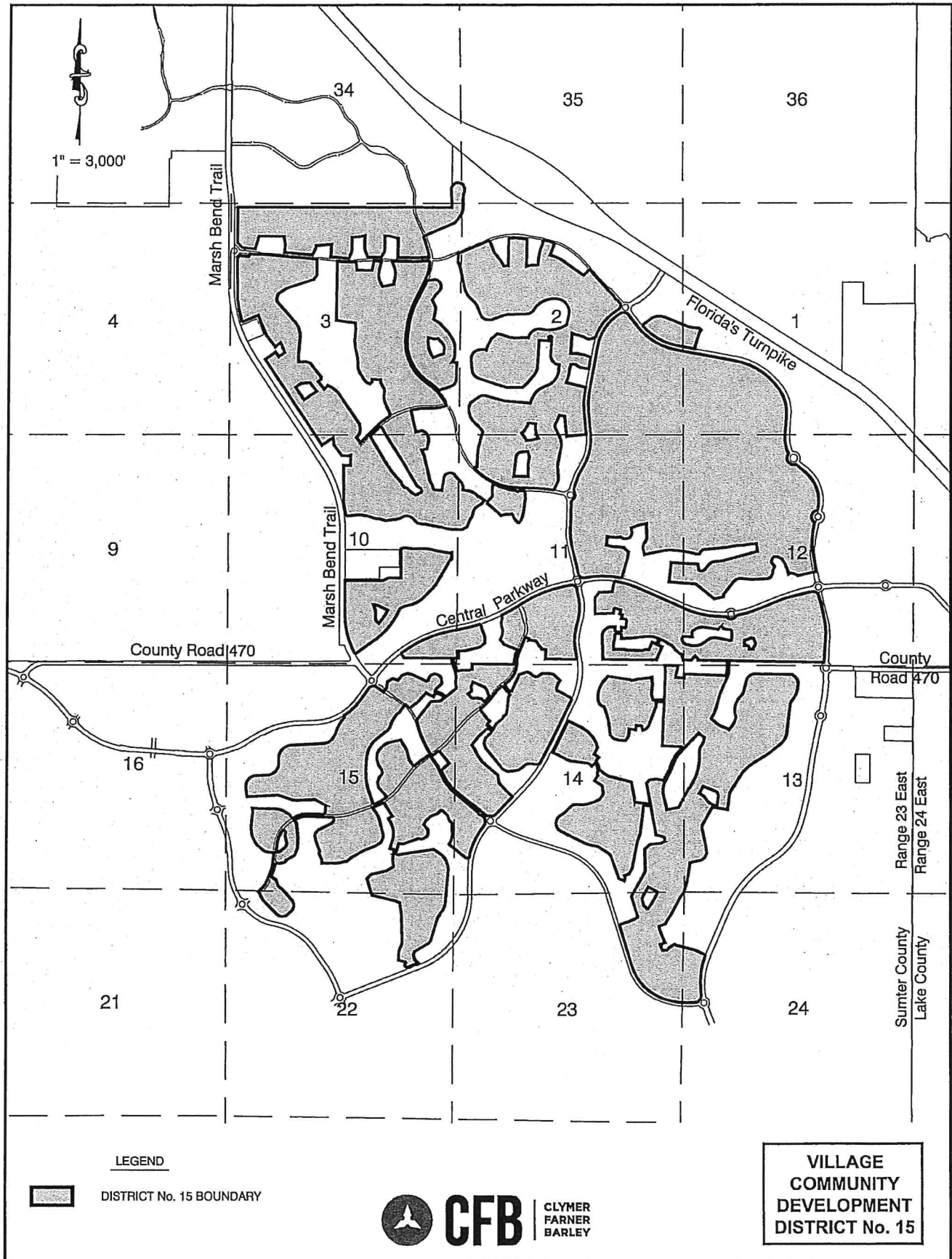
EXHIBIT 7

The Village Community Development District No. 15 (the "District") is located within the city limits of the City of Wildwood (the "City") in Sumter County, Florida. The District lies within The Villages of Southern Oaks (VOSO), which was approved on May 8, 2017 as an Age Restricted Development (ARD). Subsequent amendments were approved by the City on January 8, 2018, January 22, 2018 August 27, 2018, January 28, 2019, September 23, 2019, February 24, 2020, October 12, 2020 and again on November 8, 2021. Application to include the remaining land into VOSO ARD has been filed and the approval of this amendment is expected in September 2022.



LAND USE AND ZONING MAP

EXHIBIT 7



VILLAGE COMMUNITY DEVELOPMENT DISTRICT No. 15

EXHIBIT 8

STATEMENT OF ESTIMATED REGULATORY COSTS ESTABLISHMENT OF VILLAGE COMMUNITY DEVELOPMENT DISTRICT NO. 15

1.0 Introduction

1.1 Purpose and Scope

This statement of estimated regulatory costs (SERC) supports the petition to establish Village Community Development District No. 15 (the "District"). The proposed District will include approximately 2495.6 acres of land on which roughly 12,344 dwelling units are planned for development. The District proposes to provide infrastructure and community services to this area in the District as described more fully below.

The limitations on the scope and use of this SERC are set out in Section 190.002(2)(d), Florida Statutes ("F.S."), as follows:

"That the process of establishing such a District pursuant to uniform general law shall be fair and based only on factors material to managing and financing the service delivery function of the District, so that any matter concerning permitting or planning of the development is not material or relevant."

1.2 Overview of the Proposed District Village Community Development District No. 15

The proposed District would provide community infrastructure, services, and facilities, along with their operations and maintenance, to the proposed area, located in the City of Wildwood, Florida. The proposed District will encompass 2495.6 acres. The District will include roughly 12,344 units with a mix of housing types, designs and models.

1.3 Requirements for Statement of Estimated Regulatory Costs (SERC)

Section 120.541(2), F.S. (2022) defines the elements a SERC must contain (or in this case, City ordinance).

(a) An economic analysis showing whether the rule directly or indirectly:

1. Is likely to have an adverse impact on economic growth, private sector job creation or employment, or private sector investment in excess of \$1 million in the aggregate within five (5) years after the implementation of the rule;
2. Is likely to have an adverse impact on business competitiveness, including the ability of persons doing business in the state to

compete with persons doing business in other states or domestic markets, productivity, or innovation in excess of \$1 million in the aggregate within five years after the implementation of the rule; or

3. Is likely to increase regulatory costs, including any transactional costs, in excess of \$1 million in the aggregate within five years after the implementation of the rule.
- (b) A good faith estimate of the number of individuals and entities likely to be required to comply with the rule, together with a general description of the types of individuals likely to be affected by the rule.
 - (c) A good faith estimate of the cost to the agency, and to any other state and local government entities, of implementing and enforcing the proposed rule, and any anticipated effect on state or local revenues.
 - (d) A good faith estimate of the transactional costs likely to be incurred by individuals and entities, including local government entities, required to comply with the requirements of the rule. As used in this section, "transactional costs" are direct costs that are readily ascertainable based upon standard business practices, and include filing fees, the cost of obtaining a license, the cost of equipment required to be installed or used or procedures required to be employed in complying with the rule, additional operating costs incurred, the cost of monitoring and reporting, and any other costs necessary to comply with the rule.
 - (e) An analysis of the impact on small businesses as defined by Section 288.703, F.S., and an analysis of the impact on small counties and small cities as defined in Section 120.52, F.S. The impact analysis for small businesses must include the basis for the agency's decision not to implement alternatives that would reduce adverse impacts on small businesses.
 - (f) Any additional information that the agency determines may be useful.
 - (g) In the statement or revised statement, whichever applies, a description of any regulatory alternatives submitted under paragraph (1)(a) and a statement adopting the alternative or a statement of the reasons for rejecting the alternative in favor of the proposed rule.

2.0 An economic analysis showing whether the rule/ordinance directly or indirectly will have an adverse impact on economic growth, job creation, employment, private-sector investment, business competitiveness, or regulatory costs.

Section 120.541(2)(a), F.S., requires an economic analysis showing whether the establishment of the District will directly or indirectly have an adverse impact on economic growth, job creation, employment, private-sector investment, business competitiveness, or

regulatory costs exceeding \$1 million in the aggregate within five years after the establishment takes place. The answer, based upon numerous other residential community development districts, is that the establishment of the District will not have an adverse impact on economic growth, job creation, employment, private-sector investment, business competitiveness, or regulatory costs.

The establishment of the District is likely to increase economic growth, job creation, employment, private-sector investment, and business competitiveness. This is because the District will provide infrastructure improvements within the District's boundaries, allowing for the development of the land within the District. The development is planned to include roughly 12,344 dwelling units. The residents of the District will purchase goods and services. This new demand created by the District's residents will increase economic growth, job creation, employment, private-sector investment, and business competitiveness in the areas surrounding the District.

The District will have the ability to assess the property owners to pay for the installation, operation, and maintenance of its infrastructure improvements. However, such costs will not be in addition to, or unique to, the District. The infrastructure improvements to be funded by the District would be required to support development of the planned residences, regardless of the District's existence. Community development districts, such as Village Community Development District No. 15 can fund their infrastructure improvements with long-term bond financing that typically carries more favorable terms than other sources of funding. Thus, the costs related to the installation of the public infrastructure serving the planned development will not be increased due to the existence of the District.

3.0 A good-faith estimate of the number of individuals and entities likely to be required to comply with the rule/ordinance, together with a general description of the types of individuals likely to be affected by the rule/ordinance.

The landowner of the District plans to develop roughly 12,344 dwelling units within the District. Establishment of the proposed District would put all of these residents under the jurisdiction of the proposed District. Prior to the sale of the property within the District, the developer will also be subject to the District's jurisdiction.

4.0 Good-faith estimate of the cost to state and local government entities, of implementing and enforcing the proposed ordinance, and any anticipated effect on state and local revenues

4.1 Impact on State and Local Costs

State Government Entities

There will be only modest costs to various Florida ("State") governmental entities due to the formation of the District. The District consists of less than 2,500 acres; therefore, the City of Wildwood (the "City") is the establishing entity, pursuant to Florida Statutes Section 190.005(2). The State will incur no costs in reviewing the petition to establish the District and the State will not be required to hold any public hearings on the matter.

The ongoing costs to various State entities to implement and enforce the establishment of the District relate strictly to the receipt and processing of various reports that the District is required to file annually with the State and its various entities. These annual reports are outlined in the attached Appendix. However, the costs to the State agencies that will receive and process the District's reports will be minimal. The District is only one of many governmental subdivisions required to submit various reports to the State. Additionally, pursuant to Section 189.018, F.S., the District will pay an annual fee to the State Department of Economic Opportunity to offset such processing costs.

The City of Wildwood

City staff will process, analyze, and conduct public hearing(s) on the petition to establish the District. These activities will utilize the time of the staff and City Commissioners, however, these costs to the City are likely to be minimal for a number of reasons. First, review of the petition does not include analysis of the development to be served by the District. Second, the petition itself provides most of the information needed for City staff's review. Third, the City currently employs the staff needed to conduct the review of the petition. Fourth, no capital expenditure is required to review the petition. Finally, local governments routinely process similar petitions for land use and zoning changes that are more complex than is the petition to establish a Community Development District.

The annual costs to the City, related to the ongoing operations of the District, are also minimal. The District will be an independent unit of local government. The only annual costs incurred by the City will be the minimal costs of receiving and, to the extent desired, reviewing the various reports that the District is required to provide to the City.

4.2 Impact on State and Local Revenues

Adoption of the proposed ordinance will have no negative impact on State or local revenues. The District is an independent unit of local government. It is designed to provide community facilities and services to serve the development. It has its own sources of revenue. No State or local subsidies are required or expected.

In this regard, it is important to note that any debt obligations incurred by the District to construct its infrastructure, or for any other reason, are not debts of the State, the County, the City, or any unit of local government. By State law, the debts of the District are strictly its own responsibility.

5.0 A good-faith estimate of the transactional costs likely to be incurred by individuals and entities required to comply with the requirements of the rule/ordinance.

Table 2, below, provides an outline of the various facilities and services the proposed District may provide. The District plans to fund, own, operate, and maintain certain drainage and stormwater systems, landscaping, and ponds. The District will also plan, construct, and finance some of the community's roadways, along with possibly offsite roadway improvements. The roadways and drainage systems within publicly dedicated rights-of-way will be conveyed to the appropriate general-purpose government for operation and maintenance. The landowner will construct the utilities and other community infrastructure and facilities. The District will be responsible for maintenance of some of these facilities.

Table 2. Proposed Facilities and Services

<u>Improvements/Facility</u>	<u>Funded By</u>	<u>O&M By</u>	<u>Ownership</u>
Roads	Landowner/CDD	City	City
Utilities	Landowner	Landowner	Landowner
Amenities	Landowner	Landowner	Landowner
Drainage/Basins	Landowner/CDD	CDD	CDD
Landscape	Landowner/CDD	CDD	CDD

The petitioner has estimated the costs for providing the capital improvements and facilities outlined in Table 2. The cost estimates for these improvements and facilities are shown in Table 3, below. Total costs are estimated at approximately \$598,592,568.00. To fund these improvements, the District may issue special assessment or other revenue bonds. These bonds would be repaid through non-ad valorem assessments levied on all properties located within the District that benefit from these improvements.

Table 3. Summary of Estimated Capital Costs and Time Table¹

<u>Improvement/Facility</u>	<u>Anticipated Schedule</u>	<u>Estimated Cost</u>
Subdivision Infrastructure Roads & Drainage	2022-2028	\$99,434,476.34
Collector Road Infrastructure Roads & Drainage	2022-2028	\$17,509,807.76
Multi-Use Trails & Paths, Golf Cart Bridges & Tunnels	2022-2028	\$31,973,066.95
Landscaping & Irrigation in Common Areas	2022-2028	\$64,758,631.88
Boundary Security Buffers/Walls & Fencing in Common Areas	2022-2028	\$19,256,948.36
Master Earthwork and Stormwater Collection Systems	2022-2028	\$356,967,303.00

¹ Costs are preliminary in nature and are subject to change. Costs include engineering and contingencies.

Wetland & Wildlife Mitigation/Protection Measures	2022-2028	\$2,887,500.00
Project Entry Features	2022-2028	\$5,804,835.49
TOTAL:		\$598,592,569.78

Prospective future landowners in the District may be required to pay non-ad valorem assessments levied by the District to secure the debt incurred by the District through one or more bond issuances. In addition to the levy of non-ad valorem assessments for debt service, the District may also impose a non-ad valorem assessment to fund the operations and maintenance of the District and its facilities and services.

It is important to note that the various costs outlined in Table 3 are typical for residential developments of the type contemplated herein. In other words, there is nothing unusual about the District's financing that requires additional infrastructure over and above what would normally be needed. Therefore, these costs are not in addition to normal development costs. Instead, the facilities and services provided by the District are substituting in part for developer-provided infrastructure and facilities. Along these same lines, District-imposed assessments for operations and maintenance costs are similar to what would be charged in any event by a property owner's association common to most master-planned developments.

Real estate markets take into account the District's cost because buyers and renters evaluate all of the costs and benefits associated with various alternative locations. Therefore, market forces preclude developers from marking up the prices of their products beyond what the competition allows. To remain competitive, the operations and maintenance charges must also be in line with the competition.

Furthermore, locating in the District by new residents is completely voluntary. So ultimately, all owners and users of the affected property choose to accept the District's costs because of the benefits that the District provides.

The District is an alternative means to finance necessary community services. District financing is no more expensive, and often less expensive, than the alternatives of a municipal services taxing unit (MSTU), a neighborhood association, County provision (directly or via a dependent special District), or through developer-bank loans.

6.0 An analysis of the impact on small businesses, as defined by Section 288.703, F.S., and an analysis of the impact on small counties and small cities as defined by Section 120.52, F.S.

There will be no adverse impact on small businesses because of establishment the District. If anything, the impact will be positive. This is because the District must competitively bid certain of its contracts. This affords small businesses the opportunity to bid on District work.

The City of Wildwood has an estimated population of 15,730 according to the most recent U.S. Census Bureau (2020) and the population was 6,709 at the 2010 census. Therefore,

the City of Wildwood is not considered a small city as defined by Section 120.52 F.S. The District will provide infrastructure facilities and services to the property located within the District. These facilities and services will help to make this property developable.

Development of the property within the District will increase the value of this property, and consequently, will increase the property taxes that accrue to the City. These increased property taxes, along with other direct and indirect revenues accruing to the City as a result of the development of the land within the District, will offset any new staff, facilities, or equipment the City adds to provide services to the property owners within the District.

7.0 Any additional useful information.

The analysis provided above is based on a straightforward application of economic theory, especially as it relates to tracking the incidence of regulatory costs and benefits. Inputs were received from the developer's engineer and other professionals associated with the developer.

It is useful to reflect upon the question of whether the establishment of the District is the best alternative to provide community facilities and services to the development. As an alternative to the District, the City could approve a dependent special District for the area, such as an MSBU or a special taxing District under Chapter 170 of the Florida Statutes. Either of these alternatives could finance the improvements contemplated in Table 2 in a fashion similar to the existing District.

However, unlike the District, the alternatives would require the City to continue to administer the projects and its facilities and services. As a result, the costs for these services and facilities would not be sequestered to the land directly benefiting from them, as the case would be with the District. In addition, administering a project of the size and complexity of the development program for the District is a very significant and expensive undertaking, especially in light of the fact that the District already exists.

Another alternative to the District would be for the developer to provide the infrastructure and to use a property owners association (POA) for operations and maintenance of community facilities and services. A District is superior to a POA for a variety of reasons. First, unlike a POA, a District can impose and collect its assessments along with other property taxes on the combined real estate tax bill through the County tax collector. Therefore, the District is far more assured of obtaining its needed funds than is a POA. Second, the District is a unit of local government. Therefore, unlike a POA, the District must abide by all governmental rules and regulations.

Additionally, any debt of a District is strictly the District's responsibility. While it may be technically true that the debt of a City-established, dependent special district, is not strictly the City's responsibility, any financial problems that the special district may have will inevitably entangle the City. This will not be the case if the District is established as proposed.

With a District, residents (owners and renters) within the District would have a focused unit of government under their direct control. The District can then be more responsive to resident needs without disrupting other City responsibilities.

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: CP 2207-001 Tillman Villas

REQUESTED ACTION: Special Magistrate recommends approval.

CONTRACT:

Vendor/Entity:

Effective Date:

Termination Date:

Managing Division/Department:

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

Case #	CP 2207-001 Tillman Villas
Ordinance #	O2022-82
Applicant	Gillio Development, Matt Gillio
Owner	Carol Bennett
Property Location	Generally located along the west side of CR 209 and approximately 0.24 miles south of E C 462.
Parcel Number(s)	C36-005

The applicant is seeking approval from the City Commission for a Small Scale Comprehensive Plan Amendment to change the Future Land Use Map designation from Agriculture (Sumter County) to Medium Density Residential (City) for the parcels listed above on 20 acres MOL. This request is accompanied by rezoning request RZ 2207-001.

Staff believes the proposed amendment should be granted based on the following criteria found in Land Development Regulation (LDR) §1.7(D).

(1) Justification of the proposed amendment has been adequately presented;

The applicant intends to develop a residential development consisting of 150 townhomes on 20 acres MOL. Justification has been presented to the city to support the proposed development, with medium density residential developments to accommodate the housing demand in the area.

(2) The proposed amendment is not inconsistent with the goals, objectives and policies of the comprehensive plan;

The proposed amendment is not inconsistent with the policies of the Comprehensive Plan. Medium Density Residential (MDR) Future Land Use designation within the 2050 Comprehensive Plan allows for a maximum of 180 dwelling units on the subject property. The 2050 Comprehensive Plan FLU Policy 1.1.1 designates a maximum density allowance of 9 units per acre for the proposed FLU designation, placing the project within acceptable development standards. With Policy 1.2.8 stating that the city shall encourage all new development projects to abide by principles of sustainable land development patterns. Surrounding parcels currently have land uses of Medium Density Residential (MDR) and Residential Mixed Use (RMU), with mix of zonings of R-1, R-2 and NMU-7. Policy 1.1.4 stipulates that the City's zoning map shall be consistent with the FLUM, and further refine densities, intensities, and permitted uses.

(3) The proposed amendment should not be considered urban sprawl or exemplify an energy inefficient land use pattern;

The proposed amendment is not considered urban sprawl, and it does not exemplify an energy inefficient land use pattern. The subject property is located along CR 209 and south of E C 462, which is designated as a major collector road. The existing land use designations are also Medium Density Residential (MDR) and is in line with Objective 1.2 of the Comprehensive Plan.

(4) The proposed amendment will not have an adverse effect on environmentally sensitive systems;

The proposed amendment will not have an adverse effect on environmentally sensitive systems. Environmental and ecological assessments were conducted by Atlantic Ecological Services in August 2022. Two gopher tortoise burrows or potentially occupied burrows were identified on the site. An FWC permit for gopher tortoise relocation will be required if construction or clearing is within 25 feet of a gopher tortoise burrow. All burrows must be permitted, excavated and relocated to and approved FWC recipient site.

(5) The proposed amendment will not adversely affect transportation, potable water, sewer, schools or other public facilities without providing remedies to correct the system or facility.

Transportation: The entrance to the development would be on CR 209, from E C 462, which is a major collector road. Proposed daily trips for the proposed townhome development is 872. A full TIA will be required at the site plan stage for review and acceptance by Sumter County Public Works.

Potable Water & Sewer: The subject properties are in an infill and expansion service area according to the 2019 Utility Master Plan. There is currently a 12" force main located at US 301 and C462. There will be a 12" water main that runs along CR 209 once Phase 3 of the water main extension project has been completed. The date of completion is not available. The applicant/owner will work with City utilities at the site plan stage to connect to City water and sewer.

Schools: The residential development is proposed to add 50 students to Wildwood Schools. The school district advises that capacity is available.



Terri O'Neal
Development Services Planning Manager

ORDINANCE NO. O2022-82

AN ORDINANCE OF THE CITY OF WILDWOOD, FLORIDA, PROPOSING A SMALL SCALE FUTURE LAND USE MAP AMENDMENT TO THE ADOPTED COMPREHENSIVE PLAN AND FUTURE LAND USE MAP IN ACCORDANCE WITH THE COMMUNITY PLANNING ACT OF 2011, AS AMENDED; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLICT; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of Wildwood, Florida, is proposing to amend the local Comprehensive Plan and Future Land Use Map of said City, to include a land use amendment described as follows, to-wit:

Parcel C36-005
Carol Bennett (Owner)
20 Acres +/-

LEGAL DESCRIPTION:

The North ½ of the Southeast ¼ of the Northeast ¼ of Section 36, Township 18 South, Range 22 East, Sumter County, Florida, LESS right-of-way for County Road No. 209 across the East side thereof.

This property is to be reclassified from Agriculture (Sumter County) to Medium Density Residential (City) and contains 20 acres, MOL.

AND WHEREAS, the City is proposing to amend the Future Land Use Map to include the future land use of property that shall pertain and be applicable to said amendment.

NOW, THEREFORE, BE IT ENACTED AND ORDAINED by the City Commission of the City of Wildwood, Florida, as follows:

SECTION 1. The adopted local Comprehensive Plan and Future Land Use Map for the City of Wildwood, Florida, are hereby amended to include the above-referenced property and proposed land use amendment as indicated above. The amendment to the Future Land Use Map of the local comprehensive plan is attached hereto as "Exhibit A" and incorporated herein by reference.

SECTION 2. All ordinances or parts of ordinances in conflict herewith, be, and the same are hereby repealed.

SECTION 3. If any section, sentence, clause or phrase of this Ordinance is held to be invalid or unconstitutional by a Court or competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of said Ordinance.

SECTION 4. This Ordinance shall take effect 31 days after its final reading by the City Commission of the City of Wildwood.

DONE AND ORDAINED this _____ day of _____, 2022, by the City Commission of the City of Wildwood, Florida.

CITY COMMISSION
CITY OF WILDWOOD, FLORIDA

Ed Wolf, Mayor

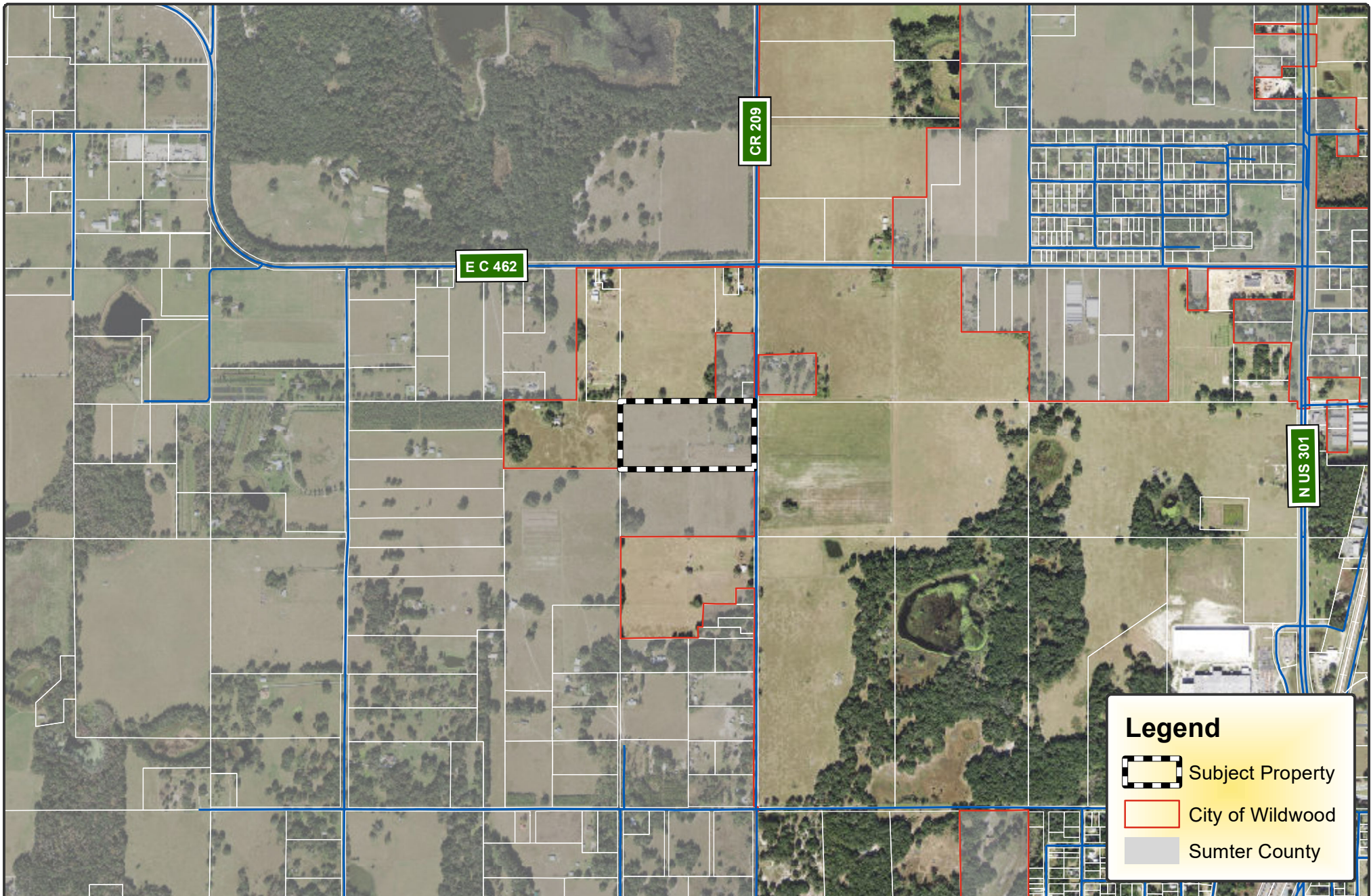
ATTEST: _____
Susan Patterson, City Clerk

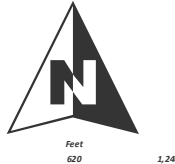
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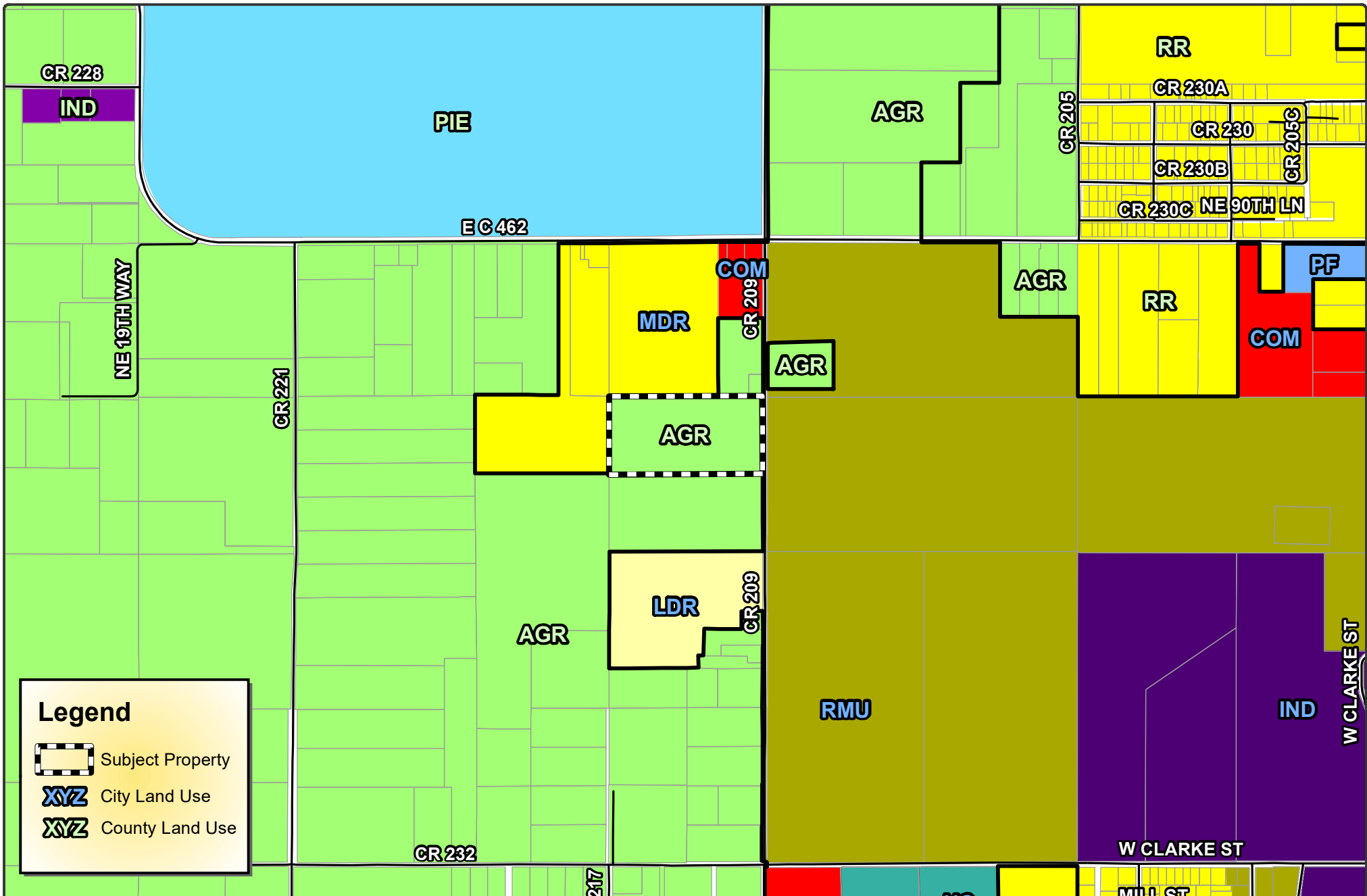
Second Reading: _____

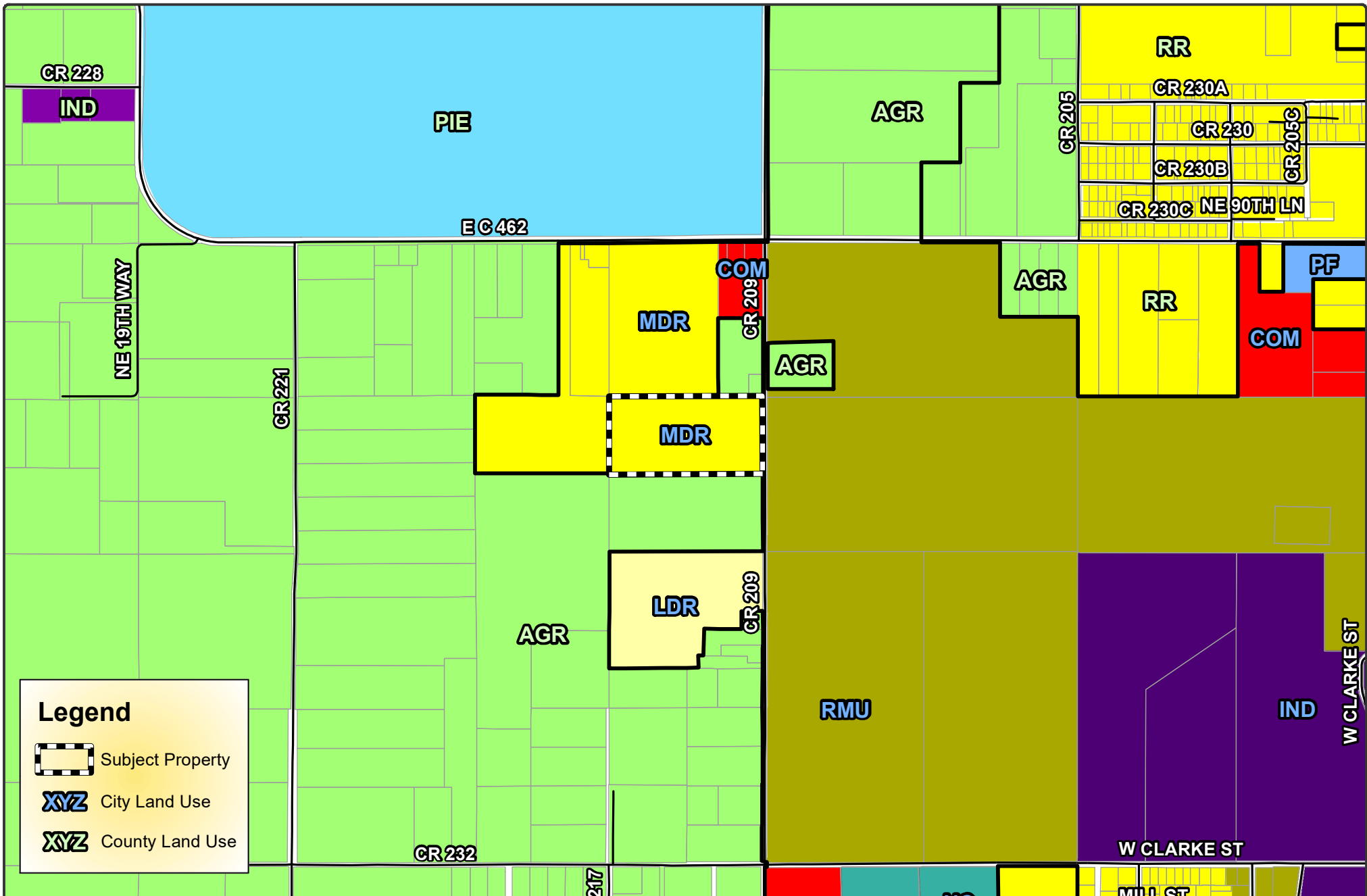
Approved as to form:

City Attorney



 WILDWOOD FLORIDA	CITY OF WILDWOOD 100 North Main Street Wildwood, FL 34785 Phone: (352) 330-1330 www.wildwood-fl.gov	 0 620 1,240	CP 2207-001 / RZ 2207-001 TILLMAN VILLAS PARCEL C36-005	MAP 1B LOCATION MAP JULY 2022
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Legend

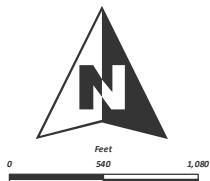
 Subject Property

XYZ City Land Use

XYZ County Land Use



CITY OF WILDWOOD
100 North Main Street
Wildwood, FL 34785
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www.wildwood-fl.gov



CP 2207-001
TILLMAN VILLAS
PARCEL C36-005

MAP 2B
PROPOSED LAND USE
PENDING COMMISSION
APPROVAL
**JULY
2022**

City of Wildwood, Florida
Planning & Zoning Board/Special Magistrate
as Local Planning Agency

The case below was heard on Tuesday, October 4, 2022, by the Special Magistrate. The applicant seeks approval and favorable recommendation from the City of Wildwood Planning and Zoning Board/Special Magistrate as the Local Planning Agency for a Comprehensive Plan amendment to amend the FLU map designation from Agriculture (Sumter County) to Medium Density Residential (City) on 20 acres MOL.

Case No: CP 2207-001
Applicant: Gillio Development, Matt Gillio
Owner: Carol Bennett
Parcel Number: C36-005

Under Land Development Regulation (LDR) § 1.7(C), the Planning and Zoning Board/Special Magistrate as Local Planning Agency has a duty to make a recommendation to the City Commission on all proposed Comprehensive Plan amendments.

Based upon the testimony, evidence, and information presented as to the criteria set forth in LDR § 1.7(D), the Special Magistrate recommends approval of the Comprehensive Plan amendment and gives a favorable recommendation of Ordinance O2022-82 to the City Commission for final determination.

Dated: 10/4/2022


Lindsay C.T. Holt
Special Magistrate City of Wildwood

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: RZ 2207-001 Tillman Villas

REQUESTED ACTION: Special Magistrate recommends approval and favorable recommendation of Ordinance Number O2022-83 subject to approval of O2022-82, which establishes a Future Land Use appropriate to the proposed zoning.

CONTRACT:

Vendor/Entity:

Effective Date:

Termination Date:

Managing Division/Department:

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

Case #	RZ 2207-001 Tillman Villas
Ordinance #	O2022-83
Applicant	Gillio Development, Matt Gillio
Owner	Carol Bennett
Property Location	Generally located along the west side of CR 209 and approximately 0.24 miles south of E C 462.
Parcel Number(s)	C36-005

The applicant is seeking approval from the City Commission for a Zoning Map Amendment to change the zoning A10C (Sumter County) to R-3 (City) for the parcels listed above on 20 acres MOL. This request is accompanied by a concurrent Small Scale Comprehensive Plan amendment CP 2207-001.

Pursuant to Land Development Regulation (LDR) § 3.3(C)(4), staff believes the zoning change should be granted based on the following criteria:

(a) Whether the proposed change is consistent with the comprehensive plan;

The proposed rezoning to R-3 is consistent with the proposed Future Land Use Map designation of Medium Density Residential. This is also consistent with the intent of the Comprehensive Plan as stated in FLU Policies 1.1.1, 1.1.4 and 1.2.8.

(b) The existing land use pattern of the surrounding area;

The proposed rezoning to R-3 is compatible with the current zoning in this area along CR 209. The property is intended to be used as a medium density residential development and is within range of other properties designated with R-1 and R-2 zoning designations to the North, West and South.

(c) The possibility of adversely affecting public facilities such as schools, utilities, streets, etc;

Schools: The residential development is proposed to add 50 students to Wildwood Schools. The school district advises that capacity is available.

Potable Water & Sewer: The subject properties are in an infill and expansion service area according to the 2019 Utility Master Plan. There is currently a 12" force main located at US 301 and C462. There will be a 12" water main that runs along CR 209 once Phase 3 of the water main extension project has been completed. The date of completion is not available.

The applicant/owner will work with City utilities at the site plan stage to connect to City water and sewer.

Streets: The entrance to the development would be on CR 209, from E C 462, which is a major collector road. Proposed daily trips for the proposed townhome development is 872. A full TIA will be required at the site plan stage for review and acceptance by Sumter County Public Works.

(d) Whether changed or changing conditions make the passage of the proposed amendment necessary;

The rezoning to R-3 is necessary to accommodate the proposed use of the property and to bring the property into compliance with the proposed MDR Future Land Use designation.

(e) Whether the proposed change will create or excessively increase traffic congestion or otherwise be a detriment to public safety;

The proposed rezoning change to R-3 according to the submitted traffic statement would result 872 daily trips for the proposed residential townhome development, on CR 209. A full traffic impact analysis accepted by Sumter County that includes traffic mitigation needed to accommodate the increase in traffic is required at the Site Plan stage.

(f) Whether the proposed change will be a deterrent to the improvement or development of adjacent property;

The proposed rezoning will not be a deterrent to the improvement or development of adjacent properties. Properties along CR 209 are already a mix of residential zonings. Properties that remain in Sumter County's jurisdiction are allowed to develop according to their jurisdiction's future land use and zoning designations.

ZONING DESIGNATION

SURROUNDING PROPERTIES

NORTH R2C & RR5C (COUNTY) & R-2 (CITY)

SOUTH A10C (COUNTY)

EAST NMU-7 (CITY)

WEST R-2 (CITY)

If approved, the applicant will be required to submit a site plan to the city prior to development. The site plan will need to follow all requirements as established in the City's Land Development Regulations, Design District Standards, and Planned Development Agreement.



Terri O'Neal
Development Services Planning Manager

ORDINANCE NO. O2022-83

AN ORDINANCE OF THE CITY OF WILDWOOD, FLORIDA;
PROPOSING A ZONING MAP AMENDMENT TO THE
OFFICIAL ZONING MAP IN ACCORDANCE WITH
SECTIONS 3.2 AND 3.3 OF THE LAND DEVELOPMENT
REGULATIONS; PROVIDING FOR CODIFICATION;
PROVIDING FOR CONFLICT; PROVIDING FOR
SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE
DATE.

WHEREAS, the City of Wildwood, Florida, is proposing to amend the Official Zoning Map of said City, to include a rezoning of real property described as follows, to-wit:

Parcel C36-005
Carol Bennett (Owner)
20 Acres +/-

LEGAL DESCRIPTION:

The North ½ of the Southeast ¼ of the Northeast ¼ of Section 36, Township 18 South, Range 22 East, Sumter County, Florida, LESS right-of-way for County Road No. 209 across the East side thereof.

This property is to be reclassified from A10C (Sumter County) to R-3 (City), on 20 acres MOL.

AND WHEREAS, the rezoning is consistent with the City's Comprehensive Plan and Land Development Regulations.

NOW, THEREFORE, BE IT ENACTED AND ORDAINED by the City Commission of the City of Wildwood, Florida, as follows:

SECTION 1. The Official Zoning Map of the City of Wildwood, Florida is hereby amended to include the above-referenced property as indicated above. The amendment to the Official Zoning Map is attached hereto as "Exhibit A" and incorporated herein by reference.

SECTION 2. All ordinances or parts of ordinances in conflict herewith, be, and the same are hereby repealed.

SECTION 3. If any section, sentence, clause or phrase of this Ordinance is held to be invalid or unconstitutional by a Court or competent jurisdiction, then said holding

shall in no way effect the validity of the remaining portions of said Ordinance.

SECTION 4. This Ordinance shall take effect 31 days after its final reading by the City Commission of the City of Wildwood.

DONE AND ORDAINED this _____ day of _____, 2022, by the City Commission of the City of Wildwood, Florida.

**CITY COMMISSION
CITY OF WILDWOOD, FLORIDA**

Ed Wolf, Mayor

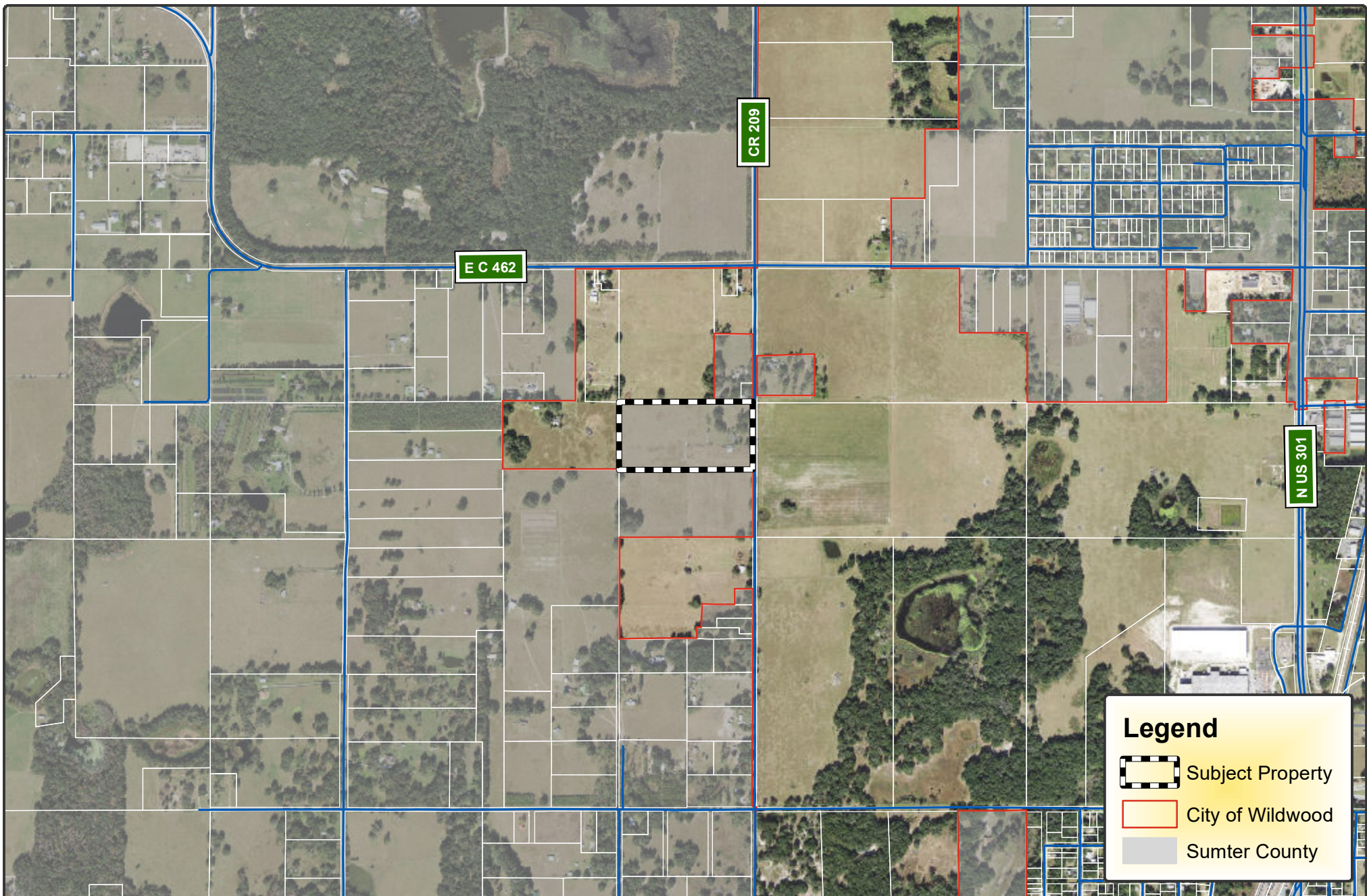
ATTEST: _____
Susan Patterson, City Clerk

First Reading: _____

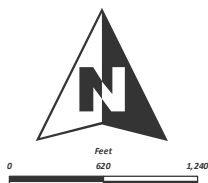
Second Reading: _____

Approved as to form:

City Attorney



**CITY OF
WILDWOOD**
100 North Main Street
Wildwood, FL 34785
Phone: (352) 330-1330
www.wildwood-fl.gov



CP 2207-001 / RZ 2207-001

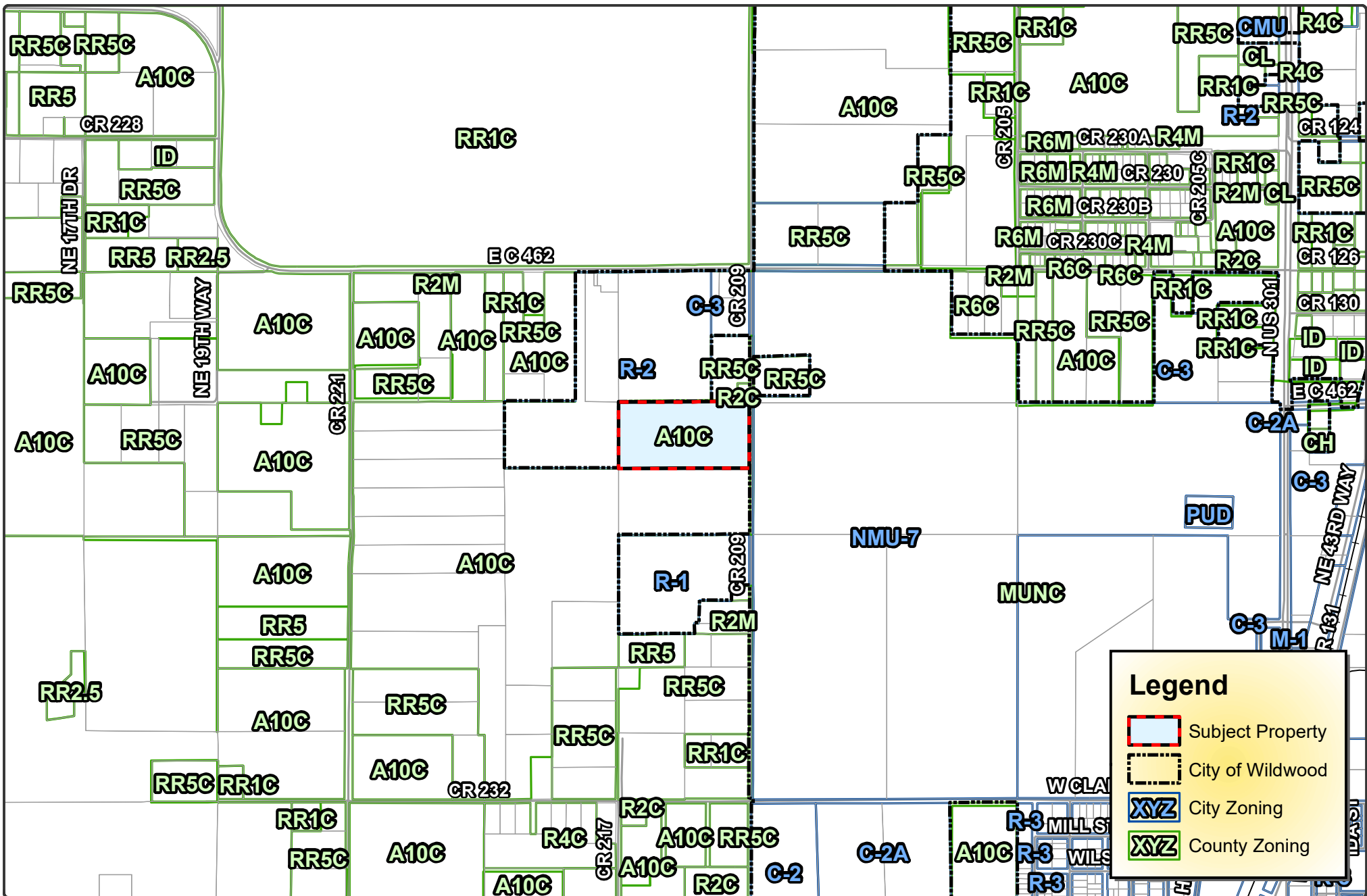
TILLMAN VILLAS

PARCEL C36-005

MAP 1B

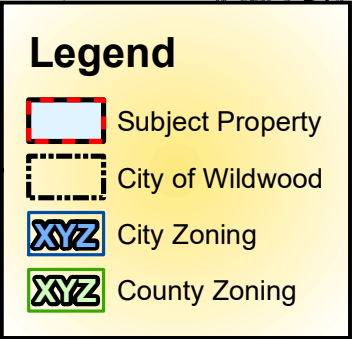
**LOCATION
MAP**

**JULY
2022**



Legend

- Subject Property
- City of Wildwood
- City Zoning
- County Zoning



Page 203 of 609

City of Wildwood, Florida
Planning & Zoning Board/Special Magistrate

The case below was heard on Tuesday, October 4, 2022, by the Special Magistrate. The applicant seeks approval and favorable recommendation from the City of Wildwood Planning and Zoning Board/Special Magistrate for a Zoning Map Amendment to change the zoning district from A10C (Sumter County) to R-3 (City) on 20 acres MOL.

Case No: RZ 2207-001
Applicant: Gillio Development, Matt Gillio
Owner: Carol Bennett
Parcel Numbers: C36-005

Under Land Development Regulation (LDR) § 1.7(C), the Planning and Zoning Board/Special Magistrate has a duty to make a recommendation to the City Commission on all proposed Zoning Map amendments.

Based upon the testimony, evidence, and information presented as to the criteria set forth in LDR § 1.7(D), the Special Magistrate recommends approval of the Zoning Map amendment and gives a favorable recommendation of Ordinance O2022-83 to the City Commission for final determination.

Dated: 10/4/2022



Lindsay C.T. Holt
Special Magistrate City of Wildwood

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: CP 2208-001 Commander's Pointe

REQUESTED ACTION: Special Magistrate recommends approval.

CONTRACT:

Vendor/Entity:

Effective Date:

Termination Date:

Managing Division/Department:

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

Case #	CP 2208-001 Commander's Pointe
Ordinance #	O2022-84
Applicant	Hall Robertson
Owner	Acorn Investments, LLC
Property Location	Located south of E C 466 and west of CR 209
Parcel Number(s)	C13-109
Date	9/07/22

The applicant seeks approval from the City Commission for a Small Scale Comprehensive Plan Amendment to change the Future Land Use Map designation from Low Density Residential & Neighborhood Commercial (City) to High Density Residential and Commercial (City) for the parcels listed above on 47.47 acres MOL. This request is accompanied by rezoning request RZ 2208-001.

Staff believes the proposed amendment should be granted based on the following criteria found in Land Development Regulation (LDR) §1.7(D).

(1) Justification of the proposed amendment has been adequately presented;

The applicant intends to develop a multi-family mixed-use development on the subject property consisting of a maximum possible development of 639 dwelling units on 42.57 acres MOL, in addition to 5 acres MOL of commercial use. Justification has been presented to the city to support the proposed development, with higher density residential developments to tackle growing housing and commercial demand in the area to adapt to current market conditions.

(2) The proposed amendment is not inconsistent with the goals, objectives and policies of the comprehensive plan;

The proposed amendment is not inconsistent with the policies of the Comprehensive Plan. High Density Residential (HDR) Future Land Use designation within the 2050 Comprehensive Plan allows for a maximum of 639 dwelling units on the subject property. The 2050 Comprehensive Plan FLU Policy 1.1.1 designates a maximum density allowance of 15 units per acre for the proposed FLU designation, placing the project within acceptable development standards. With Policy 1.2.8 stating that the city shall encourage all new development projects to abide by principles of sustainable land development patterns. Surrounding parcels are

currently primarily zoned for residential with FLU split between Low density residential, and commercial, mainly C-3 designated zoning. This current mix of commercial and residential could constitute sprawl and therefore does not conform with Objective 1.2 within the Future Land Use Element. Policy 1.1.4 stipulates that the City's zoning map shall be consistent with the FLUM, and further refine densities, intensities, and permitted uses. Policy 2.5.11 of the Transportation Element requests that developments provide vehicular connectivity internally, and to surrounding areas where feasible. The proposed development is compact in its design, and seeks to utilize the maximum space available while providing residents access to commercial opportunities within walking distance. As such, the proposed amendment is not inconsistent with the FLUM and conforms with the Comprehensive Plan.

(3) The proposed amendment should not be considered urban sprawl or exemplify an energy inefficient land use pattern;

The amendment is not considered urban sprawl, and it does not exemplify an energy-inefficient land use pattern. The subject property is located along E C 466 and CR 209, with E C 466 designated as a major collector road. As the existing mix of land use designations are mainly Low Density residential (LDR) and Commercial (COM), the addition of High Density Residential (HDR) would conform with Objective 1.2 of the Comprehensive Plan. The proposed development directly combats urban sprawl by focusing on maximizing existing space for compact development, providing a wider, more efficient land use in the area.

(4) The proposed amendment will not have an adverse effect on environmentally sensitive systems;

The proposed amendment will not have an adverse effect on environmentally sensitive systems. Environmental and ecological assessments were conducted by Modica & Associates in July of 2022. No wetlands and/or surface waters were present within the project boundary. In addition, no listed species were found on the subject property, nor did a USFWS database search reveal documented evidence of such species within the vicinity. Standard USFWS protection measures are recommended to be applied, and that the applicant educate construction personnel what to do should the indigo snake be observed on the project site during the construction process.

(5) The proposed amendment will not adversely affect transportation, potable water, sewer, schools or other public facilities without providing remedies to correct the system or facility.

Transportation: Access to the property is proposed from E C 466, and CR 209 which is maintained by the county. N US 301 is currently a two-lane divided major arterial roadway that operates at LOS D and is located approximately 1 mile east of the proposed site where it intersects E C 466. The proposed Future Land Use change to HDR and Commercial is estimated to reduce overall daily trips by approximately 795. A full traffic impact analysis will need to be conducted for the site plan and approved by Sumter County. Any concerns the county may have with projected long-term increases to traffic along CR 209 would need to be addressed.

Potable Water & Sewer: The subject properties are in an infill demand service area according to the 2019 Utility Master Plan. City water and sewer are available to the subject property. The applicant/owner will work with City utilities at the site plan stage to connect to City water and sewer.

Schools: The residential development is proposed to add 179 students to Wildwood Schools. The school district advises that capacity is available.

A handwritten signature in black ink that reads "Shaun Raja". The signature is written in a cursive, flowing style.

Shaun Raja,
Planner I, Development Services

ORDINANCE NO. O2022-84

AN ORDINANCE OF THE CITY OF WILDWOOD, FLORIDA, PROPOSING A SMALL SCALE FUTURE LAND USE MAP AMENDMENT TO THE ADOPTED COMPREHENSIVE PLAN AND FUTURE LAND USE MAP IN ACCORDANCE WITH THE COMMUNITY PLANNING ACT OF 2011, AS AMENDED; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLICT; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City of Wildwood, Florida, is proposing to amend the local Comprehensive Plan and Future Land Use Map of said City, to include a land use amendment described as follows, to-wit:

Parcel C13-109
Acorn Investments, LLC (Owner)
47.47 Acres +/-

LEGAL DESCRIPTION:

PARCEL A

THAT PORTION OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 IN SECTION 13, TOWNSHIP 18 SOUTH, RANGE 22 EAST, SUMTER COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF AFORESAID SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 13; THENCE RUN SOUTHERLY ALONG THE EAST LINE OF SAID SOUTHEAST 1/4 OF THE NORTHEAST 1/4 A DISTANCE OF 67.05 FEET, MORE OR LESS, TO THE SOUTH RIGHT-OF-WAY LINE OF COUNTY ROAD 466; THENCE ALONG SAID RIGHT-OF-WAY LINE RUN WESTERLY 28.70 FEET, MORE OR LESS, TO THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD 209 FOR THE POINT OF BEGINNING; THENCE CONTINUE WESTERLY ALONG SAID SOUTH RIGHT-OF-WAY LINE OF COUNTY ROAD 466 A DISTANCE OF 829.00 FEET; THENCE DEPARTING SAID RIGHT-OF-WAY LINE RUN SOUTHERLY PARALLEL WITH THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD 209 A DISTANCE OF 263.00 FEET; THENCE PARALLEL WITH AFORESAID SOUTH RIGHT-OF-WAY LINE OF COUNTY ROAD 466 RUN EASTERLY 829.00 FEET TO THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD 209; THENCE ALONG SAID WEST RIGHT-OF-WAY LINE RUN NORTHERLY 263.00 FEET TO THE POINT OF BEGINNING.

(CONTAINING 5.00 ACRES, MORE OR LESS)

PARCEL B

THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 AND THE NORTH 1/2 OF THE NORTH 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 13, TOWNSHIP 18 SOUTH, RANGE 22 EAST, SUMTER COUNTY, FLORIDA. LESS AND EXCEPT RIGHT-OF-WAY FOR COUNTY ROAD C-466 ACROSS THE NORTH SIDE THEREOF AND RIGHT-OF-WAY FOR COUNTY ROAD 209 ACROSS THE EAST SIDE THEREOF.

ALSO LESS AND EXCEPT THE FOLLOWING-DESCRIBED PROPERTY:

THAT PORTION OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 IN SECTION 13, TOWNSHIP 18 SOUTH, RANGE 22 EAST, SUMTER COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF AFORESAID SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 13; THENCE RUN SOUTHERLY ALONG THE EAST LINE OF SAID SOUTHEAST 1/4 OF THE NORTHEAST 1/4 A DISTANCE OF 67.05 FEET, MORE OR LESS, TO THE SOUTH RIGHT-OF-WAY LINE OF COUNTY ROAD 466; THENCE ALONG SAID RIGHT-OF-WAY LINE RUN WESTERLY 28.70 FEET, MORE OR LESS, TO THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD 209 FOR THE POINT OF BEGINNING; THENCE CONTINUE WESTERLY ALONG SAID SOUTH RIGHT-OF-WAY LINE OF COUNTY ROAD 466 A DISTANCE OF 829.00 FEET; THENCE DEPARTING SAID RIGHT-OF-WAY LINE RUN SOUTHERLY PARALLEL WITH THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD 209 A DISTANCE OF 263.00 FEET; THENCE PARALLEL WITH AFORESAID SOUTH RIGHT-OF-WAY LINE OF COUNTY ROAD 466 RUN EASTERLY 829.00 FEET TO THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD 209; THENCE ALONG SAID WEST RIGHT-OF-WAY LINE RUN NORTHERLY 263.00 FEET TO THE POINT OF BEGINNING.

(CONTAINING 42.47 ACRES, MORE OR LESS)

This property is to be reclassified from LDR & NC to HDR & COM and contains 47.47 acres, more or less;

AND WHEREAS, the City is proposing to amend the Future Land Use Map to include the future land use of property that shall pertain and be applicable to said amendment.

NOW, THEREFORE, BE IT ENACTED AND ORDAINED by the City Commission of the City of Wildwood, Florida, as follows:

SECTION 1. The adopted local Comprehensive Plan and Future Land Use Map for the City of Wildwood, Florida, are hereby amended to include the above-referenced

property and proposed land use amendment as indicated above. The amendment to the Future Land Use Map of the local comprehensive plan is attached hereto as "Exhibit A" and incorporated herein by reference.

SECTION 2. All ordinances or parts of ordinances in conflict herewith, be, and the same are hereby repealed.

SECTION 3. If any section, sentence, clause or phrase of this Ordinance is held to be invalid or unconstitutional by a Court or competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of said Ordinance.

SECTION 4. This Ordinance shall take effect 31 days after its final reading by the City Commission of the City of Wildwood.

DONE AND ORDAINED this _____ day of _____, 2022, by the City Commission of the City of Wildwood, Florida.

CITY COMMISSION

CITY OF WILDWOOD, FLORIDA

Ed Wolf, Mayor

ATTEST: _____
Susan Patterson, City Clerk

First Reading: _____

Second Reading: _____

Approved as to form:

City Attorney

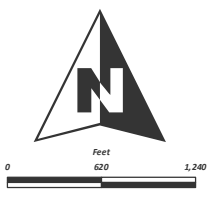


Legend

- Subject Property
- City of Wildwood
- Sumter County

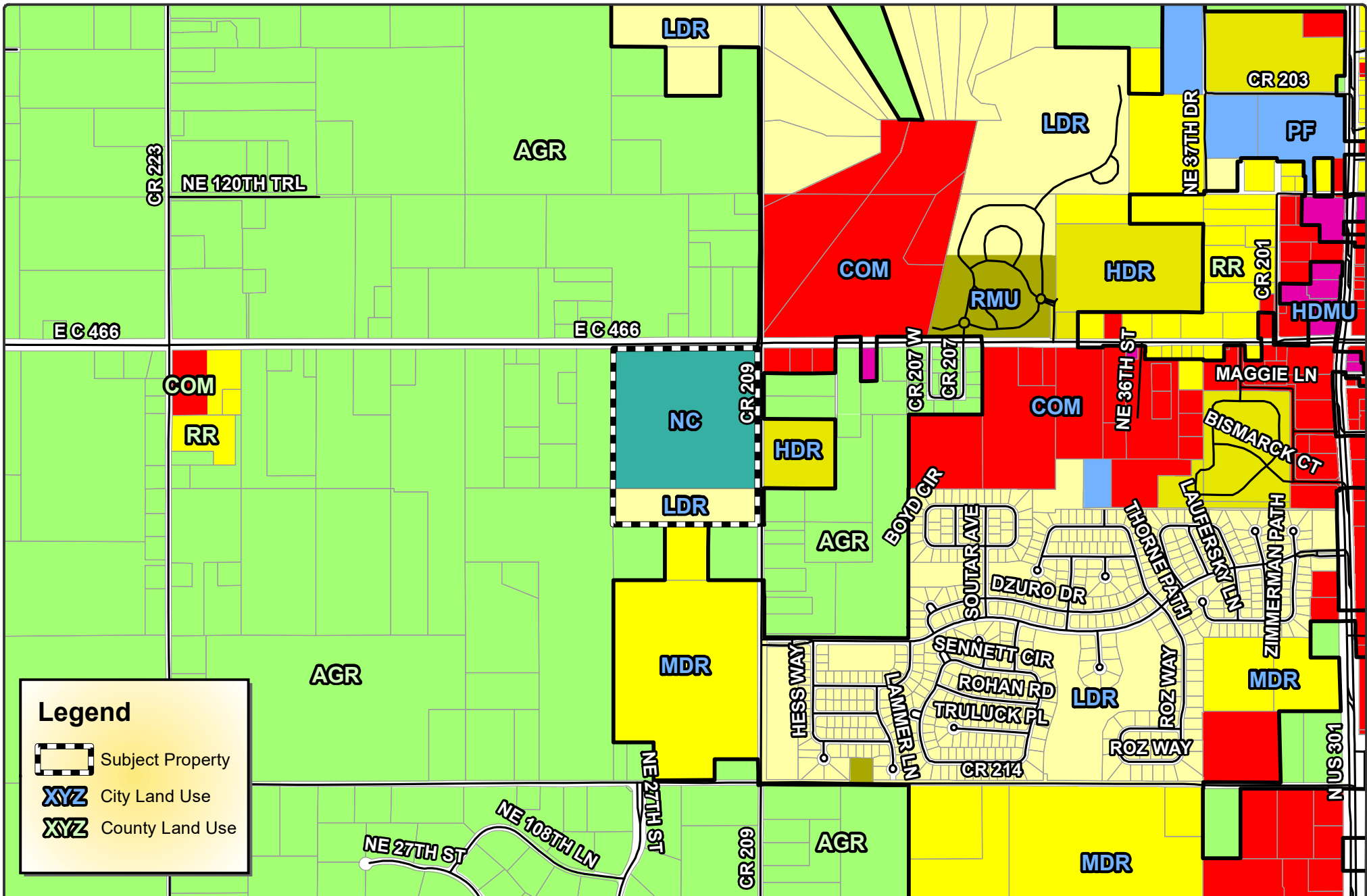
WILDWOOD
FLORIDA

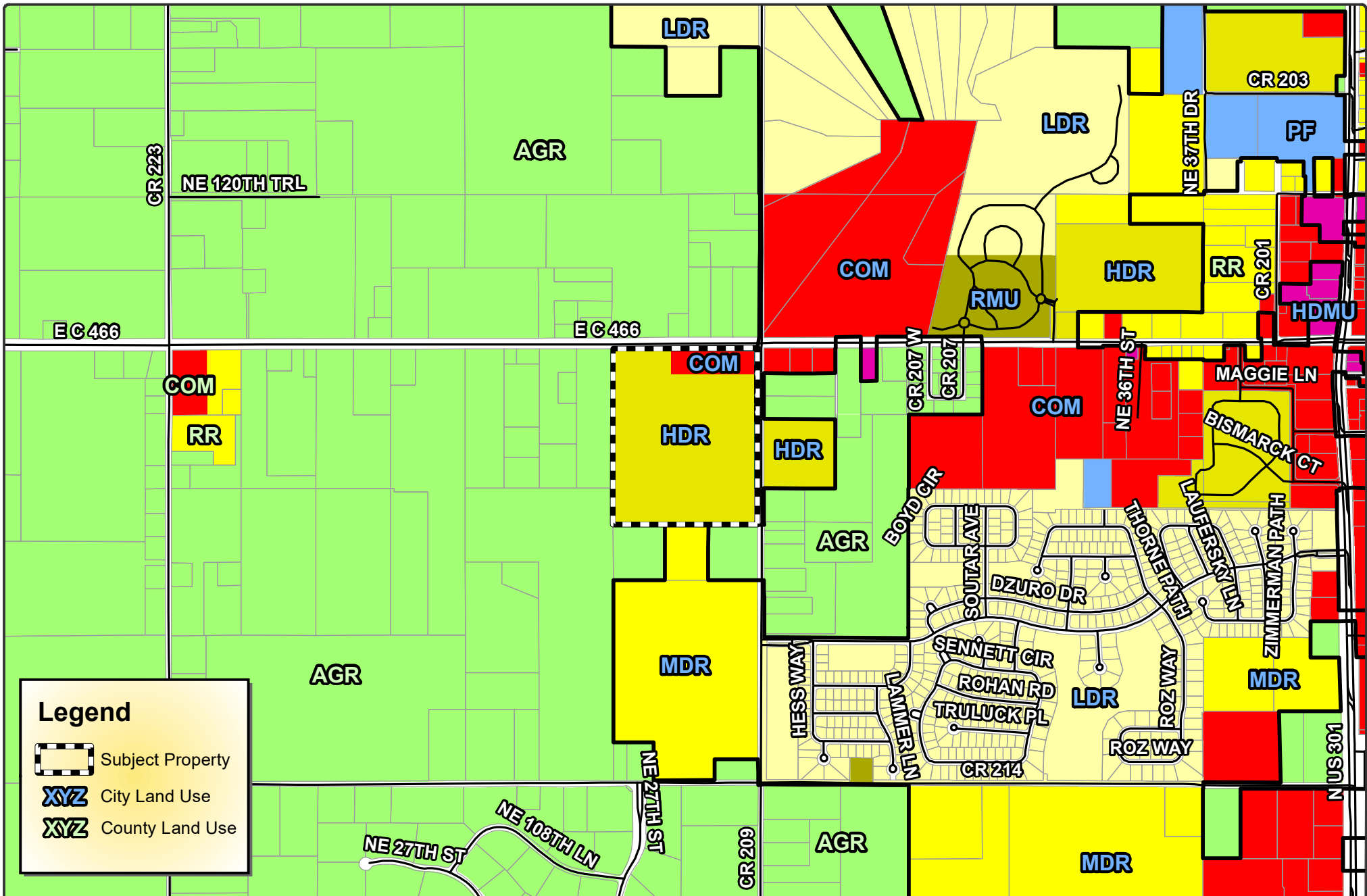
CITY OF WILDWOOD
100 North Main Street
Wildwood, FL 34785
Phone: (352) 330-1330
www.wildwood-fl.gov



CP 2208-001 / RZ 2208-001
COMMANDER'S POINTE
PARCEL C13-109

MAP 1B
LOCATION
MAP
AUGUST
2022





City of Wildwood, Florida
Planning & Zoning Board/Special Magistrate
as Local Planning Agency

The case below was heard on Tuesday, October 4, 2022, by the Special Magistrate. The applicant seeks approval and favorable recommendation from the City of Wildwood Planning and Zoning Board/Special Magistrate as the Local Planning Agency for a Comprehensive Plan amendment to amend the FLU map designation from Low Density Residential and Neighborhood Commercial to High Density Residential and Commercial on 47.47 acres MOL.

Case No: CP 2208-001 Commander's Pointe

Applicant: Hall Robertson

Owner: Acorn Investments LLC

Parcel Number: C13-109

Under Land Development Regulation (LDR) § 1.7(C), the Planning and Zoning Board/Special Magistrate as Local Planning Agency has a duty to make a recommendation to the City Commission on all proposed Comprehensive Plan amendments.

Based upon the testimony, evidence, and information presented as to the criteria set forth in LDR § 1.7(D), the Special Magistrate recommends approval of the Comprehensive Plan amendment and gives a favorable recommendation of Ordinance O2022-84 to the City Commission for final determination.

Dated: October 4, 2022



Lindsay C.T. Holt
Special Magistrate City of Wildwood

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: RZ 2208-001 Commander's Pointe

REQUESTED ACTION: Special Magistrate recommends approval, subject to approval of O2022-84, which establishes a Future Land Use appropriate to the proposed zoning.

CONTRACT:

Vendor/Entity:

Effective Date:

Termination Date:

Managing Division/Department:

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

Case #	RZ 2208-001 Commander's Pointe
Ordinance #	O2022-85
Applicant	Hall Robertson
Owner	Acorn Investments, LLC
Property Location	Located south of E C 466 and west of CR 209
Parcel Number(s)	C13-109
Date	9/12/22

The applicant seeks approval from the Commission for a Zoning Map Amendment to change the zoning from C-2A (City) to R-5 & C-3 (City) for the parcels listed above on 47.47 acres MOL. This request is accompanied by a concurrent Small Scale Comprehensive Plan amendment CP 2208-001. Pursuant to Land Development Regulation (LDR) § 3.3(C)(4), staff believes the zoning change should be granted based on the following criteria:

(a) Whether the proposed change is consistent with the comprehensive plan:

The proposed rezoning to R-5 & C-3 is consistent with the proposed Future Land Use Map designation of High Density Residential and General Commercial. This is also consistent with the intent of the Comprehensive Plan as stated in FLU Policy 1.1.4, and Policy 1.2.8. These proposed changes also coincide with Objectives 1.2 and Objective 1.4 of the Future Land Use Element, which is to cultivate a more sustainable community by discouraging urban sprawl through a future land use pattern which promotes orderly, compact development. While continuing to create an environment that fosters, supports, and champions economic growth. As such this change is consistent with the 2050 Comprehensive Plan.

(b) The existing land use pattern of the surrounding area:

The proposed rezoning to R-5 is compatible with the current zoning in this area along CR 209. The property is intended to be used as a high-density residential development and is within range of other properties designated with R-2 & R-4 zoning designations to the East and South. Whereas the Commercial C-3 zoning would be along E C 466 and is consistent with the other commercial zoning designations along E C 466. The proposed development would abide by Policy 1.2.8(a)(e)(i), as the proposed development contributes to a mix of land use, assists in developing a thriving and equitable economy, while preventing the spread of urban sprawl through compact design.

(c) The possibility of adversely affecting public facilities such as schools, utilities, streets, etc:

Schools: The residential development is proposed to add 179 students to Wildwood Schools. The school district advises that capacity is available.

Potable Water & Sewer: The subject properties are in an infill demand service area according to the 2019 Utility Master Plan. City water and sewer are available to the subject property. The applicant/owner will work with City utilities at the site plan stage to connect to City water and sewer.

Streets: Access to the property is proposed from E C 466, which is maintained by the Sumter County, and CR 209 which is a minor local road maintained by the county as well. US 301 is currently a two-lane divided major arterial roadway that operates at a LOS D. The proposed Future Land Use change to HDR and Commercial of the proposed development is estimated to reduce overall daily trips by approximately 795. A full traffic impact analysis will need to be conducted for the site plan and approved by Sumter County. Any concerns the county may have with projected long-term increases to traffic along CR 209 would need to be addressed.

(d) Whether changed or changing conditions make the passage of the proposed amendment necessary;

The surrounding area is a mix of commercial and low-density residential developments, which could be considered urban sprawl which would conflict with Objective 1.2 of the 2050 Comprehensive Plan in the Future Land Use Element section. The rezoning is necessary to accommodate the proposed use of the property and to bring the property into compliance with the proposed Future Land Use designation.

(e) Whether the proposed change will create or excessively increase traffic congestion or otherwise be a detriment to public safety;

The proposed rezoning change to R-5 according to the submitted traffic statement would result in an overall reduction of approximately 795 daily trips along E C 466 and CR 209. A full traffic impact analysis accepted by Sumter County that includes traffic mitigation needed to accommodate the increase in traffic may be required at the Site Plan stage to address Sumter County's concerns along CR 209. However, the change from the existing C-2A has resulted in a reduction in estimated traffic, alleviating congestion concerns.

(f) Whether the proposed change will be a deterrent to the improvement or development of adjacent property;

The proposed rezoning will not be a deterrent to the improvement or development of adjacent properties. Properties along E C 466 & CR 209 are already a mix of residential and Commercial development. Properties that remain in Sumter County's jurisdiction are allowed to develop according to their jurisdiction's future land use and zoning designations.

ZONING DESIGNATION SURROUNDING PROPERTIES	
NORTH	RR5C, RR1 & A10C (COUNTY) C-2 (CITY)
SOUTH	RR5C (COUNTY), R-2 (CITY)
EAST	A10C, RR1, RR1C (COUNTY), C-3 & R-4 (CITY)
WEST	A10C, RR1, RR1C & RR5C (COUNTY)

If approved, the applicant will be required to submit a site plan to the city prior to development. The site plan will need to follow all requirements as established in the City's Land Development Regulations, Design District Standards and Planned Development Agreement.



Shaun Raja,
Planner I, Development Services

ORDINANCE NO. 02022-85

AN ORDINANCE OF THE CITY OF WILDWOOD, FLORIDA;
PROPOSING A ZONING MAP AMENDMENT TO THE
OFFICIAL ZONING MAP IN ACCORDANCE WITH
SECTIONS 3.2 AND 3.3 OF THE LAND DEVELOPMENT
REGULATIONS; PROVIDING FOR CODIFICATION;
PROVIDING FOR CONFLICT; PROVIDING FOR
SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE
DATE.

WHEREAS, the City of Wildwood, Florida, is proposing to amend the Official Zoning Map of said City, to include a rezoning of real property described as follows, to-wit:

Parcel C13-109
Acorn Investments, LLC (Owner)
47.47 Acres +/-

LEGAL DESCRIPTION:

PARCEL A

THAT PORTION OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 IN SECTION 13, TOWNSHIP 18 SOUTH, RANGE 22 EAST, SUMTER COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF AFORESAID SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 13; THENCE RUN SOUTHERLY ALONG THE EAST LINE OF SAID SOUTHEAST 1/4 OF THE NORTHEAST 1/4 A DISTANCE OF 67.05 FEET, MORE OR LESS, TO THE SOUTH RIGHT-OF-WAY LINE OF COUNTY ROAD 466; THENCE ALONG SAID RIGHT-OF-WAY LINE RUN WESTERLY 28.70 FEET, MORE OR LESS, TO THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD 209 FOR THE POINT OF BEGINNING; THENCE CONTINUE WESTERLY ALONG SAID SOUTH RIGHT-OF-WAY LINE OF COUNTY ROAD 466 A DISTANCE OF 829.00 FEET; THENCE DEPARTING SAID RIGHT-OF-WAY LINE RUN SOUTHERLY PARALLEL WITH THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD 209 A DISTANCE OF 263.00 FEET; THENCE PARALLEL WITH AFORESAID SOUTH RIGHT-OF-WAY LINE OF COUNTY ROAD 466 RUN EASTERLY 829.00 FEET TO THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD 209; THENCE ALONG SAID WEST RIGHT-OF-WAY LINE RUN NORTHERLY 263.00 FEET TO THE POINT OF BEGINNING.

(CONTAINING 5.00 ACRES, MORE OR LESS)

PARCEL B

THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 AND THE NORTH 1/2 OF THE NORTH 1/2 OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 13, TOWNSHIP 18 SOUTH, RANGE 22 EAST, SUMTER COUNTY, FLORIDA. LESS AND EXCEPT RIGHT-OF-WAY FOR COUNTY ROAD C-466 ACROSS THE NORTH SIDE THEREOF AND RIGHT-OF-WAY FOR COUNTY ROAD 209 ACROSS THE EAST SIDE THEREOF.

ALSO LESS AND EXCEPT THE FOLLOWING-DESCRIBED PROPERTY:

THAT PORTION OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 IN SECTION 13, TOWNSHIP 18 SOUTH, RANGE 22 EAST, SUMTER COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF AFORESAID SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 13; THENCE RUN SOUTHERLY ALONG THE EAST LINE OF SAID SOUTHEAST 1/4 OF THE NORTHEAST 1/4 A DISTANCE OF 67.05 FEET, MORE OR LESS, TO THE SOUTH RIGHT-OF-WAY LINE OF COUNTY ROAD 466; THENCE ALONG SAID RIGHT-OF-WAY LINE RUN WESTERLY 28.70 FEET, MORE OR LESS, TO THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD 209 FOR THE POINT OF BEGINNING; THENCE CONTINUE WESTERLY ALONG SAID SOUTH RIGHT-OF-WAY LINE OF COUNTY ROAD 466 A DISTANCE OF 829.00 FEET; THENCE DEPARTING SAID RIGHT-OF-WAY LINE RUN SOUTHERLY PARALLEL WITH THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD 209 A DISTANCE OF 263.00 FEET; THENCE PARALLEL WITH AFORESAID SOUTH RIGHT-OF-WAY LINE OF COUNTY ROAD 466 RUN EASTERLY 829.00 FEET TO THE WEST RIGHT-OF-WAY LINE OF COUNTY ROAD 209; THENCE ALONG SAID WEST RIGHT-OF-WAY LINE RUN NORTHERLY 263.00 FEET TO THE POINT OF BEGINNING.

(CONTAINING 42.47 ACRES, MORE OR LESS)

This property is to be reclassified from C-2A to R-5 & C-3 containing 47.47 acres, more or less;

AND WHEREAS, the rezoning is consistent with the City's Comprehensive Plan and Land Development Regulations.

NOW, THEREFORE, BE IT ENACTED AND ORDAINED by the City Commission of the City of Wildwood, Florida, as follows:

SECTION 1. The Official Zoning Map of the City of Wildwood, Florida is hereby amended to include the above-referenced property as indicated above. The amendment to the Official Zoning Map is attached hereto as "Exhibit A" and incorporated herein by reference.

SECTION 2. All ordinances or parts of ordinances in conflict herewith, be, and the same are hereby repealed.

SECTION 3. If any section, sentence, clause or phrase of this Ordinance is held to be invalid or unconstitutional by a Court or competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of said Ordinance.

SECTION 4. This Ordinance shall take effect 31 days after its final reading by the City Commission of the City of Wildwood.

DONE AND ORDAINED this _____ day of _____, 2022, by the City Commission of the City of Wildwood, Florida.

CITY COMMISSION
CITY OF WILDWOOD, FLORIDA

Ed Wolf, Mayor

ATTEST: _____
Susan Patterson, City Clerk

First Reading: _____

Second Reading: _____

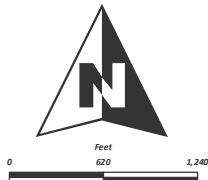
Approved as to form:

City Attorney



**CITY OF
WILDWOOD**

100 North Main Street
Wildwood, FL 34785
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www.wildwood-fl.gov

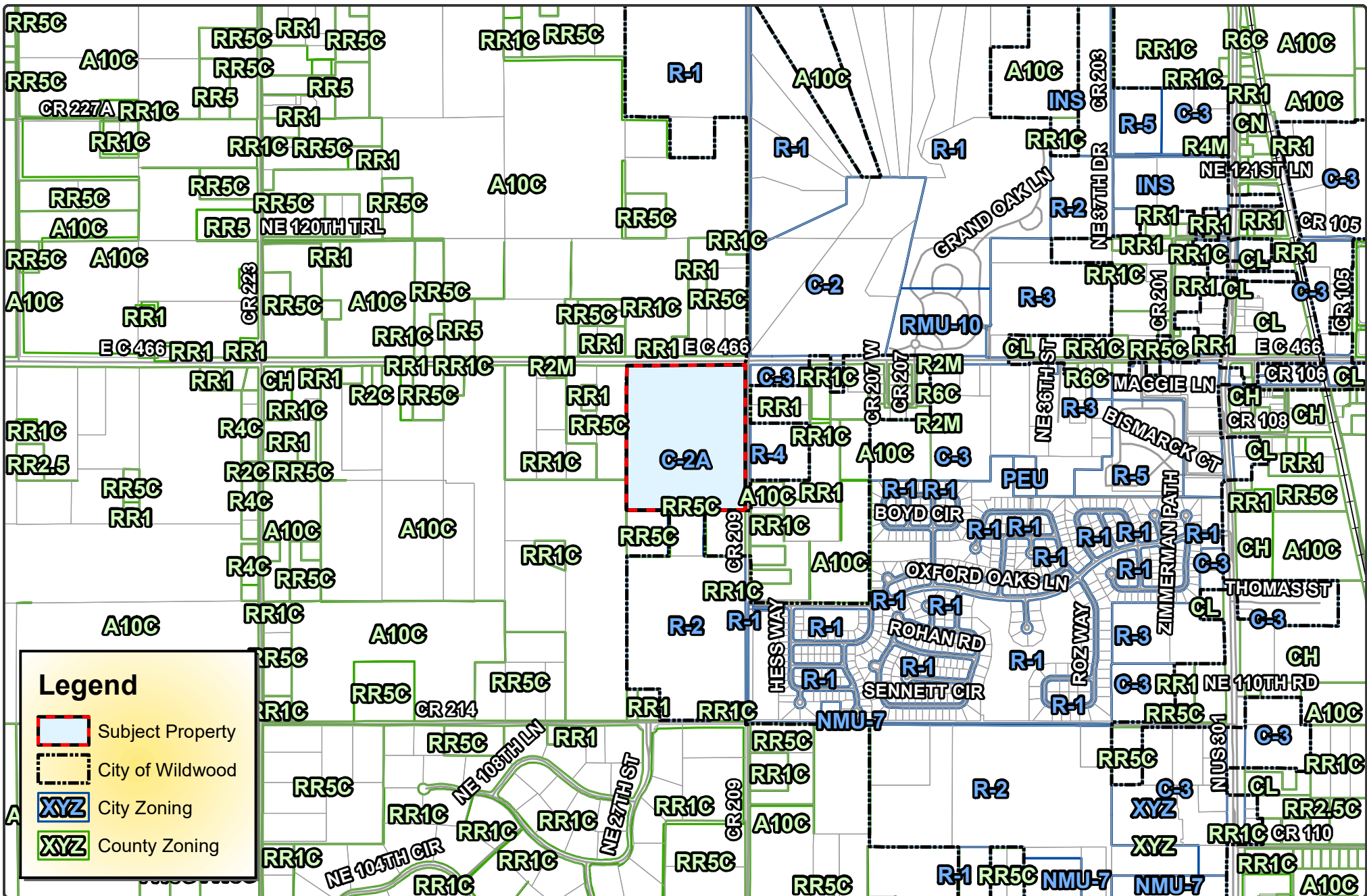


CP 2208-001 / RZ 2208-001
COMMANDER'S POINTE
PARCEL C13-109

MAP 1B

**LOCATION
MAP**

**AUGUST
2022**



City of Wildwood, Florida
Planning & Zoning Board/Special Magistrate

The case below was heard on Tuesday, October 4, 2022, by the Special Magistrate. The applicant seeks approval and favorable recommendation from the City of Wildwood Planning and Zoning Board/Special Magistrate for a Zoning Map Amendment to change the zoning district from C2-A (City) to R-5 & C-3 (City) on 47.47 acres MOL.

Case # RZ 2208-001 Commander's Pointe

Applicant Hall Robertson

Owner Acorn Investments LLC

Parcel Number(s) C13-109

Under Land Development Regulation (LDR) § 1.7(C), the Planning and Zoning Board/Special Magistrate has a duty to make a recommendation to the City Commission on all proposed Zoning Map amendments.

Based upon the testimony, evidence, and information presented as to the criteria set forth in LDR § 1.7(D), the Special Magistrate recommends approval of the Zoning Map amendment and gives a favorable recommendation of Ordinance O2022-85 to the City Commission for final determination.

Dated: October 4, 2022



Lindsay C.T. Holt
Special Magistrate City of Wildwood

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: AN 2209-003 VPSD #46

REQUESTED ACTION: Staff recommends approval.

CONTRACT: Vendor/Entity:
Effective Date: Termination Date:
Managing Division/Department:

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

The owner/applicant, Village Center Community Development District, has submitted a voluntary annexation application for parcels G32-008 and G32-027. The property to be annexed totals 0.99 acres MOL and is located along CR 509 and Warm Springs Ave, approximately 1 mile east of the intersection of Warm Springs Ave and N US 301.

Annexation into the City is appropriate because the properties are contiguous to the City limits and are within the City's Joint Planning Area with Sumter County, which allows for voluntary annexations within the planning area that would otherwise not be permissible under statute due to the creation of a "pocket" or "enclave."

The applicant plans to modify existing property to be used as a Villages Public Safety Department Building. Water and sewer are available to the subject properties. The applicant will work with the City Utilities department to connect to utilities when development is proposed.



Shaun Raja, Planner I,
Development Services Department

ORDINANCE NO. O2022-89

AN ORDINANCE OF THE CITY OF WILDWOOD, FLORIDA, PROVIDING FOR THE VOLUNTARY ANNEXATION OF CERTAIN REAL PROPERTY CONSISTING OF APPROXIMATELY .99 ACRES LOCATED ALONG CR 509 AND WARM SPRINGS AVE, APPROXIMATELY 1 MILE EAST OF THE INTERSECTION OF WARM SPRINGS AVE AND N US 301, IN SECTION 32, TOWNSHIP 19 SOUTH, RANGE 23 EAST; WHICH IS CONTIGUOUS TO THE CITY LIMITS OF THE CITY OF WILDWOOD AND LOCATED IN THE CITY'S JOINT PLANNING AREA; PROVIDING THAT SECTION 1-14 OF THE CITY OF WILDWOOD CODE OF ORDINANCES IS AMENDED TO INCLUDE THE ANNEXED PROPERTY; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLICT; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

NOW, THEREFORE, BE IT ENACTED AND ORDAINED by the City Commission of the City of Wildwood, Florida, as follows:

SECTION 1. Based upon the petition of the owner of the following described real property, which is located on CR 201, approximately 0.06 miles west of N US 301, to be annexed into the City, the property is hereby annexed into the City of Wildwood pursuant to Sections 171.044 and 171.204, Florida Statutes. The City Commission finds that the property is contiguous to the City of Wildwood; is located within the City's Joint Planning Area with Sumter County; and meets all legal requirements for annexation. The annexed property lying in Sumter County, Florida, owned by the Village Center Community Development District, is more particularly described as follows:

Parcels G32-008 & G32-027

Village Center Community Development District (OWNER)

.99 Acres +/-

LEGAL DESCRIPTION

PARCEL 1:

A PARCEL OF LAND LYING IN THE NE 1/4 OF THE NE 1/4 OF THE NW 1/4 OF SECTION 32, TOWNSHIP 19 SOUTH, RANGE 23 EAST, SUMTER COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHEAST CORNER OF TRACT "D" OF VILLAGE OF FENNEY BOUGAINVILLEA VILLAS AS RECORDED IN PLAT BOOK 16, PAGES 11 & 11A OF THE PUBLIC RECORDS OF SUMTER COUNTY, FLORIDA; THENCE ALONG THE SOUTH RIGHT OF WAY OF COUNTY ROAD 468 /WARM SPRINGS AVENUE (HAVING A 113 FOOT WIDTH), S.89°42'01"E., 210.00 FEET TO THE EAST BOUNDARY OF LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 3026, PAGE 258 OF THE PUBLIC RECORDS OF SUMTER COUNTY, FLORIDA; THENCE DEPARTING SAID SOUTH RIGHT OF WAY, ALONG THE EAST BOUNDARY OF SAID LANDS, S.00°28'58"W., 37.91 FEET; THENCE DEPARTING SAID EAST BOUNDARY, S.22°40'28"W., 102.69 FEET TO THE SOUTH BOUNDARY OF AFORESAID LANDS DESCRIBED IN OFFICIAL RECORDS BOOK 3026, PAGE 258; THENCE ALONG SAID SOUTH BOUNDARY, N.89°39'18"W., 171.00 FEET TO THE SOUTHWEST CORNER OF SAID LANDS; THENCE DEPARTING SAID SOUTH BOUNDARY, ALONG THE WEST BOUNDARY OF SAID LANDS, N.00°23'26"E., 132.73 FEET TO THE POINT OF BEGINNING.

PARCEL 2:

BEGINNING AT THE SW CORNER OF THE NE 1/4 OF THE NE 1/4 OF THE NW 1/4, SECTION 32, TOWNSHIP 19 SOUTH, RANGE 23 EAST, RUN NORTH 357 FEET TO POINT OF BEGINNING, CONTINUE NORTH 100 FEET, EAST 171 FEET, SOUTH 100 FEET, WEST 171 FEET TO POINT OF BEGINNING, SAID LAND SITUATE AND LYING IN SUMTER COUNTY, FLORIDA.

SECTION 2. All of the above described annexed property shall be liable for its proportionate share of the future and existing indebtedness of the City of Wildwood.

SECTION 3. All of the above described annexed property shall be subject to the laws and ordinance of the City of Wildwood as if this territory had been a part of the City of Wildwood at the time of passage and approval of said laws and ordinances.

SECTION 4. Until such time as the City amends its comprehensive plan, the current Sumter County zoning classification and future land use regulations will remain in full force and effect.

SECTION 5. Section 1-14 of the City of Wildwood Code of Ordinances is hereby amended to include the legal description of the annexed parcel pursuant to this

Ordinance. The location map identifying the property to be annexed are attached hereto as "Exhibit A" and incorporated herein by reference.

SECTION 6. If any portion of this Ordinance is declared invalid for any purpose, the remaining portion shall remain valid and in full force and effect

SECTION 7. This Ordinance shall take effect upon final approval by the City Commission.

DONE AND ORDAINED this _____ day of _____, 2022, by the City Commission of the City of Wildwood, Florida.

**CITY COMMISSION
CITY OF WILDWOOD, FLORIDA**

Ed Wolf, Mayor

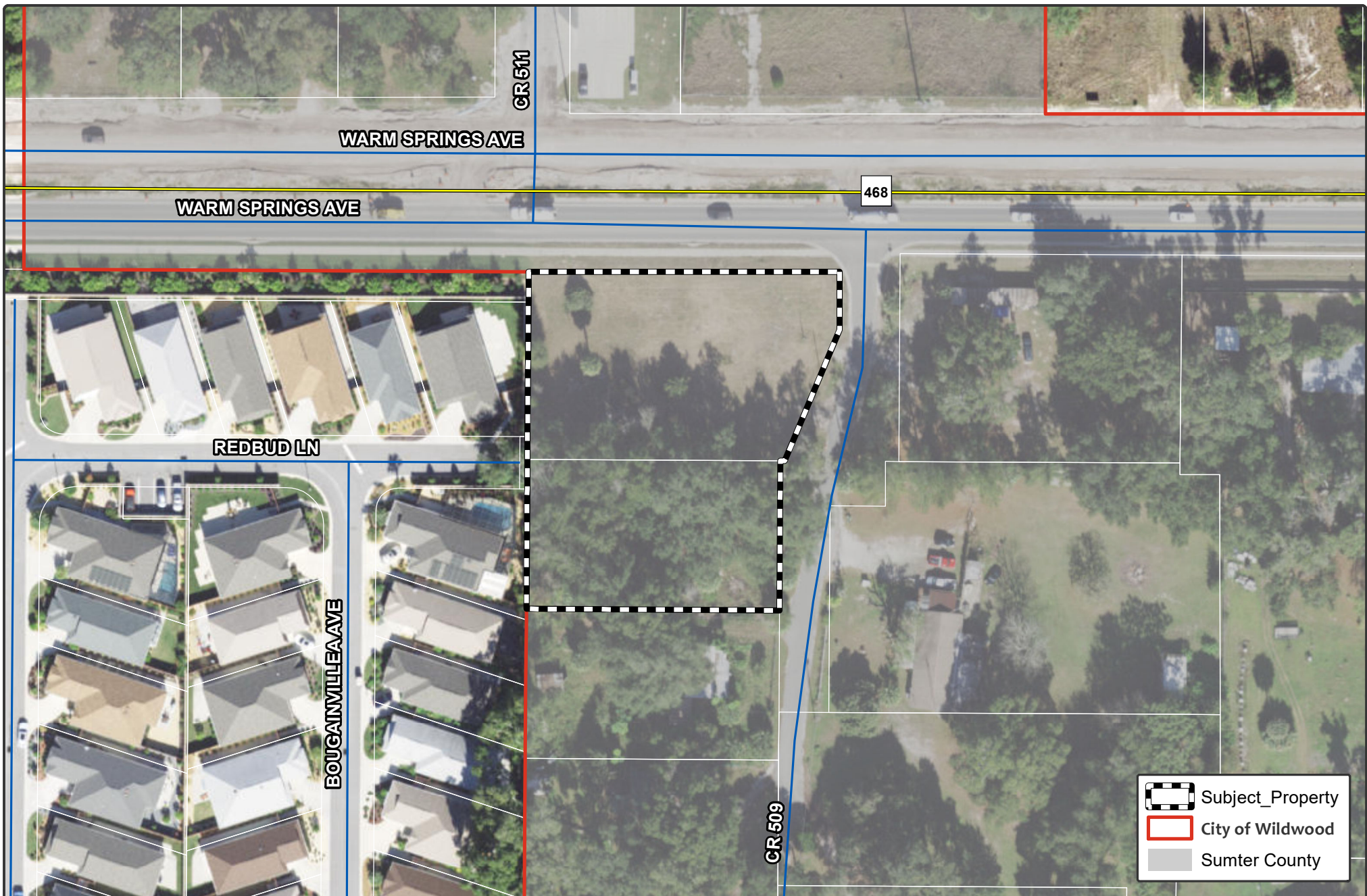
ATTEST: _____
Susan Patterson, City Clerk

First Reading: _____

Second Reading: _____

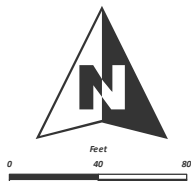
Approved as to form:

City Attorney



**CITY OF
WILDWOOD**

100 North Main Street
Wildwood, FL 34785
Phone: (352) 330-1330
www.wildwood-fl.gov



AN 2209-003

VPD No. 46

PARCELS G32-008 & G32-027

MAP 1B

**LOCATION
MAP**

**SEPTEMBER
2022**

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: **Wastewater Treatment Plant Conceptual Design Report**

REQUESTED ACTION: Staff recommends approval.

CONTRACT: Vendor/Entity:
Effective Date: Termination Date:
Managing Division/Department:

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

In December of last year the City, pursuant to Florida Statute 287.055 commonly known as the CCNA, issued an RFQ to receive submittals for professional engineering services for the wastewater treatment facility expansion project. The City Commission accepted the Selection Committee's ranking at the February 14, 2022 Commission meeting and authorized the City Manager to enter into contract negotiations with CPH, Inc. (CPH), the highest ranking firm.

At the March 14, 2022 City Commission meeting, the Commission authorized CPH to complete a Conceptual Design Report outlining the recommended steps to facilitate a phased expansion of the wastewater treatment plant to achieve a permitted capacity of 6.0 million gallons per day. CPH completed the report and presented its findings to the City Commission at the September 19, 2022 Special Called Meeting.

This resolution adopts the Conceptual Design Report.

RESOLUTION NO. R2022-28

A RESOLUTION OF THE CITY OF WILDWOOD, FLORIDA;
ADOPTING THE CITY OF WILDWOOD WASTEWATER
TREATMENT FACILITY CONCEPTUAL DESIGN REPORT
COMPLETED BY CPH, INC.; PROVIDING FOR AN
EFFECTIVE DATE.

WHEREAS, the City is a municipal provider of potable water, sanitary sewer, and reuse water services; and

WHEREAS, the City recognizes the need to protect the natural resources of the City and of the State of Florida, as well as the need to ensure the environment is carefully and adequately protected; and

WHEREAS, the City is experiencing increasing demand for its water, wastewater, and reuse water services and needs to expand its wastewater treatment capabilities to meet said demand; and

WHEREAS, on March 14, 2022 the City authorized CPH, Inc. to complete planning activities associated with the expansion of the City's wastewater treatment facility located at 1290 Industrial Drive; and

WHEREAS, CPH, Inc. has completed a Conceptual Design Report pertaining to the planned expansion, and the City wishes to adopt the Conceptual Design Report so that it may be used as a guide for the expansion activities.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF WILDWOOD, FLORIDA, THAT:

1. The City hereby adopts the "City of Wildwood Wastewater Treatment Facility Conceptual Design Report" (Report) prepared by CPH, Inc. dated September 2022 attached herein as "Exhibit A" to this Resolution.

2. The City Manager is hereby authorized to utilize the Report as a tool in making recommendations to the City Commission concerning the expansion of the wastewater treatment facility.

3. This Resolution shall take effect immediately upon adoption by the City Commission.

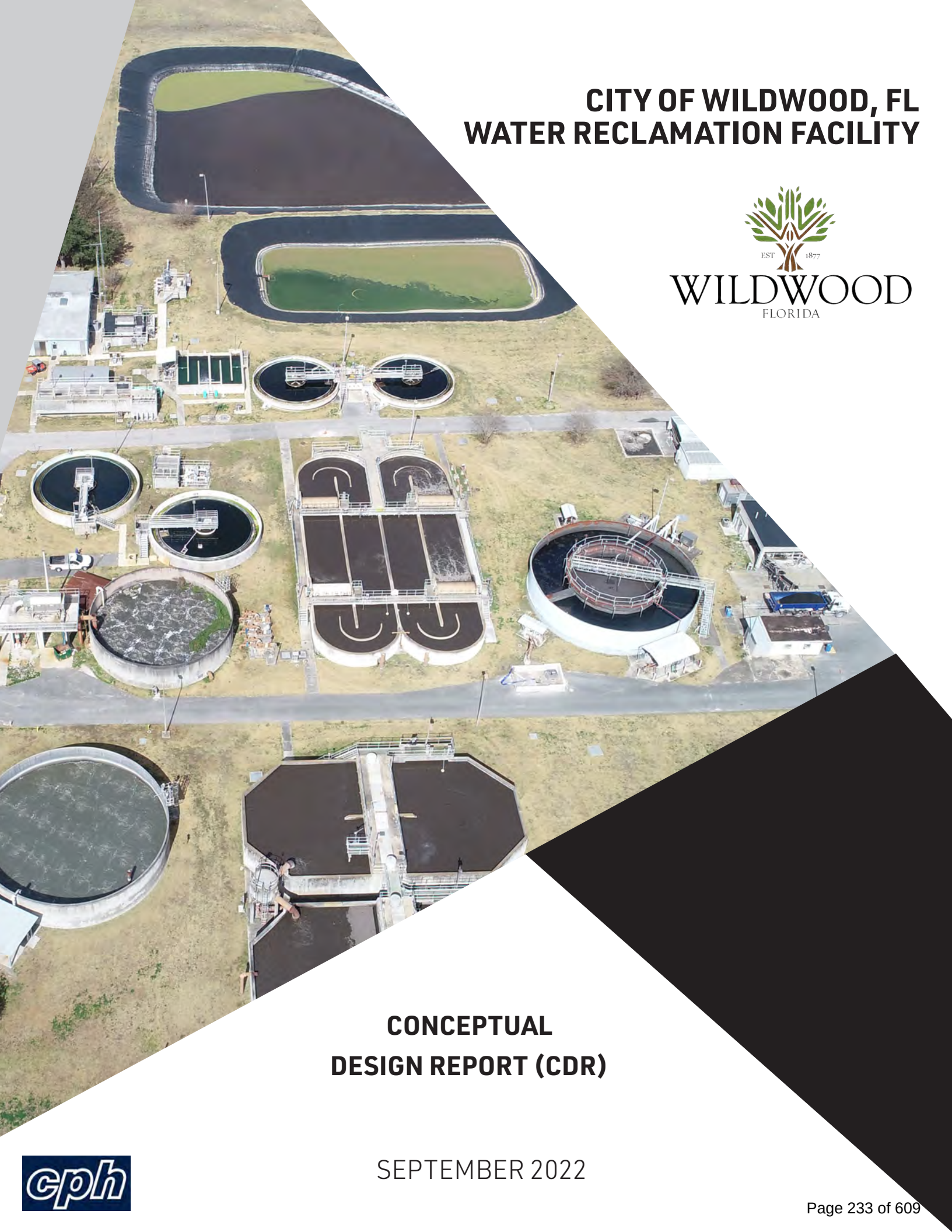
DONE AND RESOLVED this ____ day of _____, 2022, by the City Commission of the City of Wildwood, Florida.

**CITY COMMISSION
CITY OF WILDWOOD, FLORIDA**

Ed Wolf, Mayor

ATTEST: _____
Susan Patterson, City Clerk

EXHIBIT “A”



CITY OF WILDWOOD, FL WATER RECLAMATION FACILITY



CONCEPTUAL DESIGN REPORT (CDR)

SEPTEMBER 2022



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CITY OF WILDWOOD, FL

WATER RECLAMATION FACILITY

CONCEPTUAL DESIGN REPORT (CDR)



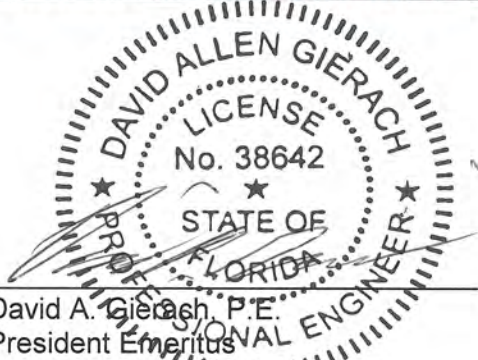
SEPTEMBER 2022

CPH, Inc.
500 West Fulton Street
Sanford, Florida 32771
CPH Project No. W12810

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PROJECT CERTIFICATIONS

PROFESSIONAL ENGINEER



David A. Gierach, P.E.
President Emeritus
Florida Registration No. 38642
CPH, Inc.
500 West Fulton Street
Sanford, Florida 32771
(407) 322-6841
dgierach@cphcorp.com

A handwritten signature in blue ink that reads "Benjamin M. Fries".

Benjamin M. Fries
Program Manager / Vice-President
CPH, Inc.
500 West Fulton Street
Sanford, Florida 32771
(407) 322-6841
bfries@cphcorp.com
bfries1@brighthouse.com

9/22/22
Date

September 22, 2022
Date

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List of Abbreviations

AADF	Annual Average Daily Flow
AC	Acres
ADF	Average Daily Flow
ANAMMOX	Anaerobic Ammonia Oxidation
AO	Administrative Order
A/O	Anaerobic/Oxic
A ² /O	Anaerobic/Anoxic/Oxic
AOB	Ammonia Oxidizing Bacteria
AWT	Advanced Wastewater Treatment
BABE	Bio-Augmentation Batch Enhanced
BAF	Biologically Aerated Filter
BAR	Bio-Augmentation Regeneration/Reaeration
BFP	Belt Filter Press
BMP	Best Management Practices
BNR	Biological Nutrient Removal
BOD	Biochemical Oxygen Demand
BPR	Biological Phosphorus Removal
CAAS	Cyclically Aerated Activated Sludge
CBOD ₅	Carbonaceous Biochemical Oxygen Demand - 5 Day
CCC	Chlorine Contact Chamber
CDR	Conceptual Design Report
CFR	Code of Federal Regulations

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AADF	Annual Average Daily Flow
AC	Acres
ADF	Average Daily Flow
ANAMMOX	Anaerobic Ammonia Oxidation
AO	Administrative Order
A/O	Anaerobic/Oxic
A ² /O	Anaerobic/Anoxic/Oxic
AOB	Ammonia Oxidizing Bacteria
AWT	Advanced Wastewater Treatment
BABE	Bio-Augmentation Batch Enhanced
BAF	Biologically Aerated Filter
BAR	Bio-Augmentation Regeneration/Reaeration
BFP	Belt Filter Press
BMP	Best Management Practices
BNR	Biological Nutrient Removal
BOD	Biochemical Oxygen Demand
BPR	Biological Phosphorus Removal
CAAS	Cyclically Aerated Activated Sludge
CBOD ₅	Carbonaceous Biochemical Oxygen Demand - 5 Day
CCC	Chlorine Contact Chamber
CDR	Conceptual Design Report
CFR	Code of Federal Regulations
CIP	Capital Improvements Plan
COD	Chemical Oxygen Demand
CPH	CPH, LLC
DMR	Discharge Monitoring Report
DO	Dissolved Oxygen
DT	Dry Tons
EPA	Environmental Protection Agency
EQ	Equalization
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FEB	Flow Equalization Basin
F/M	Food-to-Microorganism Ratio
FOG	Fats, Oils and Grease
GAO	Glycogen-Accumulating Organism
GPCD	Gallons per Capita-Day
HDPE	High Density Polyethylene
HDT	Hydraulic Detention Time
HP	Horsepower

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HRT	Hydraulic Retention Time
IFAS	Integrated Fixed Film Activated Sludge
IMLR	Internal Mixed Liquor Recycle
InNitri	Inexpensive Nitrification
kgal	1,000 gallons
lb	Pounds
lb/day	Pounds per day
LOS	Levels of Service
MAUREEN	Mainstream Autotrophic Recycle Enabling Enhanced Nitrogen-removal
MBBR	Moving Bed Biofilm Reactor
MBR	Membrane Bioreactor
MCRT	Mean Cell Residence Time
MDF	Maximum Daily Flow
mg	Milligram
mg/L	Milligrams per Liter
MG	Million Gallons
MGD	Million Gallons per Day
MLE	Modified Ludzack-Ettinger
MLSS	Mixed Liquor Suspended Solids
MLVSS	Mixed Liquor Volatile Suspended Solids
MOP	Monitoring and Operating Protocol
NaOCl	Sodium Hypochlorite
NH ₃ -N	Ammonia-Nitrogen
O&M	Operations and Maintenance
ORP	Oxidation Reduction Potential
PAC	Polyaluminum Chloride
PACI	Polyaluminum Chloride
PAO	Phosphorus Accumulating Organisms
PC	Progressive Cavity
PD	Positive Displacement
pH	Negative logarithmic value of the hydrogen ion concentration/activity
PHF	Peak Hourly Flow
PID	Phased Isolation Ditch
PPD	Pounds per Day
PVC	Polyvinyl Chloride
RAS	Return Activated Sludge
rbCOD	Readily Degradable Chemical Oxygen Demand
RIB	Rapid Infiltration Basin
RPM	Revolutions per Minute
SBR	Sequencing Batch Reactor

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List of Abbreviations (Cont'd)

SCADA	Supervisory Control and Data Acquisition
SHARON	Single-reactor for High-Activity Ammonia Removal Over Nitrate
SLR	Solids Loading Rate
SNdN	Simultaneous Nitrification-Denitrification
SOR	Surface Overflow Rate
SRF	State Revolving Fund
SRT	Solids Retention Time
SSO	Sanitary Sewer Overflow
SU	Standard Unit
SWD	Side Water Depth
TDH	Total Dynamic Head
TKN	Total Kjeldahl Nitrogen (Organic-N + NH ₃ -N)
TMDL	Total Maximum Daily Load
TN	Total Nitrogen
TP	Total Phosphorus
TRC	Total Residual Chlorine
TS	Total Solids
TSS	Total Suspended Solids
UCT	University of Capetown
VFA	Volatile Fatty Acids
VFD	Variable Frequency Drive
VIP	Virginia Initiative Process
VS	Volatile Solids
VSS	Volatile Suspended Solids
WAS	Waste Activated Sludge
WEF	Water Environment Federation
WLA	Waste Load Allocation
WLR	Weir Loading Rate
WOR	Weir Overflow Rate
WRF	Water Reclamation Facility
WT	Wet Tons
WTP	Water Treatment Plant
WWTF	Wastewater Treatment Facility
WWRF	Wildwood Water Reclamation Facility

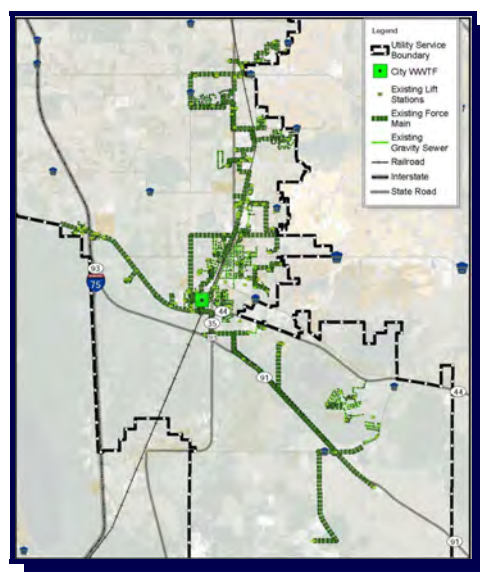
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SECTION 1

EXECUTIVE SUMMARY

1.1 INTRODUCTION

The Wildwood Wastewater Management System Service Area encompasses the City of Wildwood, portions of the City of Coleman and unincorporated portions of Sumter County. The wastewater collection system consists of gravity mains, lift station and force mains that serve the residential, commercial, light industrial and rural portions of the service area. Development is suburban in nature, dominated by single-family residential subdivisions and commercial development typically associated with residential development. Population and corresponding wastewater flow projections are based on this service area. The City currently owns and operates the Wildwood water reclamation facility to process the raw wastewater generated within the Wastewater Management System Service Area and the sludge generated in the treatment process. The facility is located at 1290 Industrial Drive, Wildwood, FL 34785.



The Wildwood WRF has undergone numerous upgrades since the installation of the first package treatment plant in the 1970's. However, a significant portion of the facility infrastructure is aging, corroding, outdated and failing. In addition, there are hydraulic and operational issues that are limiting the treatment capacity of the facility to approximately 2.80 MGD AADF (overflows occurring during heavy rainfall events when the flows exceed 2.30 MGD). Therefore, to meet the current and future wastewater treatment capacity commitments, and current and future regulatory requirements, the existing infrastructure needs to be replaced and upgraded.

This Conceptual Design Report (CDR) includes the identification and evaluation of nutrient removal alternatives, the recommended nutrient removal system improvements required, short-term/interim improvements to the existing facility, conceptual layout of the proposed improvements for the new 6.0 MGD AWT WRF, and is comprised of the following Sections:

CDR Section	CDR Section Title
2	Existing Conditions
3	Nutrient Removal Principles
4	Nutrient Removal Technologies
5	Evaluation of Nutrient Removal Technologies
6	Proposed Facility Improvements Program

1.2 PROJECT OBJECTIVES AND SCOPE

CPH, LLC was selected by the City of Wildwood, through the RFQ process, to provide professional engineering services associated with the following wastewater treatment facility project objectives:

- Interim/short-term improvements to the existing Wildwood WRF to meet the existing wastewater treatment capacity commitments and ensure continued growth within the Wildwood wastewater management system service area during the design, permitting, and construction of the new 6.0 MGD AWT treatment facility
- Development of a conceptual master plan, including all required unit operations and processes, for the new 6.0 MGD AADF treatment facility. The new WRF shall be capable of meeting advanced wastewater treatment (AWT) standards

The scope of this Conceptual Design Report (CDR) is to provide the City of Wildwood with professional guidance and a conceptual roadmap to meet the project objectives and ensure the development of a long-term, energy-efficient, sustainable, and reliable 6.0 MGD AWT treatment facility. The conceptual evaluation and design scope elements included the following:

- Conduct numerous site visits to the existing Wildwood WRF to thoroughly understand the treatment facility unit operations and processes
- Conduct numerous workshops with City management, utility, engineering, and operations staff to fully understand the current issues (hydraulic, operational, infrastructure condition, capacity, etc.) at the existing Wildwood WRF, the goals and objectives of the new 6.0 MGD AWT facility, and the phased implementation of the proposed improvements
- 3D Survey of the existing Wildwood WRF and adjacent property

- Wastewater data collection and analysis (influent, effluent, biosolids, DMR's, etc.)
- Development of a wastewater/sidestream sampling program and analysis of the collected data for use in the conceptual evaluation of the new 6.0 MGD AWT WRF
- Evaluation of the existing Wildwood WRF unit operations and processes
- Evaluation and resolution of the hydraulic and operational issues at the existing Wildwood WRF
- BLOWIN modeling of the existing Wildwood WRF and treatment capacity evaluation
- Conceptual layout of the proposed improvements required to the existing Wildwood WRF to ensure available treatment capacity and meet the wastewater commitments made by the City during the phased-construction of the new 6.0 MGD AWT WRF
- Conceptual evaluation/modeling of the new 6.0 MGD AWT WRF unit operations and processes
- Conceptual layout and master planning of the new 6.0 MGD AWT facility on the adjacent property to the west of the existing treatment facility (phased implementation)
- Generation of a Conceptual Design Report (CDR) to be used as the basis for the preliminary engineering of the proposed improvements and development of the Preliminary Design Report (for FDEP permitting of the improvements)

1.3 WILDWOOD WRF

The Wildwood WRF is classified as a *Secondary Treatment plus Filtration Facility (Category III, Class B)*, utilizing the oxidation ditch modification of the activated sludge process (series configuration) and has a permitted treatment capacity of 3.55 MGD AADF. The Wildwood Wastewater Management System, Wildwood WRF, and effluent disposal systems are currently permitted under FDEP Operations Permit No. FLA013497 (a copy is provided in Appendix A). The unit operations and processes currently employed at the Wildwood WRF (2022) are divided into the following treatment elements/categories:

- | | |
|-----------------------|---------------------------|
| ■ Primary Treatment | ■ High-Level Disinfection |
| ■ Secondary Treatment | ■ Biosolids Management |
| ■ Tertiary Treatment | |

After high-level disinfection, the effluent flows by gravity to the Reclaimed Water Distribution Pump Station on the north side of the facility site and is conveyed to either: (1) Effluent Disposal System R-001 (reclaimed water distribution system and North Sumter Utilities (NSU) reuse area); and/or (2) Effluent Disposal System R-002 (rapid infiltration basins).

Historical raw wastewater flows received at the Wildwood WRF during the past five (5) years and over the last twelve (12) months, are synopsized below:

Raw Wastewater Flow Condition	Wildwood WRF Raw Wastewater Flow (MGD)	
	Last 5 Years*	Last 12 Months**
Average Daily Flow	1.390	1.701
Maximum Day Flow	2.832	2.567
Minimum Day Flow	0.566	0.791
Monthly ADF Range	1.165 - 1.808	1.571 - 1.808
3-Month ADF Range	1.157 - 1.785	1.465 - 1.785
AADF Range (monthly rolling average)	1.211 - 1.701	1.353 - 1.701
% of Permitted Facility Capacity (ADF)***	39.2%	47.9%

* July 2017 - June 2022

** July 2021 - June 2022

*** Permitted Treatment Capacity: 3.55 MGD

Detailed annual wastewater flow comparisons and a flow distribution analysis were conducted as part of the CDR and indicate the following:

- The 2022 raw wastewater flows (January - June) are 30.7% greater than over the same time period in 2021
- Flows have been increasing at a rate of 16.1% (annually), post Covid-19, which is greater than the flow projection assumptions (8.9%) used in the Utility Master Plan
- The flow distribution analysis confirms that the raw wastewater flows have been shifting over the last five years to the high flow ranges seen at the facility. In 2017, 1.9% of all wastewater flows were greater than 1.70 MGD; however, in 2022, 56.3% of the wastewater flows have been greater than 1.70 MGD.

The current 2022 wastewater flows are significantly greater than those predicted in the Utility Master Plan. At the current rate of increase in the raw wastewater flow received at the Wildwood WRF, the actual treatment capacity of the facility will be exceeded in 3.2 - 3.4 years. With preliminary and final engineering design, permitting and construction of the new treatment facility or a portion thereof, anticipated to take 2.7 - 3.0 years, the proposed improvements need to begin immediately to ensure available treatment capacity for growth.

The proposed improvements to the existing Wildwood WRF and construction of the new 6.0 MGD AWT WRF are required to:

- Replace aging/obsolescent equipment that is at or past its service life
- Replace infrastructure that is corroded
- Resolve hydraulic and operational issues that currently exist
- Resolve wastewater treatment capacity issues and ensure that growth within the service area is not limited
- Meet current and future regulatory requirements
- Provide Class I Reliability
- Meet BNR and AWT standards (environmental stewardship)

Therefore, short-term/interim treatment system modifications are required to the existing Wildwood WRF, at this time, while the new 6.0 MGD AADF WRF is being constructed. The new treatment facility should be designed to its build-out condition (6.0 MGD AADF) now, so as to not create the same hydraulic and operational issues that currently exist at the existing Wildwood treatment facility. In addition, the construction of the new WRF will occur in a phased-approach to better match growth within the wastewater management system service area and minimize capital expenditures.

1.4 EVALUATION OF NUTRIENT REMOVAL TECHNOLOGIES

Forty-two (42) nutrient removal technologies were analyzed and evaluated, in Sections 4 and 5 of this Conceptual Design Report (CDR), with respect to reducing TN and TP concentrations in the reclaimed water/effluent from the new 6.0 MGD AWT WRF in the following classifications:

- Nitrogen Removal
- Combined Nitrogen and Phosphorus Removal
- Phosphorus Removal
- Sidestream Treatment

Based on a preliminary screening process (first-level), criteria weighting (pair-wise) analysis and the final screening process (second-level), the BIODENIPHO[®] Process and 5-Stage Bardenpho BNR Process, highly efficient and automated nutrient removal technologies, were selected as the recommended nutrient removal technologies to be implemented at the new Wildwood WRF. The final selection of the BNR Process to be implemented will occur during the preliminary design phase of the proposed facility improvements.

1.5 PHASED IMPLEMENTATION OF THE FACILITY IMPROVEMENTS PROGRAM

To more closely follow the current and future growth within the Wildwood Wastewater Management System Service Area, and to continue to use the existing facility infrastructure while constructing the new 6.0 MGD WRF, a construction improvements program has been developed consisting of five (5) phases. This methodology will ensure that construction follows growth trends and that capital resources are not expended when infrastructure is not required.

The construction associated with the new 6.0 MGD AWT WRF will utilize common wall construction as much as possible and minimize the piping network to reduce construction and O&M costs, minimize system headloss, and more evenly distribute flows throughout the facility. The phased facility improvements program is synopsized below and discussed in detail in Section 6 of this Conceptual Design Report.

Phase	Capacity (MGD)	Description
1	2.80	<u>Existing WRF Improvements:</u> EQ pumping station improvements; instrumentation improvements to the oxidation ditch systems; site piping improvements; conversion of the Kruger and Lakeside oxidation ditches to a "parallel" configuration/operation; dedication of the Kruger ditch effluent flow to the 50-foot diameter clarifiers and the Lakeside oxidation ditch flow to the 40-foot diameter clarifiers; RAS pumping system improvements; addition of a new skid-mounted biosolids dewatering screw press; RAS Bleed system for odor control and MLSS conditioning; demolition of the existing belt filter press system; and electrical, controls, instrumentation and SCADA modifications. <u>New 6.0 MGD WRF Improvements:</u> Construction of a new screening system (at grade); Master Lift Station No. 1; site work; process piping system; and electrical, controls, instrumentation and SCADA modifications.
2	4.30	<u>New 6.0 MGD WRF Improvements:</u> EQ Basin No. 1 and EQ Pumping Station No. 1; Treatment Train No. 1 of the 5-Stage BNR AWT System (1.50 MGD capacity); Reaeration Basin/Clarifier Flow Splitter Box; two 70-foot diameter secondary clarifiers; RAS/WAS Pumping Station No. 1; two tertiary disc filters and filter influent channel; two chlorine contact chambers, influent and effluent channels and chemical feed and storage systems; Transfer Pump Station with two submersible pumps; aerobic-facultative digestion system (2 reactors) and sludge thickening system; move the biosolids dewatering screw press (Phase I) into the new Biosolids Dewatering Building (open-air structure); and electrical, controls, instrumentation and SCADA modifications.
3	4.50	<u>New 6.0 MGD WRF Improvements:</u> Master Lift Station No. 2; Treatment Train No. 2 of the 5-Stage BNR AWT System (1.50 MGD capacity); third secondary clarifier and RAS/WAS Pumping Station No. 2; third disc filter and filter influent channel expansion; third chlorine contact chamber and influent/effluent channel expansion; installation of a third submersible pump into the Transfer Pump Station; and electrical, controls, instrumentation and SCADA modifications. <u>Existing WRF Improvements:</u> Decommissioning of the Lakeside Oxidation Ditch system and 40-foot diameter clarifiers.

Phase	Capacity (MGD)	Description
4	4.50	<u>New 6.0 MGD WRF Improvements:</u> EQ Basin No. 2 and EQ Pumping System No. 2; Treatment Train No. 3 of the 5-Stage BNR AWT System (1.50 MGD capacity); fourth disc filter and filter influent channel expansion; fourth chlorine contact chamber and influent/effluent channel expansion; installation of a fourth submersible pump into the Transfer Pump Station; addition of two aerobic-facultative digestion reactors (install equipment in one of them) and sludge thickener; second biosolids dewatering screw press; chemical feed and storage system expansion; and electrical, controls, instrumentation and SCADA modifications. <u>Existing WRF Improvements:</u> Decommissioning of the old wastewater treatment facility with FDEP (infrastructure longer in use). Begin demolition of the infrastructure (amount of demolition based on funding availability).
5	6.00	<u>New 6.0 MGD WRF Improvements:</u> Treatment Train No. 4 of the 5-Stage BNR AWT System (1.50 MGD capacity); fourth secondary clarifier and addition of pumps to RAS/WAS Pumping Station No. 2; installation of equipment into the fourth reactor of the aerobic-facultative digestion system and 5th PD blower; and electrical, controls, instrumentation and SCADA modifications. <u>Existing WRF Improvements:</u> Finish demolition of the remaining old treatment facility infrastructure and return the area to a greenfield site.

The new 6.0 MGD AWT WRF has been master planned on the City-owned property immediately west of the existing treatment facility as shown in the figure to the right. All of the proposed facility infrastructure fits very efficiently on the site as seen in the graphical rendering of the new treatment facility presented in Figure 1.5-1. The phased-construction of the treatment facility improvements program for the new Wildwood 6.0 MGD AWT WRF:



- Meets the goals and objectives set forth by the City of Wildwood
- Allows construction of the improvements to follow the actual growth patterns within the City of Wildwood wastewater management system service area; thereby providing better utilization of City capital infrastructure funds
- Yields a stream-lined treatment facility that utilizes common wall construction and minimizes the facility piping network system; thereby saving capital and operating costs
- Allows the operation of an energy-efficient, state-of-the-art facility that produces an AWT effluent and meets all Class I Reliability criteria

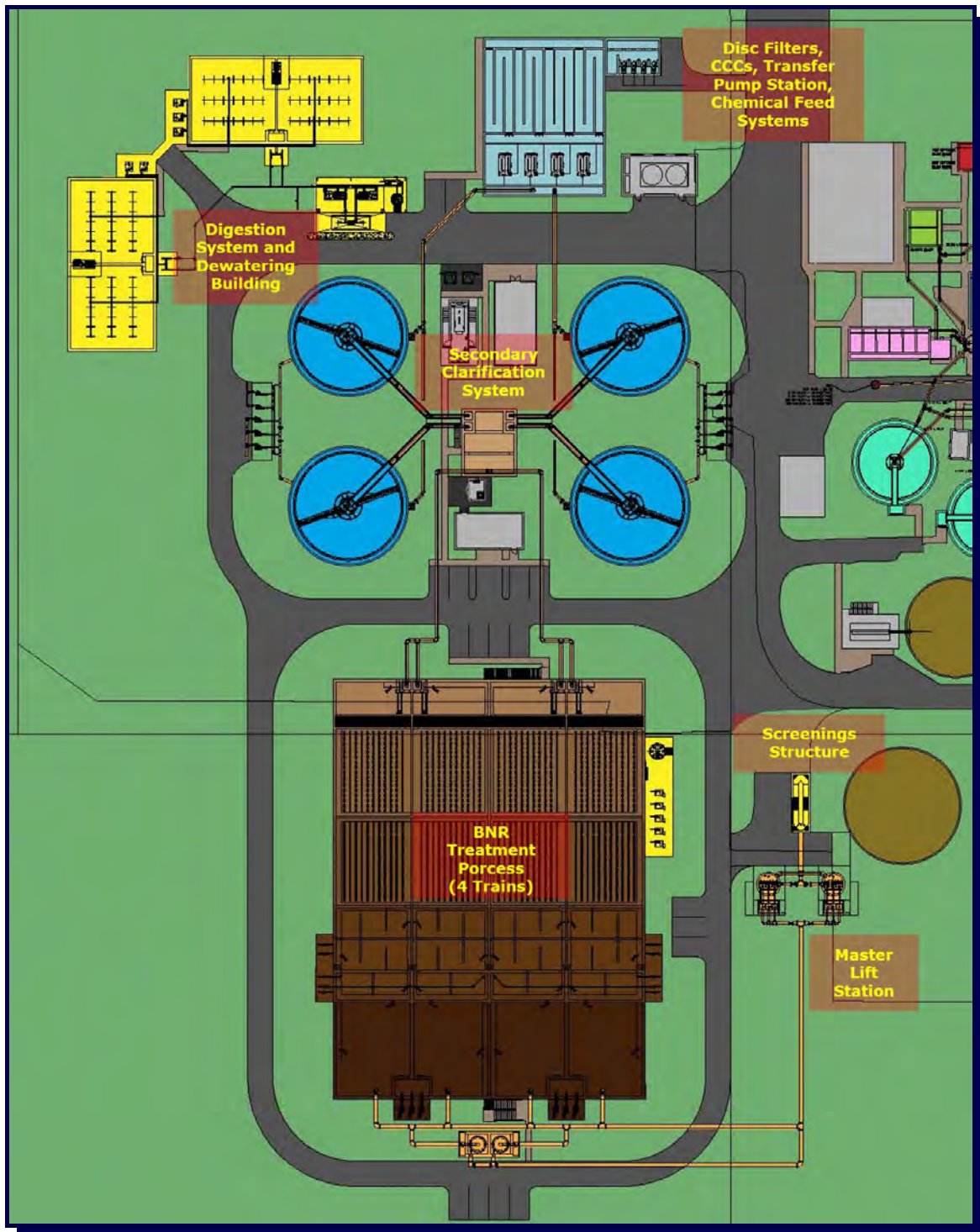


Figure 1.5-1: Proposed City of Wildwood 6.0 MGD AWT WRF

SECTION 2

EXISTING CONDITIONS

2.1 WASTEWATER MANAGEMENT SYSTEM SERVICE AREA

The Wildwood Wastewater Management System Service Area includes the City of Wildwood, portions of the City of Coleman and unincorporated portions of Sumter County as presented in Figure 2.1-1. The Wildwood Wastewater Management System serves the City's residential, commercial, light industrial and rural areas. Population and corresponding raw wastewater flow projections are based on this service area. The raw wastewater is collected and conveyed via gravity sewers, lift stations and forcemains to the City's wastewater treatment plant that processes all of the wastewater and biosolids generated in the treatment processes.

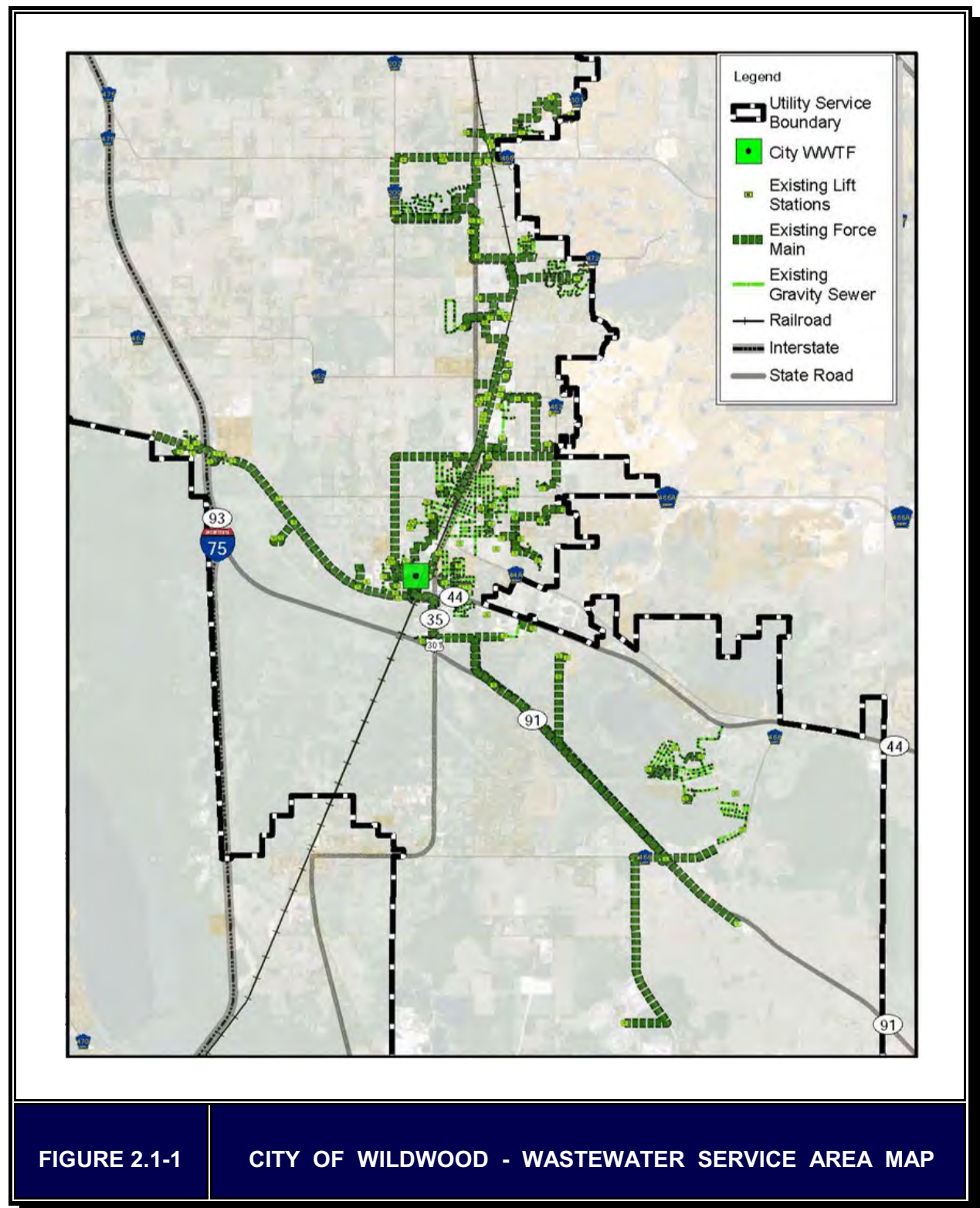
Treatment Facility	Treatment Facility Address	Treatment Capacity (MGD)
Wildwood WRF	1290 Industrial Drive, Wildwood, FL 34785	3.550

Development is suburban in nature, dominated by single-family residential subdivisions and commercial development typically associated with residential development. Natural barriers and land development barriers regulated by the Federal and State government confine a portion of the Wildwood Wastewater Management System Service Area.

2.2 WILDWOOD WASTEWATER TREATMENT FACILITY (WWRF)

The Wildwood WRF is classified as a Wastewater Treatment plus Filtration Facility (Category III, Class B), utilizing the Oxidation Ditch modification of the activated sludge process to treat the raw wastewater from the service area. The biological treatment process consists of four oxidation ditches operating in a "series" configuration as follows:

- Two (2) Kruger BIODENITRO® Oxidation Ditches which treat the raw wastewater; with the effluent then conveyed to
- Two (2) Lakeside Oxidation Ditches which further treat the MLSS from the Kruger Oxidation Ditches prior to discharge to a system of four (4) secondary clarifiers.



The City of Wildwood Wastewater Management System, Reclaimed Water System and the Wildwood Wastewater Treatment Facility (WRF) are currently operating under FDEP Operations Permit No. FLA013497 (expires January 22, 2027). Effluent disposal is accomplished through the following FDEP permitted effluent disposal systems.

Table 2.2-1: Effluent Disposal System Descriptions and Limitations

Effluent Disposal System	Description	BOD Limit* (mg/L)	TSS Limit* (mg/L)	NO ₃ -N Limit* (mg/L)
R-001	An existing 3.30 MGD AADF permitted capacity slow-rate public access system. R-001 is a reuse system that consists of approximately 1.30 MGD of reclaimed water used for irrigation within the FDEP-approved local Reuse Service Area, and 2.0 MGD AADF to the North Sumter Utility (NSU) Reuse Service area through an approved interconnection. Reject flow may be sent to the on-site holding ponds (1.0 MG and 2.50 MG) or to the RIBs (R-002). Reject flows sent to the on-site holding ponds are returned to the biological treatment (oxidation ditch) system for re-treatment. Wet-weather storage is provided by a 2.65 MG and 6.93 MG lined storage ponds at the RIB site (R-002).	20	5	---
R-002	An existing 1.06 MGD AADF permitted rapid infiltration basin (RIB) reuse system consisting of nine (9) RIBs with a total wetted area of 11.68 acres located at approximately Latitude 28°53' 44.7366" N, Longitude 82°1' 32.4203" W. The RIBs serve as back-up for the public access reuse system during periods of wet-weather and for reject flow.	20	20	12

* Annual Average Concentration

An aerial view, process flow diagram and site plan of the Wildwood WRF are presented in Figures 2.2-1 through 2.2-3, respectively. The unit operations and processes currently employed at the Wildwood WRF (2022) are divided into the following elements/categories:

Treatment Elements	Description
Primary Treatment	One (1) automatic, continuous, self-cleaning, mechanical barscreen (3 mm; 10 MGD capacity), screenings compacting/dewatering screw system, and a manual headworks bypass. The screened wastewater is conveyed to a flow equalization basin system consisting of two EQ basins that are hydraulically connected (total volume of 0.65 MG). A common EQ pump station, with three pumps (1,250 gpm each), conveys the raw wastewater to the biological (secondary) treatment system (oxidation ditches) for treatment.
Secondary Treatment	Biological oxidation of the organic wastes utilizing four (4) Oxidation Ditches (two Kruger ditches - 0.41 MG each; two Lakeside Ditches - 0.392 MG each). The oxidation ditch system is operated in a "series" configuration. MLSS from the oxidation ditch system is conveyed to a system of four secondary clarifiers (two at 50 foot diameter; two at 40 foot diameter; 12 foot sidewater depth) for settling of MLSS. Each pair of clarifiers has a dedicated RAS/WAS pumping station (2 pumps per station (one duty; one standby), each with a rated capacity of 800 gpm).



FIGURE 2.2-1

WILDWOOD WRF - AERIAL VIEW

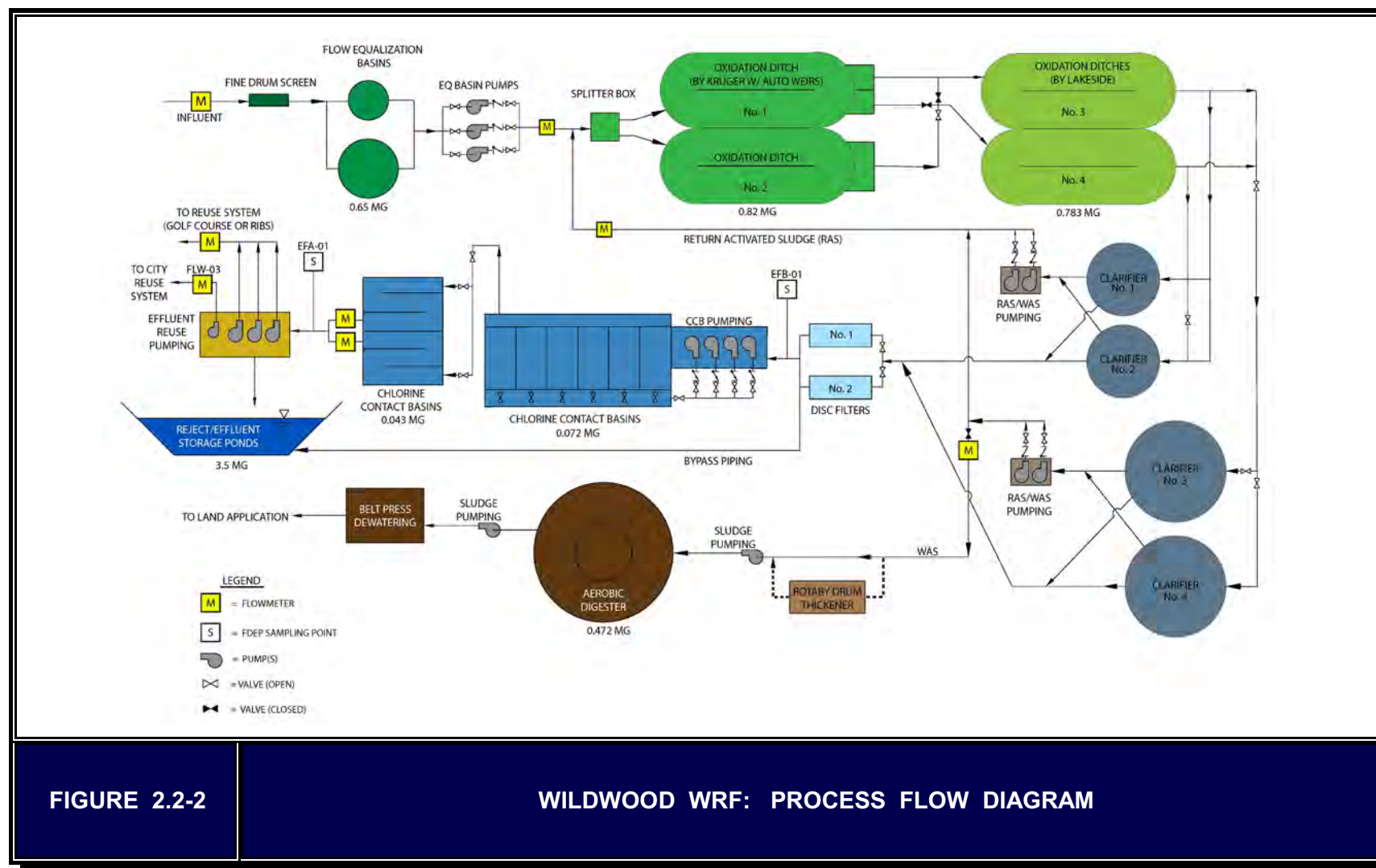


FIGURE 2.2-2

WILDWOOD WRF: PROCESS FLOW DIAGRAM

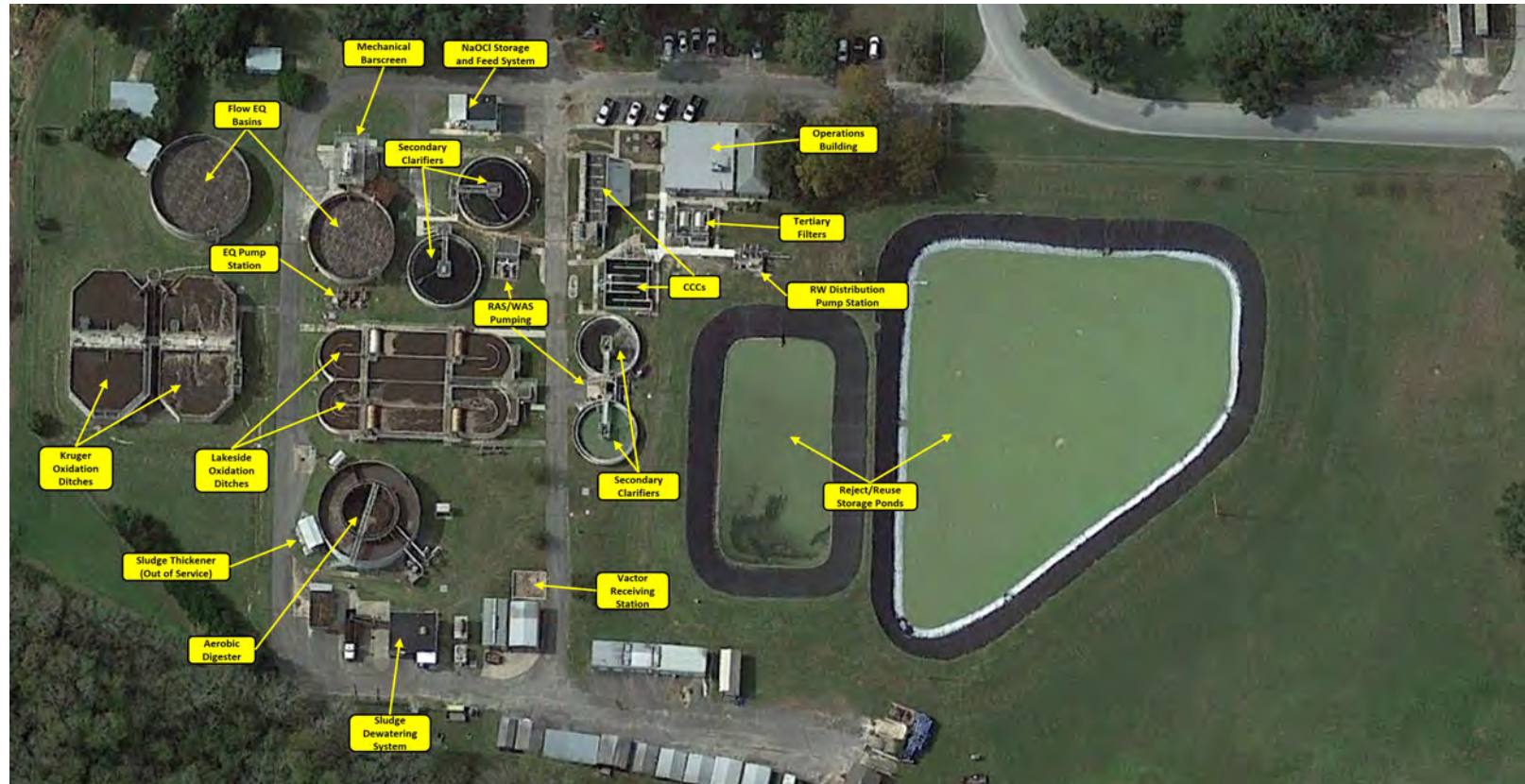


FIGURE 2.2-3

WILDWOOD WRF: FACILITY SITE PLAN

Treatment Elements	Description
Tertiary Treatment	Tertiary filtration of the secondary effluent through the use of two (2) HydroTech disc filters (11 discs in each) with a total filtration capacity of 5.069 MGD and an automatic backwashing system.
Disinfection	High-level disinfection of the effluent is accomplished through the use of bulk liquid NaOCl (chemical feed and storage systems) and a system of chlorine contact chambers (one elevated and requiring a pump station; one at grade).
Biosolids Treatment	Biosolids treatment consisting of a single aerobic digester; air compression system with coarse bubble diffusers; sludge pumping system; and a sludge dewatering system (belt filter press). Dewatered sludge is transported to a third-party vendor for final treatment and disposal.

Design and current wastewater flows at the Wildwood WRF are as follows:

Table 2.2-2: Wildwood WRF Design and Current Wastewater Flows		
Flow Condition	Wastewater Flow Rate (MGD)	
	Design	Actual Operation*
Annual Average Daily Flow (AADF)	3.55	1.702
Maximum Month Average Daily Flow (MMADF)	3.91	1.808
Peak Hourly Flow, prior to EQ Basin (PHF)	10.00	
Peak Hourly Flow, after to EQ Basin (PHF)	5.33	

* Actual flow conditions from August 2021 - July 2022.

Influent and effluent design criteria for the Wildwood WRF are presented below.

Table 2.2-3: Wildwood WRF Influent and Effluent Design Criteria			
Parameter	Units	Influent	Tertiary Effluent
CBOD ₅	mg/L	250	< 10
TSS	mg/L	250	< 5*
TKN	mg/L	40	
NH ₃ -N	mg/L	28	< 1 - 2
TN	mg/L		< 12**
TP	mg/L	6	< 5***

* After Tertiary Filtration

** Supplemental carbon may be required.

*** A coagulant may be required

2.2.1 Primary Treatment System

Raw wastewater flows from the City of Wildwood Wastewater Management System Service Area enter the Headworks Structure on the west-central side of the treatment facility. The Headworks Structure consists of a cast-in-place concrete structure and one (1) automatic, continuous, self-cleaning drum barscreen (3 mm openings). The system also consists of a bypass channel to direct flow around the drum screen and directly to the flow equalization basins, if the unit is out of service.



Mechanical Drum Screen (3 mm)

Screenings from the drum screen are conveyed to a washer/compacter/dewatering system for dewatering prior to discharge into a municipal dumpster at grade (landfill disposal). General characteristics of the mechanical drum screen is as follows:

Table 2.2-4: Wildwood WRF Mechanical Drum Screen Design Characteristics

Parameter	Units	Value
No. of Mechanical Barscreen		1
Type of Mechanical Barscreens		Automatic, Self Cleaning
Barscreen Open Spacing	mm	3
Hydraulic Capacity (AADF), each	MGD	10
Barscreen Manufacturer		Parkson Corporation
Barscreen Type		Drum Screen
Screening Compaction System Capacity	yd ³ /hour	1.22 (batch service)
Screening System Meets Class I Reliability Standards		No (Backup screen req'd)

The screened wastewater exiting the drum screen is discharged, by gravity, to the in-line flow equalization basins. The two (2) EQ basins are hydraulically interconnected by a 16-inch pipe, where flow and constituent attenuation are provided. The wastewater in each EQ Basin is mixed and aerated, through the use of a dedicated PD blower system and coarse bubble diffusers, to ensure that the fluid is homogeneous and kept in an aerobic/anoxic state. Characteristics of the in-line flow equalization basins are presented below in Table 2.2-5.



Flow Equalization (EQ) Basins

Table 2.2-5: In-Line Flow Equalization (EQ) Basin - Design Characteristics		
Parameter	Units	Value
Flow Equalization Basin No. 1 - North		
No. of EQ Basins		1
EQ Basin Operation		Parallel
EQ Basin Diameter	feet	60
EQ Basin Sidewater Depth	feet	14
EQ Basin Volume	MG	0.296
No. of PD Blowers		2
PD Blower Motor Size	HP	40
Flow Equalization Basin No. 2 - South		
No. of EQ Basins		1
EQ Basin Operation		Parallel
EQ Basin Diameter	feet	70
EQ Basin Sidewater Depth	feet	14
EQ Basin Volume	MG	0.403
No. of PD Blowers		2
PD Blower Motor Size	HP	40
Flow Equalization Basin Pump Station		
No. of EQ Pumps		3
EQ Pump Capacity, each	gpm	1,250
EQ Basin Motor Size	HP	15
Pump Manufacturer		Aurora
EQ Pump Station Meets Class I Reliability Standards		No

The equalization (EQ) basin pump station conveys the raw wastewater to the flow splitter structure located immediately upstream of the Kruger oxidation ditch system through the use of three (3) VFD-driven, non-clog pumps. The EQ basin pump station pump speed is regulated by the level in the equalization basins with settings for the following: (1) minimum flow; (2) mid-range, and (3) maximum output.



Equalization Basin Pump Station

2.2.2 Secondary Treatment System

Secondary treatment of the raw, screened wastewater at the Wildwood WRF is provided by two (2) sets of oxidation ditch systems that are operating in a “series” configuration. The screened wastewater is conveyed to the Kruger oxidation ditches, which operate in a “parallel” configuration, for treatment of the organic wastes. The flow is then discharged from each oxidation ditch, independently, and is conveyed in a piping network to the Lakeside oxidation ditches for final treatment.

The oxidation ditch modification of the activated sludge process is an extended aeration process that is designed to utilize the metabolic reactions of microorganisms to produce an acceptable effluent water quality by removing oxygen demanding constituents (CBOD₅) and provides partial reduction of nutrients (nitrogen and phosphorus).

Kruger Oxidation Ditch System (BIODENITRO®)

The raw wastewater is pumped from the flow equalization basins and conveyed to the Kruger Oxidation Ditch Flow Splitting Structure on the west side of the treatment tankage. The splitter structure is used to convey a mixture of raw wastewater and RAS, equally through the use of knife gate valves, to the two (2) Kruger oxidation ditches. The oxidation ditches operate in a “parallel” configuration where previously developed floc particles are brought into contact with the organic matter in the wastewater.



**Kruger Oxidation Ditch
Flow Splitting Structure**

Aeration in each oxidation ditch is provided by two (2) mechanical rotors (40 hp each) and mixing is provided by a submersible mixer on a guide rail. The aeration system provides the oxygen required by the active microbial culture (MLVSS) in the oxidation ditch system. The rotors operate to maintain a DO or ORP setpoint in the oxidation ditch(es) as measured by DO and ORP probes (operator choice). When the DO or ORP setpoint has been reached, the rotors turn off and the submersible mixing system moves the MLSS around the ditch system until the DO or ORP reaches the minimum setpoint level and then the rotors are automatically turned back on. This alternating series with the rotors “on” and “off” generate the following treatment zones within the oxidation ditch system:



Kruger Oxidation Ditches

Zone	Description
Aerobic	Aerobic (oxic) conditions within the oxidation ditch system allow the heterotrophic and autotrophic bacteria, provided the proper detention time and oxygen transfer, to oxidize the influent organic compounds, and allow nitrification and phosphorus uptake to occur. The autotrophic bacteria convert the influent ammonia to nitrate (nitrification), and heterotrophic bacteria oxidize the organic matter (BOD ₅).
Anoxic	Anoxic conditions with the oxidation ditch system provide the conditions necessary for denitrification occur. The microbial culture (MLVSS) and nitrate from the aerobic zone are brought into contact with the influent organic matter (BOD ₅). Heterotrophic bacteria convert the nitrate to nitrogen gas and consume a portion of the influent BOD ₅ in the process.

Thus, simultaneous nitrification-denitrification (SNDN) is accomplished within the oxidation ditch system to effectively treat the waste stream. Design characteristics of the Kruger Oxidation Ditch System (BIODENITRO®) are as follows:

Table 2.2-6: Kruger Oxidation Ditch System - Design Characteristics		
Parameter	Units	Values
No. of Oxidation Ditches in the Kruger Treatment System		2 (1996 and 2008)
Oxidation Ditch Operation/Configuration		Parallel
Oxidation Ditch Length, each	feet	51
Oxidation Ditch Width, each	feet	100
Sidewater Depth, each	feet	11
Oxidation Ditch Volume, each	MG	0.41
No. of Rotors per Oxidation Ditch		2
Rotor Motor Size	HP	40
Aeration System Type		Mechanical Rotors
Mixing System Type		Submersible
MLSS Concentration	mg/L	3,000 - 4,000
No. of Effluent Weirs per Oxidation Ditch		1
Hydraulic Residence Time, per Oxidation Ditch (at Design Flow)	hours	5.5

The effluent from each of the Kruger oxidation ditches overflows a weir gate system and is conveyed to the two Lakeside oxidation ditches. However, flow is unevenly distributed to each Lakeside oxidation ditch due to the design of the piping, fittings and valving network. Therefore, facility operators are required to control flow by manually operating the Kruger weir gates and plug valves located upstream of the Lakeside system in an attempt to somewhat equalize the flow distribution to the Lakeside ditches (more flow is hydraulically conveyed to the south Lakeside ditch).

Lakeside Oxidation Ditch System

The two (2) Lakeside oxidation ditches operate in a parallel configuration and act as polishing treatment units where previously developed floc particles, from the Kruger oxidation ditch system, are brought into contact with the remaining organic matter in the wastewater. Aeration in each oxidation ditch is provided by two (2) mechanical rotors (40 hp each) and mixing is provided by a submersible mixer on a guide rail. The aeration system provides the oxygen required by the active microbial culture (MLVSS) in the oxidation ditch system. The rotors operate to maintain a DO or ORP setpoint in the oxidation ditch as measured by DO and ORP probes (operator choice). When the DO or ORP setpoint has been reached, the rotors turn off and the submersible mixing system moves the MLSS around the ditch system until the DO or ORP reaches the minimum setpoint level and then the rotors are automatically restarted; thereby allowing simultaneous nitrification-denitrification (SNdN) within the oxidation ditch system. Design characteristics of the Lakeside Oxidation Ditch System are as follows:



Lakeside Oxidation Ditches

Table 2.2-7: Lakeside Oxidation Ditch System - Design Characteristics

Parameter	Units	Values
No. of Oxidation Ditches in the Lakeside Treatment System		2 (1986)
Oxidation Ditch Operation/Configuration		Parallel
Oxidation Ditch Length, each	feet	36
Oxidation Ditch Width, each	feet	137
Sidewater Depth, each	feet	11
Oxidation Ditch Volume, each	MG	0.392
No. of Rotors per Oxidation Ditch		2
Rotor Motor Size	HP	40
Aeration System Type		Mechanical Rotors
Mixing System Type		Submersible
MLSS Concentration	mg/L	3,000 - 4,000
No. of Effluent Weirs per Oxidation Ditch		1
Hydraulic Residence Time, per Oxidation Ditch (at Design Flow)	hours	5.3

The effluent from each of the Lakeside oxidation ditches overflows weir gates/discharge boxes and is conveyed to the four (4) secondary clarifiers. However, due to the design of the piping, fitting and valving network, hydraulic problems exist, and an unequal flow is distributed to each secondary clarifier causing operational issues (more flow conveyed to the 40-foot clarifiers).

Secondary Clarification System

Secondary clarification of the biologically treated wastewater is provided to remove MLSS, flocculated suspended solids, and chemical precipitates, and to meet the effluent criteria mandated by FDEP, EPA and Class I Reliability. Secondary clarification is provided by the following infrastructure:

- Two (2) identical 50-foot diameter, 12-foot sidewater depth, cast-in-place concrete clarifiers with full-surface skimmers
- Two (2) identical 40-foot diameter, 12-foot sidewater depth, cast-in-place concrete clarifiers with full-surface skimmers



Secondary Clarifiers (50-foot diameter)



Secondary Clarifiers (40-foot diameter)

Design and operating characteristics of the secondary clarifiers (all 4 clarifiers operating) are as follows:

Table 2.2-8: Secondary Clarification System Design Characteristics			
Parameter	Units	North/South Units	East/West Units
Diameter, each	feet	50	40
Sidewater Depth, each	feet	12	12
Clarifier Volume, each	MG	0.176	0.113
Weir Length, each	feet	157	126

Table 2.2-8: Secondary Clarification System Design Characteristics

Parameter	Units	North/South Units	East/West Units
Surface Area, each	ft ²	1,963	1,257
Surface Overflow Rate (SOR)*, each	gpd/ft ²	552	551
Weir Overflow Rate (WOR)*, each	gpd/lf	6,896	5,494
Hydraulic Detention Time*, each	hours	0.98	0.98
Meets Class I Reliability Standards		Yes	Yes

* Assumed 61% of flow to the 50-foot diameter clarifiers (North and South) based on overall clarification system surface area, at the facility ADF design flow, and all four (4) secondary clarifiers operating.

The settled MLSS in the clarifier underflow is conveyed to RAS collection basins, located between each pair of secondary clarifiers, and is controlled by manually adjusted telescoping valves. From each RAS collection box, dry-pit submersible RAS pumps return the MLSS to the Kruger Oxidation Ditch Flow Splitting Structure and mixed with the raw wastewater. The RAS flow rate is set to maintain an operator determined flow rate proportional to the influent flow rate (manually controlled by the facility operators or automatically operated off of level control). However, the existing RAS pumps are oversized, are currently set to their minimum turndown speeds, and the RAS return rate is greater than that desired by the Operators for the current facility operations. The Waste Activated Sludge (WAS) is pumped to the aerobic digester for thickening (decanting) and stabilization, prior to dewatering. The RAS/WAS pumping system characteristics are as follows:

**RAS/WAS Pumping System****Table 2.2-9: RAS/WAS Pumping System Characteristics**

Property	North and South RAS Pumps	East and West RAS Pumps
No. of Pumps	2	2
Type of Pumps	Dry Pit Submersible with variable speed drives (VFD's)	
Capacity of Each Pump	800 gpm	800 gpm
Pump Motor Size	35 HP	35 HP
Pump Manufacturer	Flygt	Flygt

2.2.3 Tertiary Filtration System

Tertiary filtration of the treated effluent is required to ensure protection of public health and enhance the disinfection process. A chemical dose (coagulant) may be introduced, as necessary, into the common influent channel to the tertiary filters to enhance turbidity removal should the effluent approach the mandated maximum turbidity value (2.5 NTU). The secondary clarification system effluent flows, by gravity, to the tertiary filtration system common influent channel. A sluice gate system is used to control the flow to the tertiary filtration units. An automatic hydraulic bypass and manual bypass system are provided so that the tertiary filters can be by-passed during maintenance



Tertiary Filtration System

Tertiary filtration is accomplished through the use of two (2) disc filtration units. Each filter unit has the capacity to have more discs added in the future; thus, increasing their hydraulic capacity. Design characteristics of the tertiary filtration system are presented below:

Table 2.2-10: Tertiary Filtration System (Disc Filters) Design Characteristics

Parameter	Units	Value
No. of Disc Filters		2
Type of Disc Filters		Automatic, In-Basin, Self Cleaning
Rated Filtration System Capacity	MGD	5.068
No. of Discs per Filter		11
Surface Area per Disc, each	ft ²	40
Filter Surface Area	ft ²	880
Design Filtration Rate, at PHF	gpm/ft ²	4.0
Disc Filter Manufacturer		HydroTech
Design Effluent TSS Concentration	mg/L	< 5
Filtration System Meet Class I Reliability Standards		No (Backup screen req'd)

Each HydroTech Disc Filter consists of eleven (11) discs mounted on a center feed drum. During normal operation, the secondary effluent enters the disc segments,

by gravity, via the center feed drum. Filter panels, which are mounted on two (2) sides of the disc segments, separate solids from the secondary effluent. The solids are collected within the filter discs, while the filtered water flows to the outside of the disc and into the concrete collection tank (inside which the disc filter units are mounted). The disc filter units are installed within a concrete containment area. The disc filters operate at approximately sixty-five percent (65%) submergence with a clean filter headloss of 2 - 6 inches across the media. Normal continuous operation occurs until the maximum allowable headloss of twelve (12) inches is attained. When this condition occurs, backwashing of the tertiary filtration unit is automatically initiated. During the backwash cycle, the discs are rotated and the solids are collected in an interior collection trough. The backwash cycle utilizes approximately 2 - 5% of the total throughput volume of effluent to the tertiary filter to clean the filtration discs. The filtrate is then conveyed back to the treatment system for processing.

Should the effluent turbidity exceed 2.5 NTU (at EFB-1), the filter effluent diversion valve will automatically close, via the PLC, and the filter effluent flow will be diverted to the on-site lined reject water ponds. This substandard water can then be recycled back through the facility during periods of low flow for re-treatment.

2.2.4 High-Level Disinfection System

From the tertiary filters, the treated effluent flows, by gravity, to a cast-in-place concrete Chlorine Contact Chamber (CCC) sump where it is pumped up to CCC No. 1. The Chlorine Contact Chamber pumping system consists of four (4) submersible Flygt pumps (7.5 hp, each). Chemical feeds skids, located in the Chlorine Feed and Storage Building, deliver liquid sodium hypochlorite (NaOCl) solution to the head end of contact basin. As the effluent leaves CCC No. 1, the chlorine residual is measured with an on-line analyzer and a second dose of NaOCl is added at the entrance to CCC No. 2. This second NaOCl dose is based on a compound control loop utilizing the first chlorine residual analyzer results and the measured flow rate through CCC No.1. CCC No. 1 and No. 2 provide chlorine contact times of 29.1 and 17.3 minutes, respectively, at the facility design flow (3.55 MGD). CCC No. 1 and No. 2 provide chlorine contact times of 19.4 and 11.6 minutes, respectively, at the facility design flow (5.325 MGD - after EQ Basin).



CCC Sump and CCC No. 1



CCC No. 2

The two Chlorine Contact Chamber provide the contact time for the inactivation of fecal coliforms, pathogens and other microbial organisms. However, the entire CCC system is oversized for the facility design flow (provides 46.5 minutes of contact time at AADF; FDEP requirements are for a minimum of 30 minutes) and the system is designed with two unequal sized CCC's, such that with the largest CCC contact basin out of service, the treatment facility does not meet Class I Reliability Criteria. The design characteristics of the Chlorine Contact Chambers are as follows

Table 2.2-11: Chlorine Contact Chambers - Design Characteristics			
Parameter	Units	CCC No. 1	CCC No. 2
No. of Chlorine Contact Chambers		1	2
Chlorine Contact Chamber Volume, each	gallons	71,800	21,370
Chlorine Contact Chamber Volume, Total	gallons	71,800	42,740
Contact Time at Design AADF*	min	29.1	17.3
Total Contact Time at Design AADF*	min	46.5	
Contact Time at Design PHF**	min	19.4	11.6
Total Contact Time at Design PHF**	min	31.0	

* Design AADF: 3.55 MGD

** Design PHF: 5.325 MGD

Should the total residual chlorine concentration drop below 1.5 mg/L (at EFA-1), the PLC system will shut-down the reclaimed water distribution pump station, and flow will be diverted to the on-site lined reject water ponds. This substandard water can then be recycled back through the facility during periods of low flow for re-treatment.

2.2.5 Reclaimed Water Distribution Pump Station

After high-level disinfection, the effluent flows by gravity to the Reclaimed Water Distribution Pump Station on the north side of the facility site. The Reclaimed Water Distribution Pump Station consists of an enclosed concrete wetwell, three large pumps, one small pump, a piping network, and controls and instrumentation systems. The pump station conveys the reclaimed water to the following:

- Reclaimed water distribution system
- North Sumter Utilities (NSU)
- R-12 site

The Reclaimed Water Distribution Pump Station consists of the following infrastructure:

Table 2.2-12: Reclaimed Water Distribution Pump Station Pumps			
Design Parameter	Units	Large Pumps	Small Pump
Pump Capacity	gpm	1,480	
Design TDH	feet	110	
Pump Type		Vertical Turbine	Vertical Turbine
Motor Size	hp	75	15
No. of Pumps		3	1

2.2.6 R-12 Reclaimed Water Pump Station

At the R-12 site, the Public Access Reuse (PAR) water is stored in a reclaimed water storage pond where it can be pumped to the following locations:

- Rapid Infiltration Basins (RIBs)
- North Sumter Utilities (NSU)
- Millennium Park

The R-12 pump station consist of the following pumps:

Table 2.2-13: R-12 Site - Reclaimed Water Pump Station Pumps					
Design Parameter	Units	NSU Pumps	Millennium Park Pump	Millennium Park Pump	Ball Park Pump
Pump Capacity	gpm	1,400	1,000	160	---
Pump Type		Vertical Turbine			
Motor Size	hp	75	50	15	15
No. of Pumps		1	1	1	1
Meets Class I Reliability Criteria		No	No	No	No

During periods of wet weather, the production of reclaimed water may exceed the reclaimed water demand in the distribution system. In this event, the effluent can be diverted to the rapid infiltration basins (RIBs) via an operator-controlled valve.

2.2.7 Reject Water Storage

Any reclaimed water that does not meet the Public Access Criteria (low chlorine residual or high Turbidity) will not be pumped to the reclaimed water distribution system. This event will cause an alarm condition, the PLC causes an actuated valve to open, and the substandard water will be automatically conveyed to the following reject water storage ponds:

Table 2.2-14: Reject Water Storage Ponds		
Pond No.	Lined	Storage Volume (MG)
1	Yes	1.0
2	Yes	2.5
Total Reject Water Storage Volume (MGD):		3.5

Additionally, a facility overflow protection system will route effluent from the Chlorine Contact Chamber (CCC) system to the reject storage ponds if the water level in the CCC rises above a certain point.

The reject water pump station consists of two (2) submersible pumps that convey the substandard water back through the treatment facility during periods of low flow for re-treatment.



Reject Water Storage Ponds

2.2.8 Biosolids Management System

The biosolids management system at the Wildwood WRF consists of the following infrastructure:

- Aerobic digester and air compression system
- Air diffusion system
- Sludge pumping system
- Belt Filter Press for biosolids dewatering
- Load-out conveyor

Waste Activated Sludge (WAS) is pumped from the secondary clarification systems to the aerobic digester. The aerobic digester is utilized to biologically stabilize waste activated sludge (WAS) and scum from the treatment process by destroying the volatile solids in the mixture. This treatment further reduces odors and other nuisances prior to final disposal and reduces the volume of the biosolids. The aerobic digester has a diameter of seventy (70) feet, sidewater depth of sixteen and a half (16.5) feet, and a volume of approximately 0.472 MG (63,100 ft³). Characteristics of the aerobic digestion system are as follows:

Table 2.2-15: Aerobic Digestion System Characteristics		
Parameter	Units	Value
No. of Aerobic Digesters		1
Aerobic Digester Diameter	feet	70
Volume of Aerobic Digester	MG	0.472
Meets Class I Reliability		No
No. of Hoffman Blowers		3
Capacity/Motor Size of Hoffman Blowers, each	SCFM / HP	900 / 50
No. of Sutorbilt Blowers		2
Capacity/Motor Size of Sutorbilt Blowers, each	SCFM / HP	400 / 40

The belt filter press is utilized to dewater aerobically digested biosolids prior to final disposal. Dewatering reduces the volume and weight of the biosolids and makes handling and disposal of the biosolids easier. Dewatered biosolids are hauled off-site for ultimate disposal.

Table 2.2-16: Belt Filter Press Characteristics		
Parameter	Units	Value
No. of Belt Filter Presses		1
BFP Manufacturer		Komline-Sanderson
BFP - Belt Size	meters	1.2
Feed Solids Concentration	% dry solids	1 - 1.5
Hydraulic Throughput	gpm	150
Solids Throughput	lb/hr, d.s.	560
Dewatered Cake Dry Solids	% dry solids	5 - 10

2.3 HISTORICAL WASTEWATER FLOWS

Historical wastewater flows, including monthly ADF flows, three-month ADF flows and annual ADF flows, for the Wildwood WRF for the period between January 2017 and June 2022 are presented in Table 2.3-1. The average daily raw wastewater flow during the last twelve (12) months was 1.701 MGD. In addition, the above referenced historical flows are plotted as a function of time and are presented graphically in Figures 2.3-1 through 2.3-3, respectively.

Seasonal (annual) trends in raw wastewater flows experienced in the Wildwood Wastewater Management System, defined as the ratio of the three-month average daily flow to the annual average daily flow, are presented in tabular form in Table 2.3-2 and graphically in Figure 2.3-4. The ratio of the maximum 3-month ADF to AADF averaged 1.079 and was found to be in a very narrow range over the five-year period (1.034 - 1.128). Likewise, the maximum month peaking factor averaged 1.132 and was also found to be in a vary narrow range over the six-year period (1.040 - 1.231).

Table 2.3-2: Wildwood Wastewater Management System - Annual Variations in Flow						
Calendar Year	AADF (MGD)	Max Month Flow (MGD)	Maximum 3-Month ADF		Maximum 3-Month ADF to AADF	Maximum Month Peaking Factor
			Month	Flow (MGD)		
2017	1.211	1.491	November	1.355	1.119	1.231
2018	1.293	1.421	September	1.372	1.061	1.099
2019	1.357	1.529	September	1.472	1.085	1.127
2020	1.295	1.406	November	1.356	1.047	1.086
2021	1.496	1.808	November	1.688	1.128	1.209
2022*	1.727	1.796	May	1.785	1.034	1.040

* Partial Year Data: January - June 2022

The raw wastewater flows received at the Wildwood WRF are affected by heavy rainfall events as a portion of the City's wastewater collection system is composed of older materials, is below the local groundwater water table some or all of the time, and therefore experiences issues with infiltration and inflow (I/I). Hence, seasonal variations in flow can be attributed to the amount of precipitation that occurs within the Wastewater Management System Service Area. The City appropriates money on an annual basis to make collection system and transmission system improvements throughout the Wastewater Management System Service Area.

Table 2.3-1: Wildwood WRF - Historical Wastewater Flows

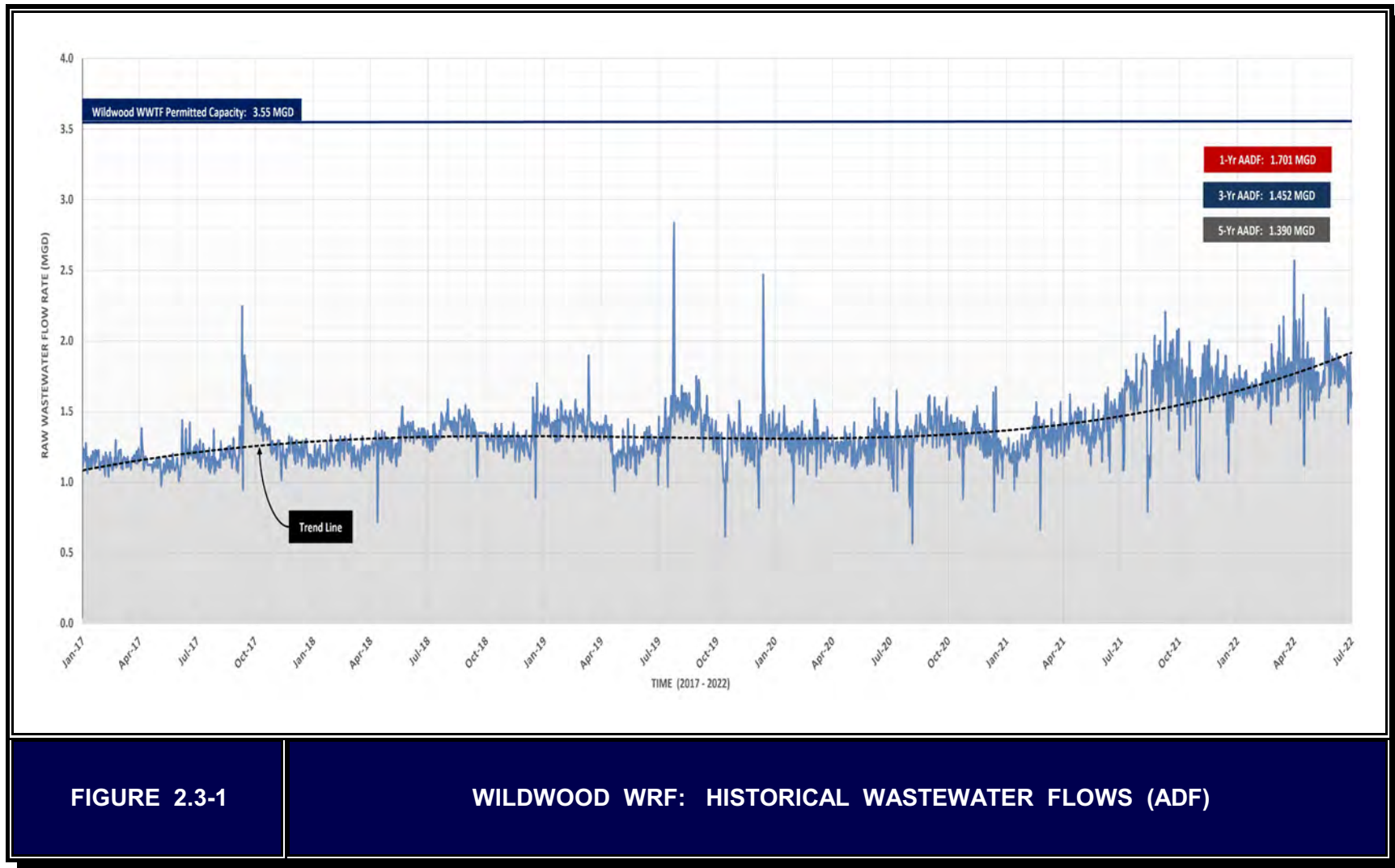
Month	Year	Monthly ADF (MGD)	3-Month ADF (MGD)	AADF (MGD)
JANUARY	2017	1.161		
FEBRUARY	2017	1.143		
MARCH	2017	1.153	1.152	
APRIL	2017	1.144	1.147	
MAY	2017	1.111	1.136	
JUNE	2017	1.194	1.150	
JULY	2017	1.165	1.157	
AUGUST	2017	1.189	1.183	
SEPTEMBER	2017	1.491	1.282	
OCTOBER	2017	1.354	1.345	
NOVEMBER	2017	1.220	1.355	
DECEMBER	2017	1.202	1.259	1.211
JANUARY	2018	1.180	1.201	1.212
FEBRUARY	2018	1.241	1.208	1.220
MARCH	2018	1.187	1.203	1.223
APRIL	2018	1.241	1.223	1.231
MAY	2018	1.293	1.240	1.246
JUNE	2018	1.341	1.292	1.259
JULY	2018	1.347	1.327	1.274
AUGUST	2018	1.421	1.370	1.293
SEPTEMBER	2018	1.347	1.372	1.281
OCTOBER	2018	1.297	1.355	1.276
NOVEMBER	2018	1.275	1.306	1.281
DECEMBER	2018	1.346	1.306	1.293

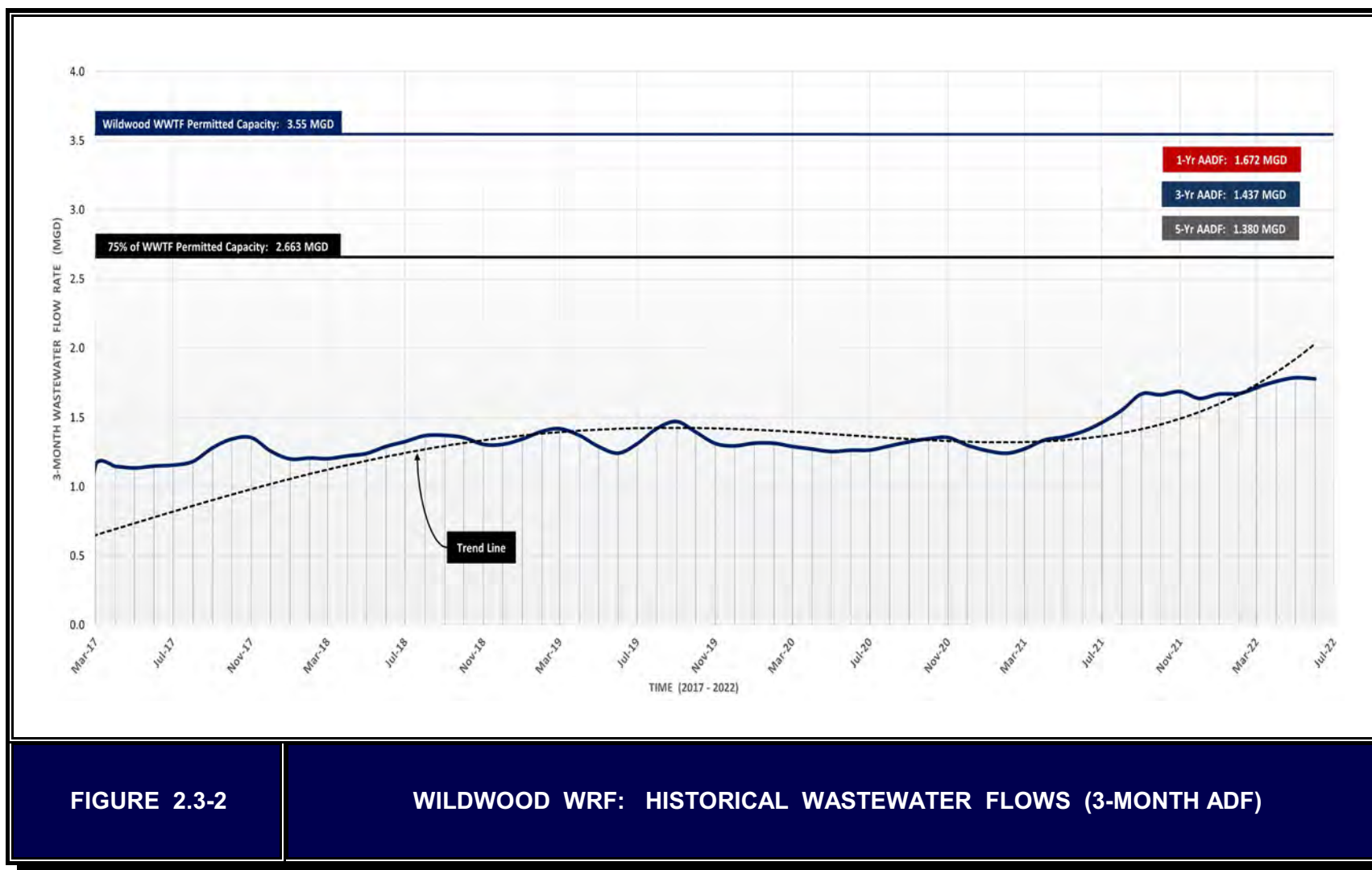
Table 2.3-1: Wildwood WRF - Historical Wastewater Flows (Cont'd)

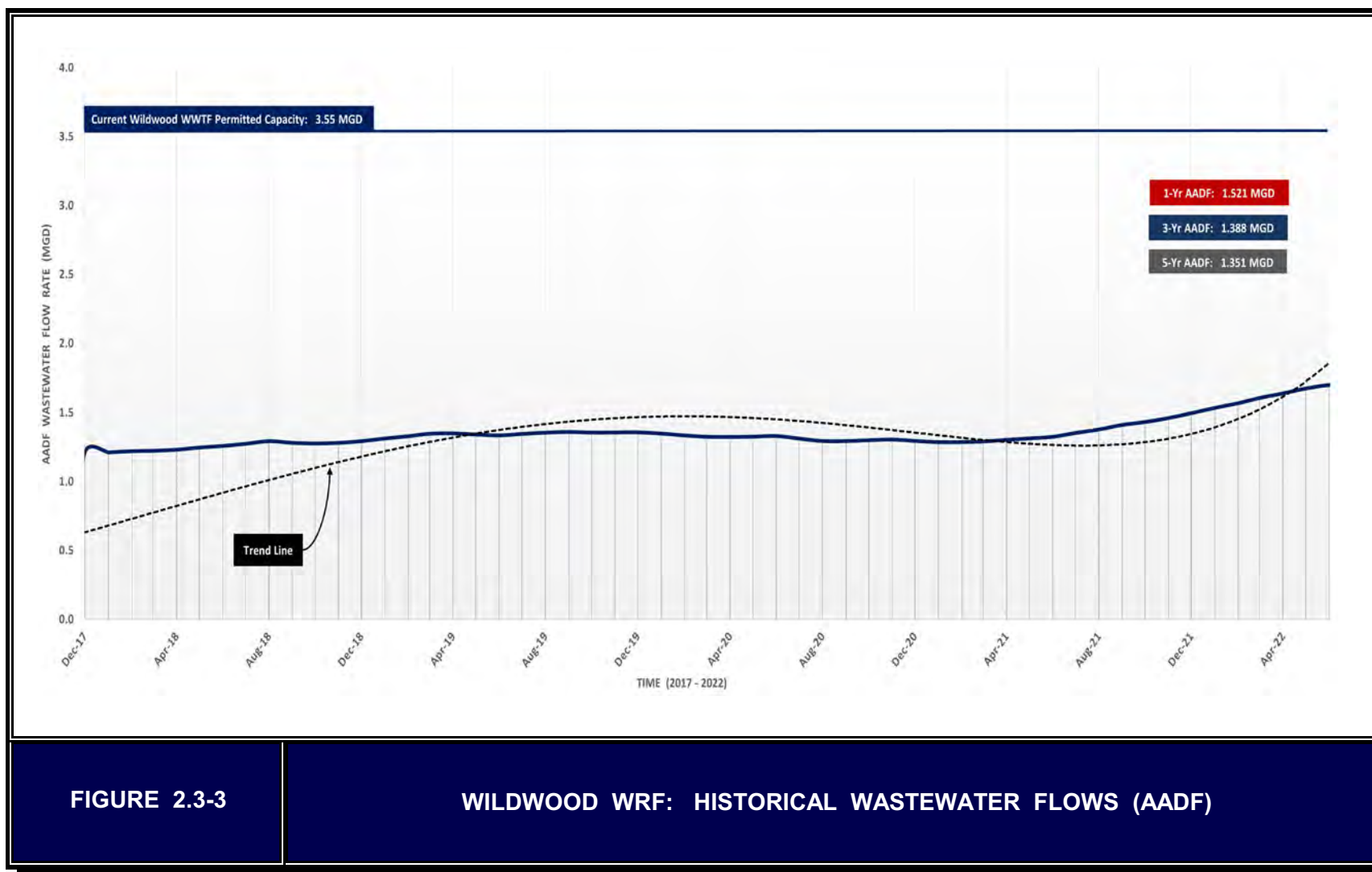
Month	Year	Monthly ADF (MGD)	3-Month ADF (MGD)	AADF (MGD)
JANUARY	2019	1.414	1.345	1.313
FEBRUARY	2019	1.441	1.400	1.329
MARCH	2019	1.404	1.420	1.347
APRIL	2019	1.270	1.372	1.350
MAY	2019	1.199	1.291	1.342
JUNE	2019	1.259	1.243	1.335
JULY	2019	1.477	1.312	1.346
AUGUST	2019	1.529	1.422	1.355
SEPTEMBER	2019	1.409	1.472	1.360
OCTOBER	2019	1.248	1.395	1.356
NOVEMBER	2019	1.280	1.312	1.356
DECEMBER	2019	1.358	1.295	1.357
JANUARY	2020	1.307	1.315	1.348
FEBRUARY	2020	1.278	1.314	1.335
MARCH	2020	1.287	1.291	1.325
APRIL	2020	1.253	1.273	1.324
MAY	2020	1.223	1.254	1.326
JUNE	2020	1.316	1.264	1.330
JULY	2020	1.257	1.265	1.312
AUGUST	2020	1.313	1.295	1.294
SEPTEMBER	2020	1.406	1.325	1.294
OCTOBER	2020	1.322	1.347	1.300
NOVEMBER	2020	1.340	1.356	1.305
DECEMBER	2020	1.239	1.300	1.295

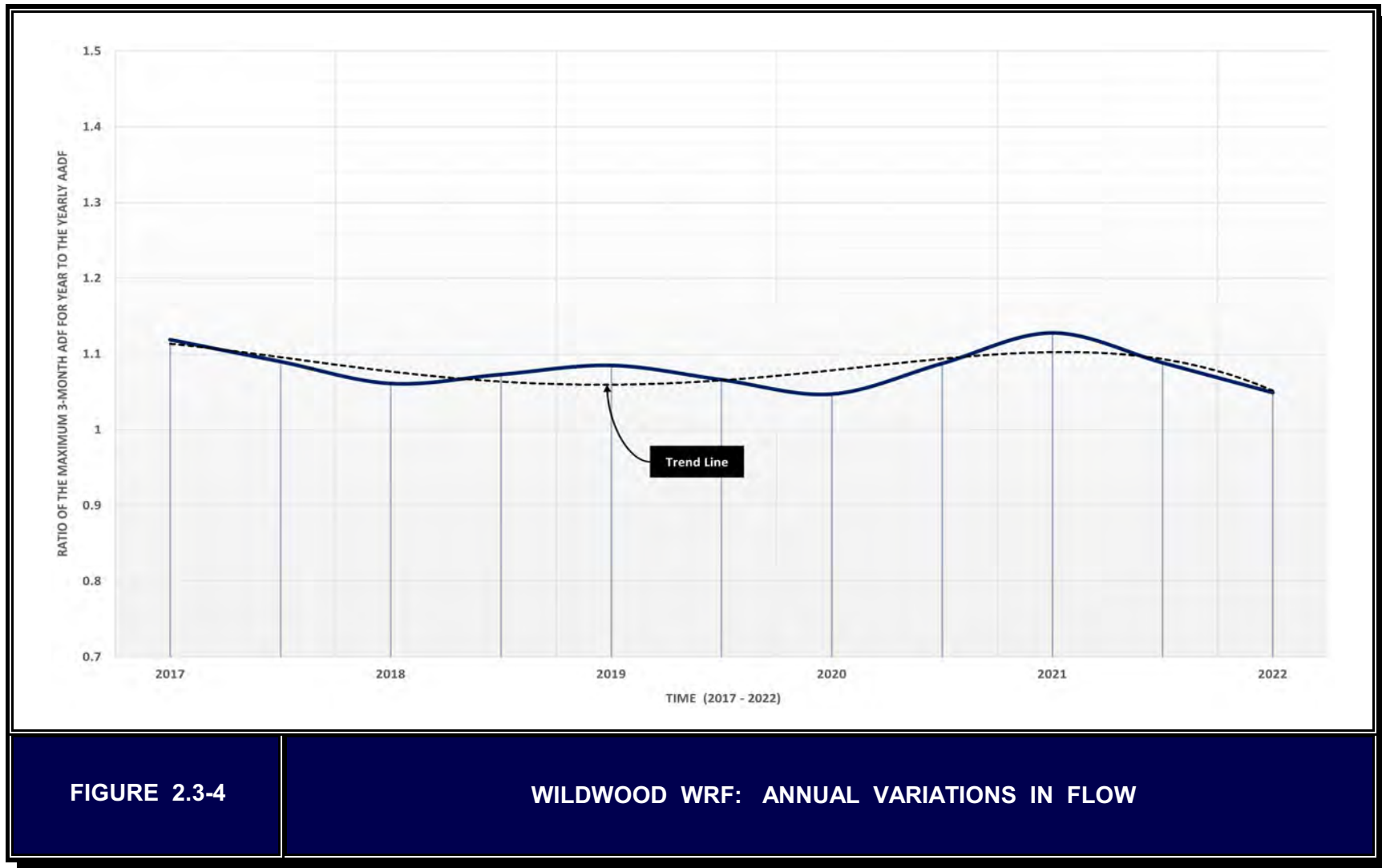
Table 2.3-1: Wildwood WRF - Historical Wastewater Flows (Cont'd)

Month	Year	Monthly ADF (MGD)	3-Month ADF (MGD)	AADF (MGD)
JANUARY	2021	1.204	1.261	1.287
FEBRUARY	2021	1.284	1.242	1.287
MARCH	2021	1.334	1.274	1.291
APRIL	2021	1.394	1.337	1.303
MAY	2021	1.352	1.360	1.313
JUNE	2021	1.454	1.400	1.325
JULY	2021	1.590	1.465	1.353
AUGUST	2021	1.616	1.553	1.378
SEPTEMBER	2021	1.808	1.671	1.411
OCTOBER	2021	1.571	1.665	1.432
NOVEMBER	2021	1.686	1.688	1.461
DECEMBER	2021	1.660	1.639	1.496
JANUARY	2022	1.667	1.671	1.535
FEBRUARY	2022	1.693	1.673	1.569
MARCH	2022	1.787	1.716	1.607
APRIL	2022	1.796	1.759	1.640
MAY	2022	1.772	1.785	1.675
JUNE	2022	1.763	1.777	1.701
JULY	2022			
AUGUST	2022			
SEPTEMBER	2022			
OCTOBER	2022			
NOVEMBER	2022			
DECEMBER	2022			









A review of the historical raw wastewater flows (averages, maximum month, 3-month ADF average and AADF) conveyed to the Wildwood WRF, during the past five (5) years and over the last twelve (12) months, are synopsized below in Table 2.3-3:

Table 2.3-3: Historical Wastewater Flow Conditions (2017 - 2022)		
Raw Wastewater Flow Condition	Wildwood WRF Raw Wastewater Flow (MGD)	
	Last 5 Years*	Last 12 Months**
Average Daily Flow	1.390	1.701
Maximum Day Flow	2.832	2.567
Minimum Day Flow	0.566	0.791
Monthly ADF Range	1.165 - 1.808	1.571 - 1.808
3-Month ADF Range	1.157 - 1.785	1.465 - 1.785
AADF Range (monthly rolling average)	1.211 - 1.701	1.353 - 1.701
% of Permitted Facility Capacity (ADF)***	39.2%	47.9%

* July 2017 - June 2022

** July 2021 - June 2022

*** Based on Permitted Treatment Capacity of 3.55 MGD

2.3.1 Wastewater Flow Comparison - 2021 vs. 2022

A comparison of the raw wastewater flows in the first six (6) months of Calendar Years 2021 and 2022 are presented below in Table 2.3-4.

Table 2.3-4: Raw Wastewater Flow Comparison (2021 - 2022)		
Month	2021 Flow (MGD)	2022 Flow (MGD)
January	1.204	1.667
February	1.284	1.693
March	1.334	1.787
April	1.394	1.796
May	1.352	1.772
June	1.454	1.763
Average Flow (MGD):	1.337	1.747
Annual Percent Increase in Flow:		30.7%

The data indicates that the raw wastewater flow received at the Wildwood WRF, in the first six months of 2022, was 30.7% greater than over the same period in 2021. This significantly exceeds the raw wastewater flows that were projected in the City's Utility System Master Plan (2019). The Utility System Master Plan projected raw wastewater flows to increase at an annual rate of 8.9% between Calendar Years 2020 and 2037.

The increase in raw wastewater flows being received at the treatment facility currently is almost 3.5 times the rate that was projected in the Utility System Master Plan. Therefore, if raw wastewater flow continues to increase at this rate, then the following infrastructure improvements are necessary, immediately, to ensure that the available treatment capacity of the WRF is not exceeded and growth can continue within the Wildwood Wastewater Management System Service Area:

- Modifications to the existing Wildwood WRF (expansion of the EQ pumping system, conversion of the oxidation ditch operations to a parallel configuration, piping system modifications, new screening system, new master lift station, etc.) during the interim period when the new Wildwood WRF (6.0 MGD AADF) is being designed, permitted and constructed
- Master planning, design, and permitting of the new 6.0 MGD AADF Wildwood WRF (phased-implementation). This would then be followed by construction of a portion of the new facility, under a CMAR delivery method

2.3.2 Annual Wastewater Flow Comparison

A comparison of the raw wastewater flows, for the period from January 2017 - June 2022, is presented below in Table 2.3-5.

Table 2.3-5: Annual Raw Wastewater Flow Comparison (2017 - 2022)		
Calendar Year	Annual Flow (MGD)	Annual Percent Change
2017	1.211	
2018	1.293	6.8%
2019	1.357	5.0%
2020	1.295	-4.6%
2021	1.496	15.5%
2022	1.746	16.7%
Overall Flow Increase Over the Last Six (6) Year Period:		44.2%
Annualized Increase in Flow (Year over Year):		7.6%
Annualized Increase in Flow (Excluding 2020 - COVID Pandemic)		9.6%

This data indicates, as discussed in Article 2.3.1, that the raw wastewater flow being received at the Wildwood WRF over the last six (6) years is far outpacing the flow projections identified in the City of Wildwood's Utility System Master Plan (2019). In reviewing the "post COVID-19" data only (2021 - 2022), the raw wastewater flows have increased at more than 16.1%, which is almost twice the rate that was projected. Therefore, if raw wastewater flow continues to increase at this rate, then the previously discussed treatment facility infrastructure improvements are necessary, immediately, to ensure that the available treatment capacity of the WRF is not exceeded and growth can continue within the Wildwood Wastewater Management System Service Area.

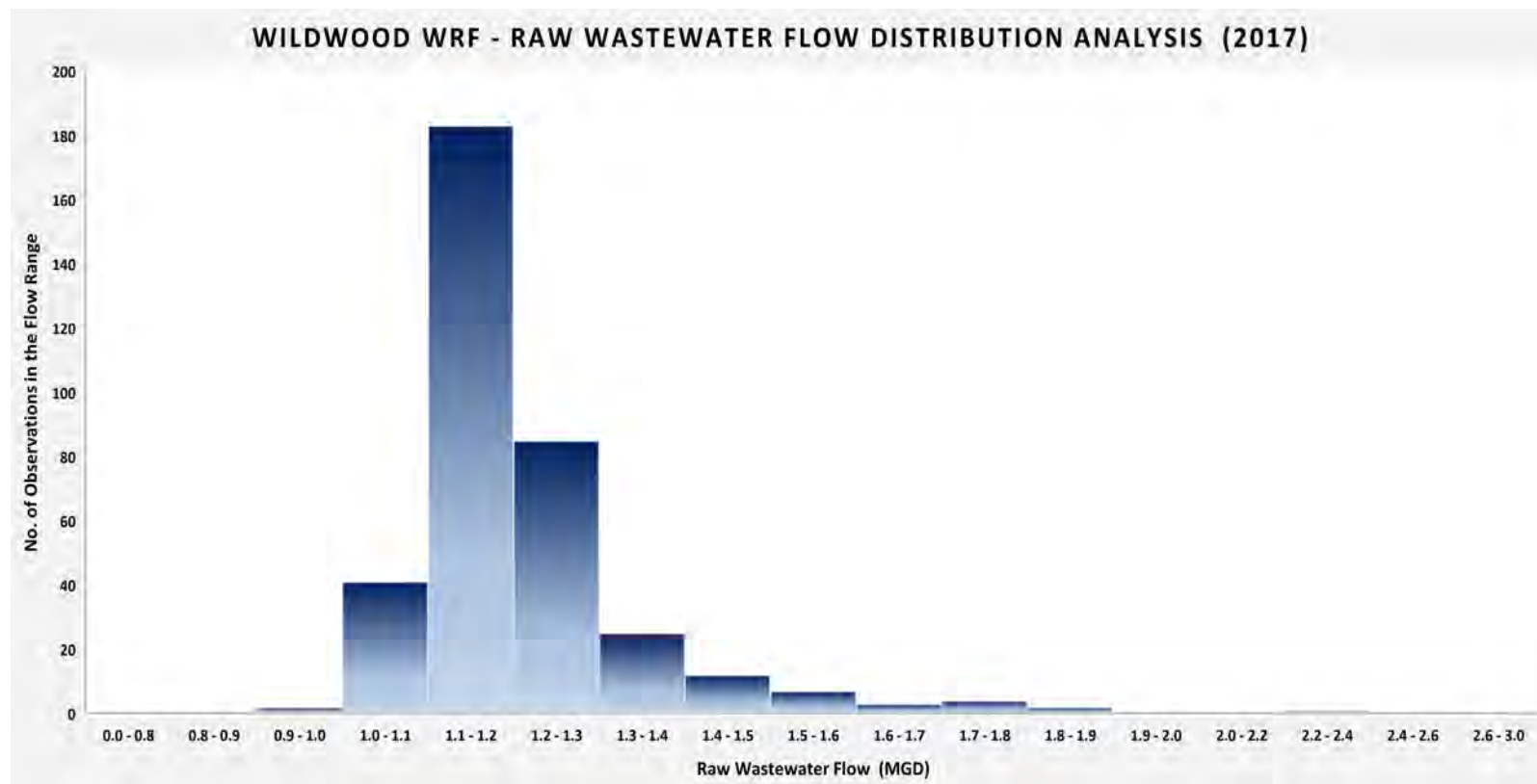
2.3.3 Raw Wastewater Flow Distribution

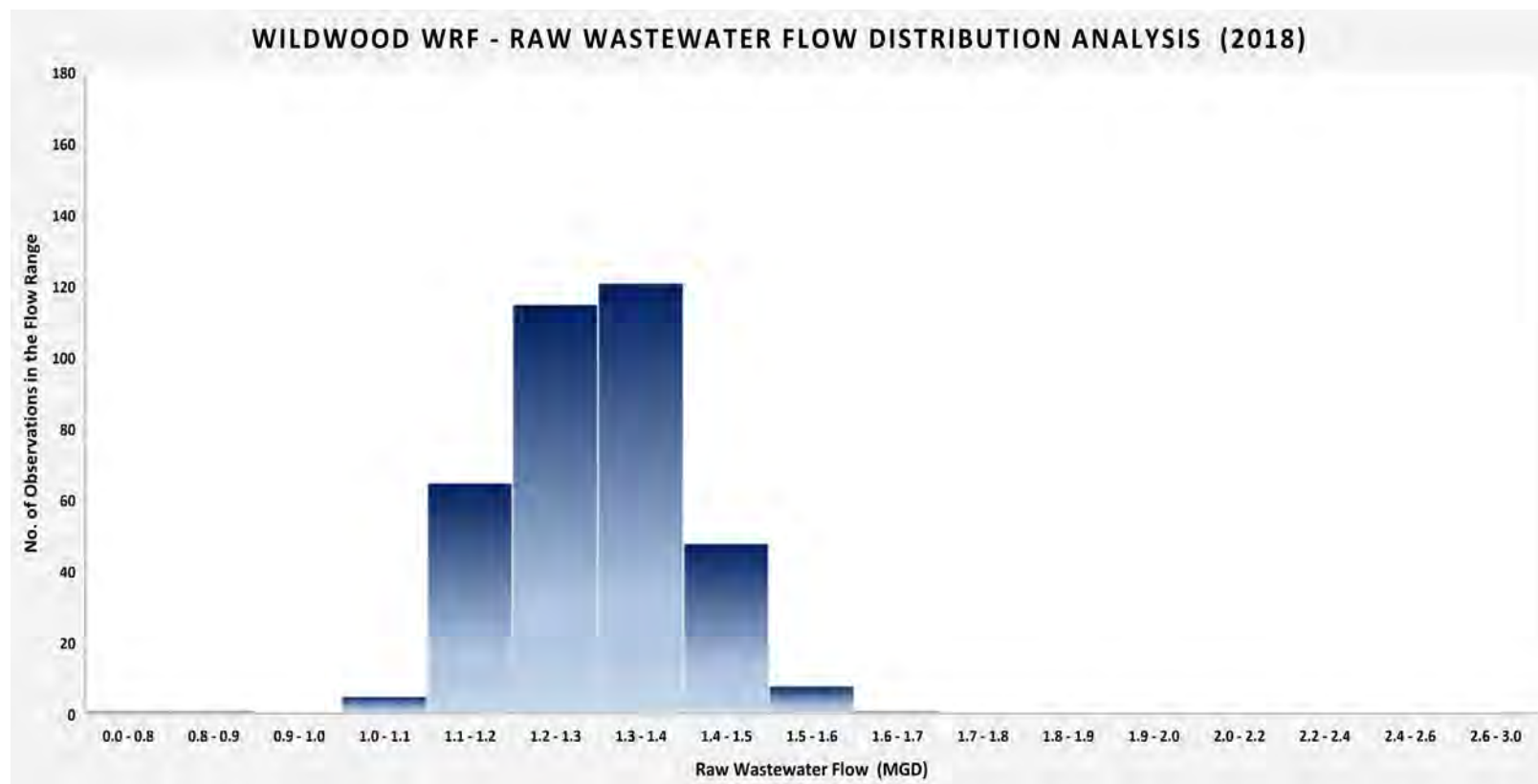
An analysis of the raw wastewater flow distribution was conducted for Calendar Years 2017 - 2021 and the first six (6) months of Calendar Year 2022 to evaluate the modulation and shifting of raw wastewater flows since 2017. The results of the analysis are tabularized below in Table 2.3-6 and presented graphically, per year, in Figures 2.3-5 through 2.3-10.

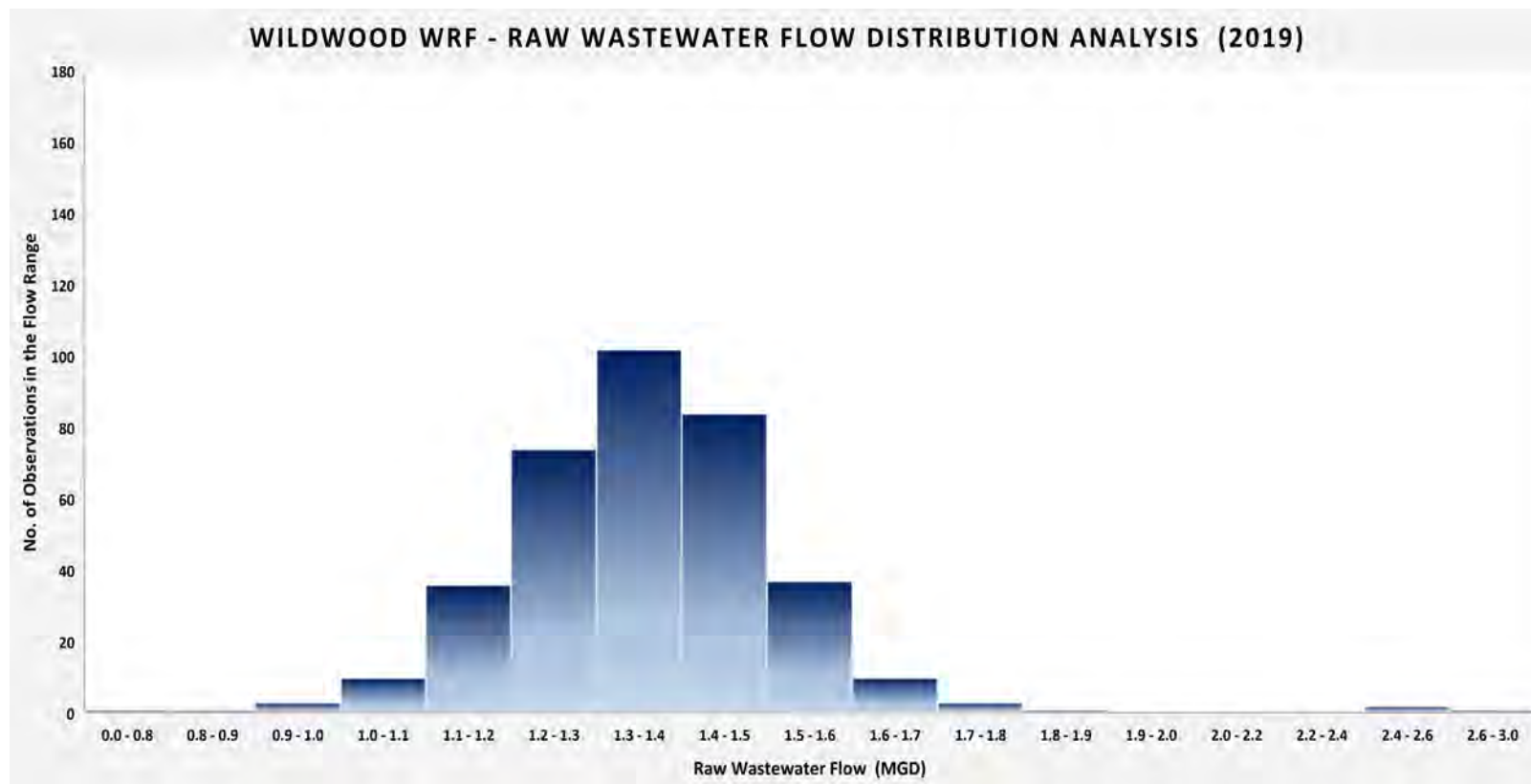
Table 2.3-6: Annual Distribution of Raw Wastewater Flows - Wildwood WRF						
Flow Range (MGD)	Calendar Year / Percentage of Flows within the Identified Flow Range					
	2017	2018	2019	2020	2021	2022
0.0 - 0.9	0.0%	0.5%	0.5%	1.6%	0.5%	0.0%
0.9 - 1.3	85.2%	50.7%	33.7%	47.3%	23.0%	1.3%
1.3 - 1.7	12.9%	48.8%	63.8%	51.1%	52.3%	42.4%
1.7 - 2.2	1.6%	0.0%	1.6%	0.0%	23.8%	54.3%
2.2 - 3.0	0.3%	0.0%	0.3%	0.0%	0.3%	2.0%

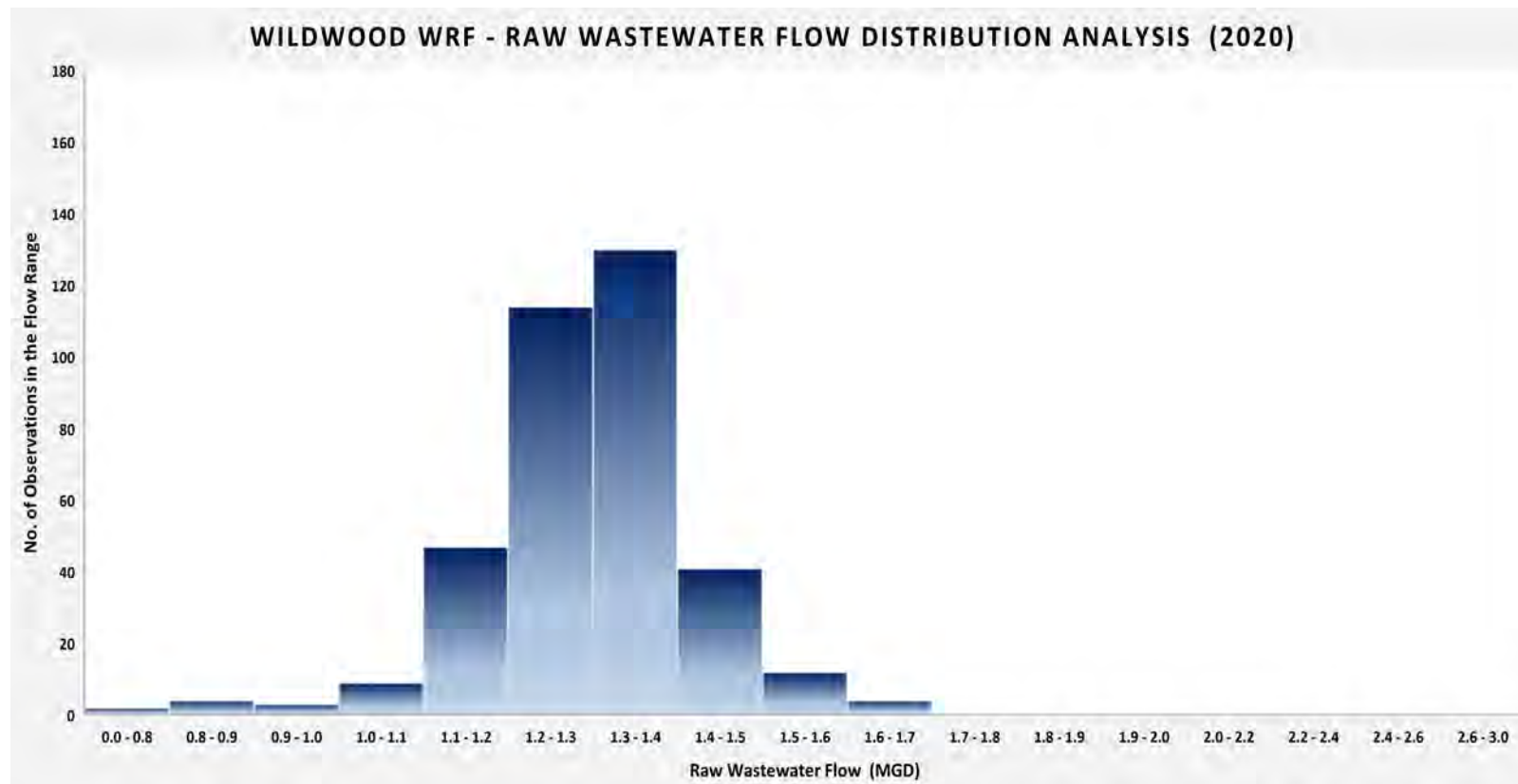
The raw wastewater flow distribution analysis indicates the following:

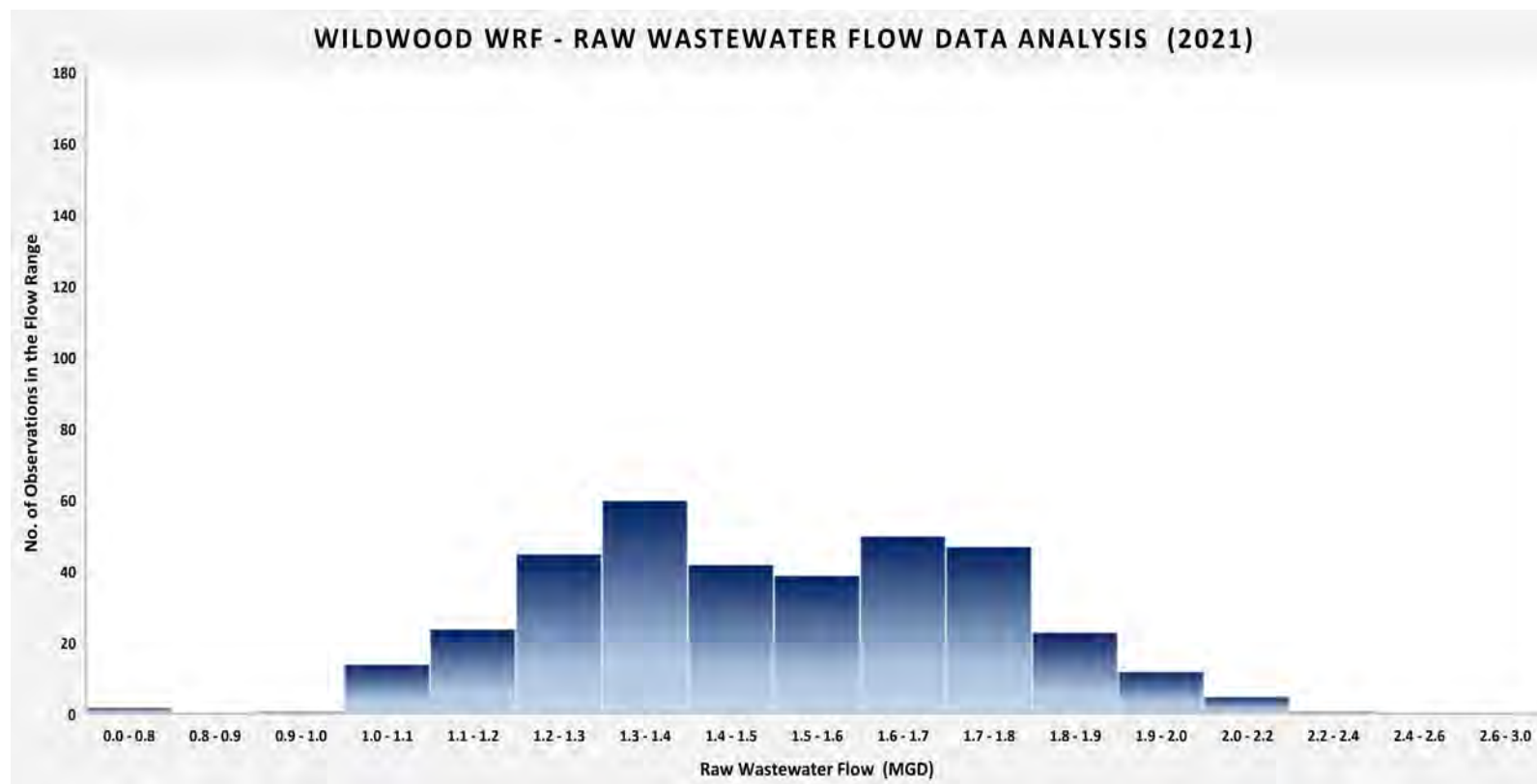
- The majority of the raw wastewater flows received at the treatment facility have increased from the 0.9 - 1.3 MGD flow range in 2017 to the 1.7 - 2.2 MGD flow range in 2022 (partial year data).
- Flows exceeding 1.70 MGD accounted for 1.9% of the total flows received at the WRF in 2017. Flows exceeding 1.70 MGD accounted for 56.3% of the total flows received at the WRF in 2022 (through June 2022).

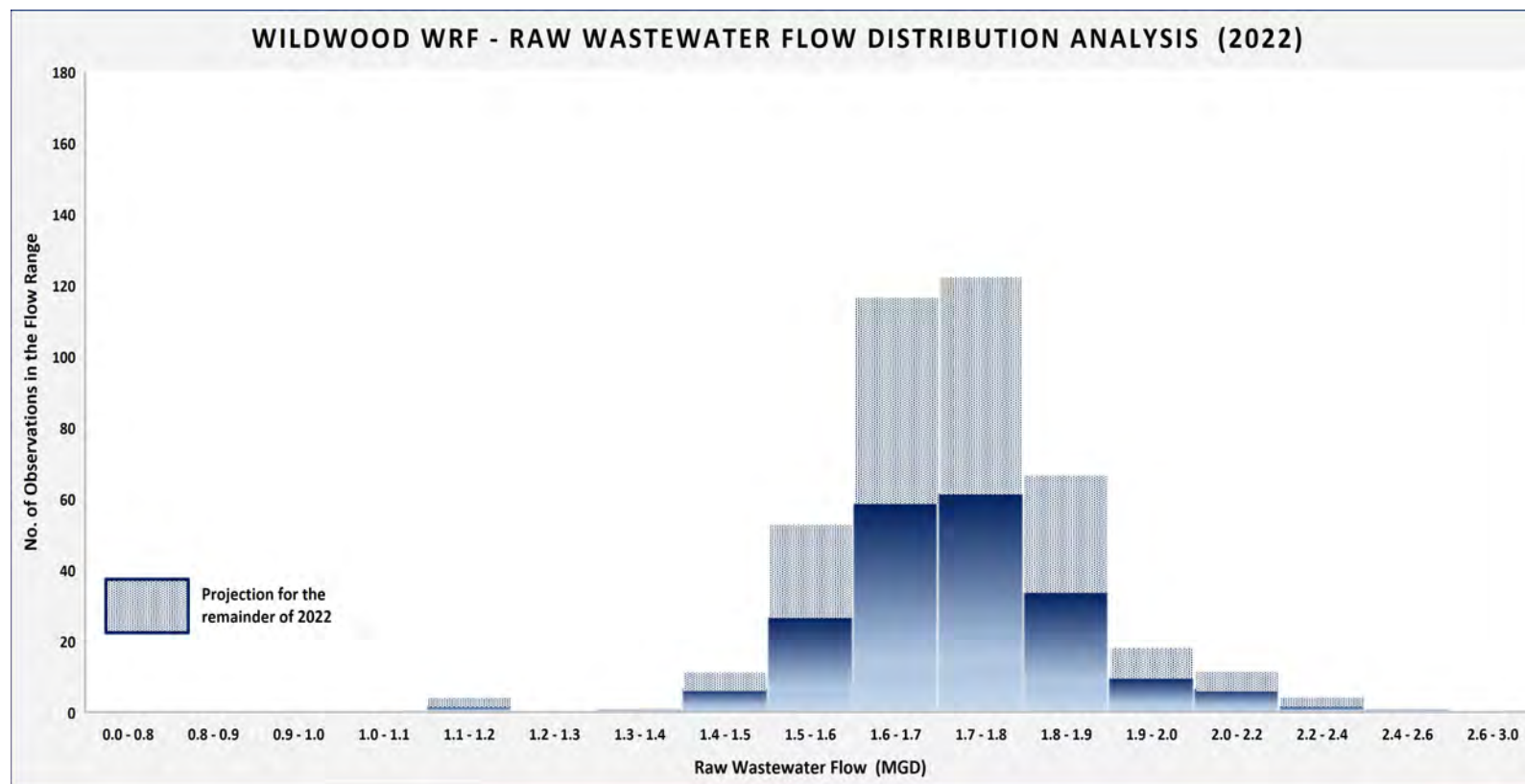
**FIGURE 2.3-5****WILDWOOD WRF: RAW WASTEWATER FLOW DISTRIBUTION ANALYSIS (2017)**

**FIGURE 2.3-6****WILDWOOD WRF: RAW WASTEWATER FLOW DISTRIBUTION ANALYSIS (2018)**

**FIGURE 2.3-7****WILDWOOD WRF: RAW WASTEWATER FLOW DISTRIBUTION ANALYSIS (2019)**

**FIGURE 2.3-8****WILDWOOD WRF: RAW WASTEWATER FLOW DISTRIBUTION ANALYSIS (2020)**

**FIGURE 2.3-9****WILDWOOD WRF: RAW WASTEWATER FLOW DISTRIBUTION ANALYSIS (2021)**

**FIGURE 2.3-10****WILDWOOD WRF: RAW WASTEWATER FLOW DISTRIBUTION ANALYSIS (2022)**

- The raw wastewater flow distribution analysis further demonstrates that the steady growth within the wastewater management system service area, along with potential infiltration/inflow issues, is generating greater raw wastewater flows at the Wildwood WRF than previously projected in the Utility System Master Plan (2019), as synopsized in the table below.

Table 2.3-7: Utility System Master Plan Flow Projections (2019)*		
Calendar Year	Projected Wastewater Flows (MGD)	
	Method 1**	Method 2***
2022	1.595	1.532
2024	1.892	1.745
2026	2.244	1.986
2028	2.660	2.261
2030	3.154	2.574
2032	3.740	2.931
2034	4.434	3.337
2036	5.258	3.799

* Flow projection information in this table was taken from the City of Wildwood Utility System Master Plan (2019, Kimley-Horn). A detailed explanation of the methodologies for generating the wastewater collection system future raw wastewater flows is contained within the Master Plan.

** Method 1 - Linear growth rate in raw wastewater flows of approximately 8.9% per year from 2020 - 2037 (City of Wildwood Utility System Master Plan, 2019, Kimley-Horn)

*** Method 2 - Raw wastewater flow projections based on the actual growth rate of the average daily flows from 2017 - 2019 (City of Wildwood Utility System Master Plan, 2019, Kimley-Horn).

Utilizing the historical raw wastewater flows over the last eighteen (18) months, it is estimated that the annual treatment facility flow for Calendar Year 2022 will be 1.80 - 1.87 MGD, which is a minimum of 0.30 MGD more than projected in the Utility System Master Plan. At this rate of growth, the current “hydraulic” capacity of the treatment facility will be exceeded in 3.2 - 3.4 years. The design, permitting and construction of the proposed improvements will take approximately 2.7 - 3.0 years. Therefore, the infrastructure improvements outlined in Section 2.3.1 need to proceed, immediately, to ensure that the available treatment capacity of the Wildwood WRF is not exceeded and growth can continue within the Wildwood Wastewater Management System Service Area. A more detailed description of the proposed improvement, and phasing, is presented in Section 6 of this CDR.

2.4 RAW WASTEWATER CBOD₅ CONCENTRATIONS AND LOADINGS

The influent concentrations and flows utilized for the design of the current unit operations and processes at the Wildwood WRF are presented below in Table 2.4-1.

Table 2.4-1: Wildwood WRF - Design Influent Concentrations and Flows					
Condition	Flow (MGD)	Influent Concentrations (mg/L)			
		CBOD ₅	TSS	TKN	TP
AADF	3.55	250	250	50	8
MDF	5.33	250	250	50	8
PHF	10.00				

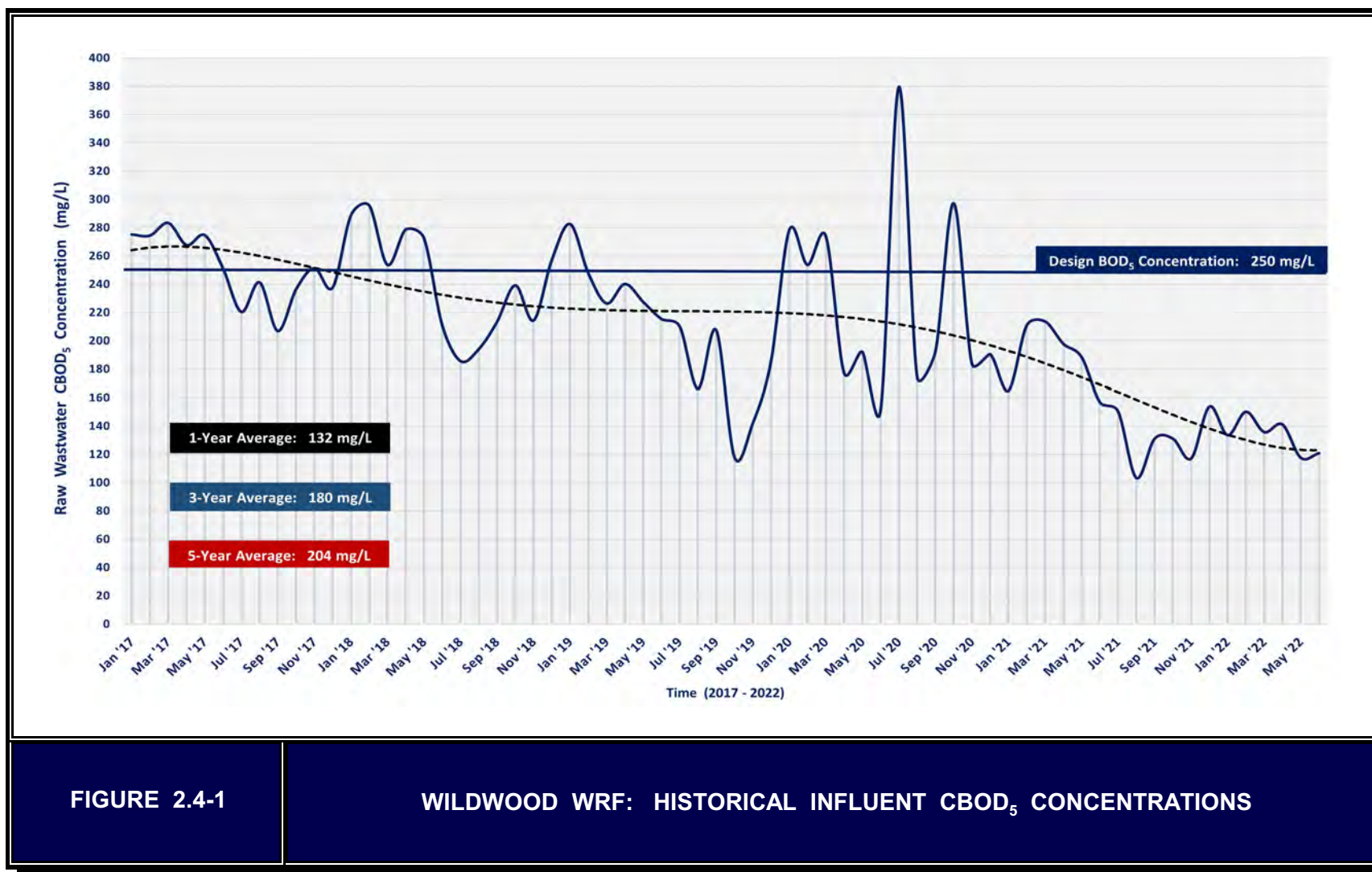
The Wildwood WRF raw wastewater CBOD₅ concentrations and loadings, for Calendar Years 2017 - 2020, and the 5-Year average, are presented in a tabular form in Table 2.4-2 and graphically in Figures 2.4-1 and 2.4-2, respectively.

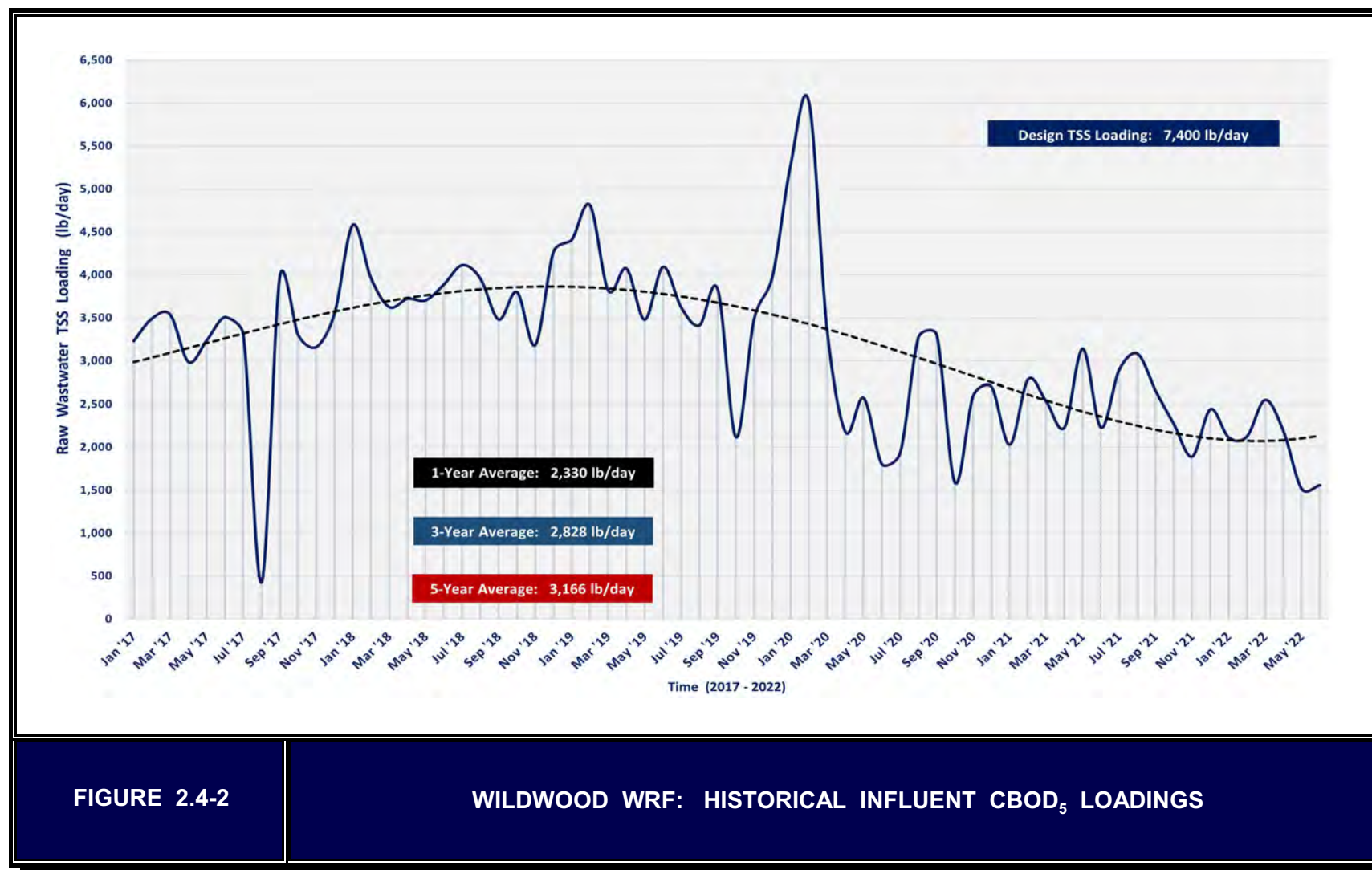
Table 2.4-2: CBOD ₅ Influent Concentrations and Loadings* (2017 - 2022)			
Calendar Year	Raw Wastewater Flow Rate (MGD)	Raw Wastewater CBOD ₅ *	
		Concentration (mg/L)	Loading (lb/day)
2017	1.211	252	2,545
2018	1.293	242	2,610
2019	1.357	206	2,331
2020	1.295	229	2,473
2021	1.496	160	1,996
2022**	1.746	133	1,937
5-Year Average	1.400	204	2,315

* Annual Average

** Partial Year Data (January 2022 - June 2022)

The annual and 6-Year average influent CBOD₅ concentrations are less than the Wildwood WRF design concentration of 250 mg/L. As can be seen from the ADF figure, average monthly influent CBOD₅ concentrations varied from 104 - 380 mg/L and there has been a decrease in raw wastewater CBOD₅ concentrations over the last five (5) years.





The annual and 6-Year average influent CBOD₅ loadings have been significantly less than the Wildwood WRF design organic loading of 7,400 lb/day. As can be seen from the ADF figure, average monthly CBOD₅ loadings varied from 1,230 - 3,978 lb/day. In addition, there appears to be a downward trending of the CBOD₅ loadings over the past four (4) years.

The influent CBOD₅ concentrations and loadings are within normal ranges for domestic wastewater and this trend is not expected to change in the future. Residential wastewater sources will continue to be the predominate source of future flows received and treated by the Wildwood WRF.

2.5 RAW WASTEWATER TSS CONCENTRATIONS AND LOADINGS

The Wildwood WRF raw wastewater TSS concentrations and loadings, for Calendar Years 2017 - 2022, and the 6-Year average, are presented in a tabular form in Table 2.5-1 and graphically in Figures 2.5-1 and 2.5-2, respectively.

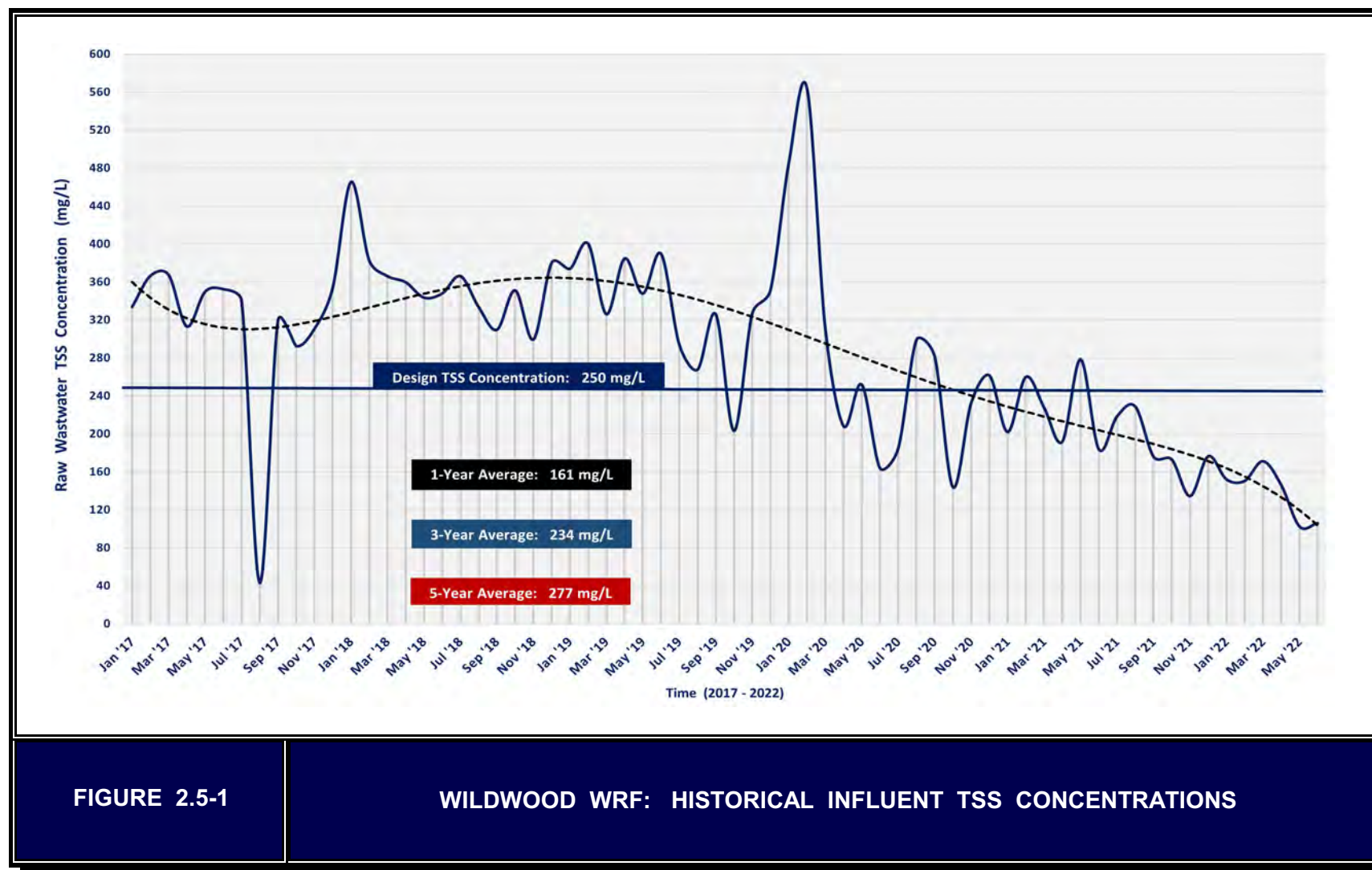
Table 2.5-1: TSS Influent Concentrations and Loadings* (2017 - 2022)			
Calendar Year	Raw Wastewater Flow Rate (MGD)	Raw Wastewater TSS*	
		Concentration (mg/L)	Loading (lb/day)
2017	1.211	312	3,151
2018	1.293	359	3,871
2019	1.357	333	3,769
2020	1.295	282	3,046
2021	1.496	204	2,545
2022**	1.746	138	2,010
5-Year Average	1.400	271	3,065

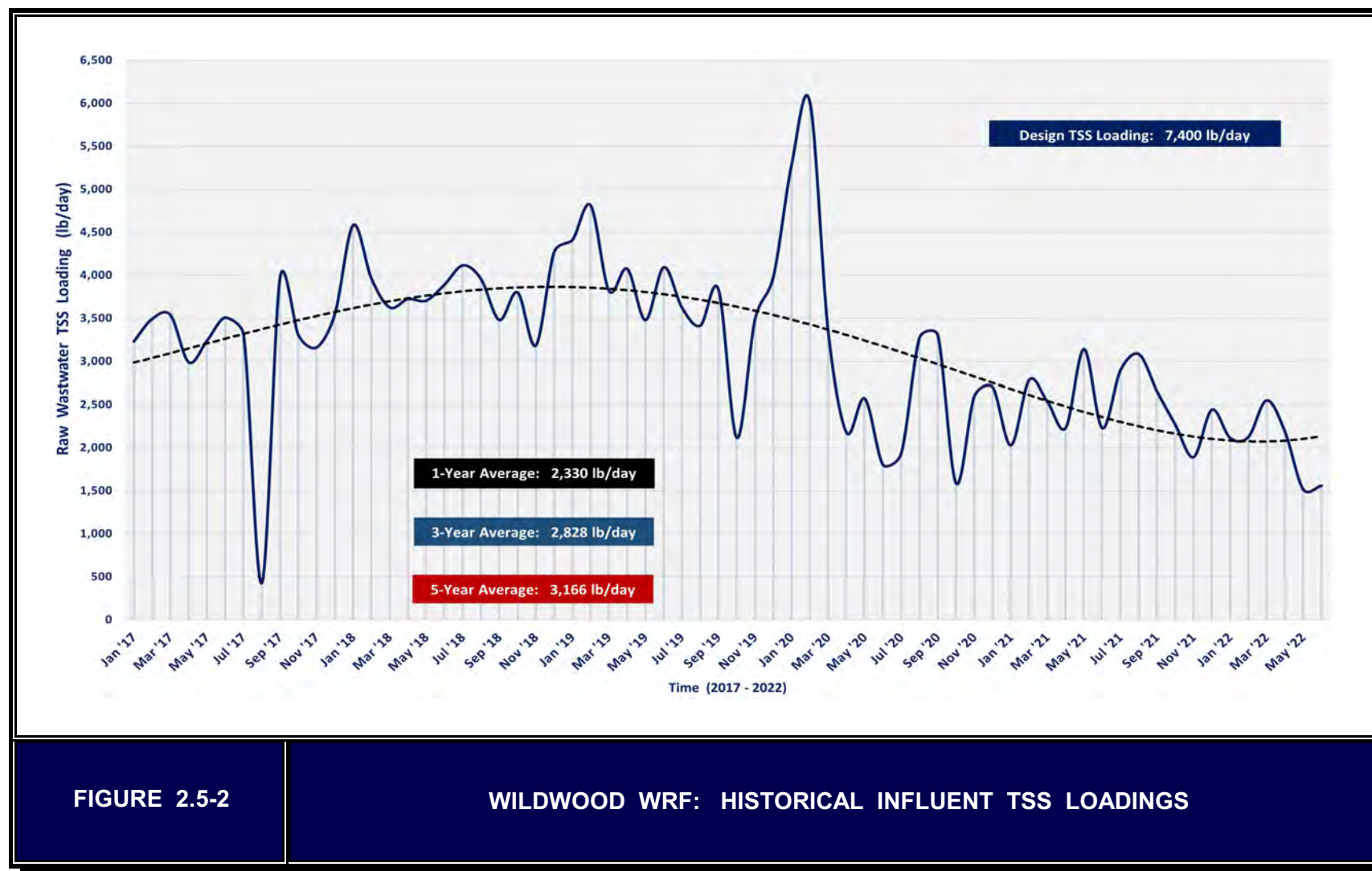
* Annual Average

** Partial Year Data (January 2022 - July 2022)

The annual and 5-Year average influent TSS concentrations were slightly higher than the Wildwood WRF design value of 250 mg/L from 2017 - 2020. As can be seen from the ADF figure, average monthly influent TSS concentrations varied from 43 - 564 mg/L and there has been a decrease in influent TSS concentrations over the last three (3) years.

The annual and 5-Year average influent TSS loadings have been less than the Wildwood WRF design organic loading of 7,400 lb/day. As can be seen from the figure, average monthly loadings varied from 426 - 6,011 lb/day. In addition, there appears to be a downward trending of the TSS loadings over the past three (3) years.





The influent TSS concentrations and loadings are within normal ranges for domestic wastewater and this trend is not expected to change in the future. Residential wastewater sources will continue to be the predominate source of future flows received and treated by the Wildwood WRF.

2.6 WILDWOOD WRF - RECLAIMED WATER QUALITY

The reclaimed water quality produced (CBOD₅, TSS, TN and TP) from the Wildwood WRF, for Calendar Years 2017 - 2022, and the 6-Year average, are presented in a tabular form in Table 2.6-1 and graphically in Figures 2.6-1 through 2.6-4, respectively.

Table 2.6-1: Wildwood WRF - Reclaimed Water Quality (2017 - 2022)						
Calendar Year	Reclaimed Water Flow Rate (MGD)*	Reclaimed Water Quality Parameter				
		CBOD ₅ (mg/L)	TSS (mg/L)	TN (mg/L)	TP (mg/L)	Fecal Colif (#/100 mL)
Limitation	4.550	20**	5***	---	---	25***
2017	1.211	2.5	0.6	5.7	5.4	< 1
2018	1.293	2.6	0.6	4.5	5.3	< 1
2019	1.357	2.5	0.8	2.7	5.2	< 1
2020	1.295	1.6	0.7	2.3	5.0	< 1
2021	1.496	1.3	0.5	2.3	4.3	< 1
2022****	1.746	1.0	0.5	2.6	5.0	<1
6-Year Average	1.400	1.9	0.6	3.3	5.0	< 1

* FLW-01 ** Annual Average *** Maximum Concentration Allowed **** Partial Year Data (January 2022 - July 2022)

The annual and 6-Year average reclaimed water CBOD₅, TSS, TN and TP concentrations are below the design effluent concentrations set for the Wildwood WRF and the FDEP Operations Permit limitations. However, the effluent TP concentrations are very high since the existing treatment facility was not designed with the unit operations and processes required to effectively remove the phosphorus either biologically or chemically.

The Wildwood WRF treatment system efficiencies, for the period from July 2020 through June 2022, are presented below in Table 2.6-2.

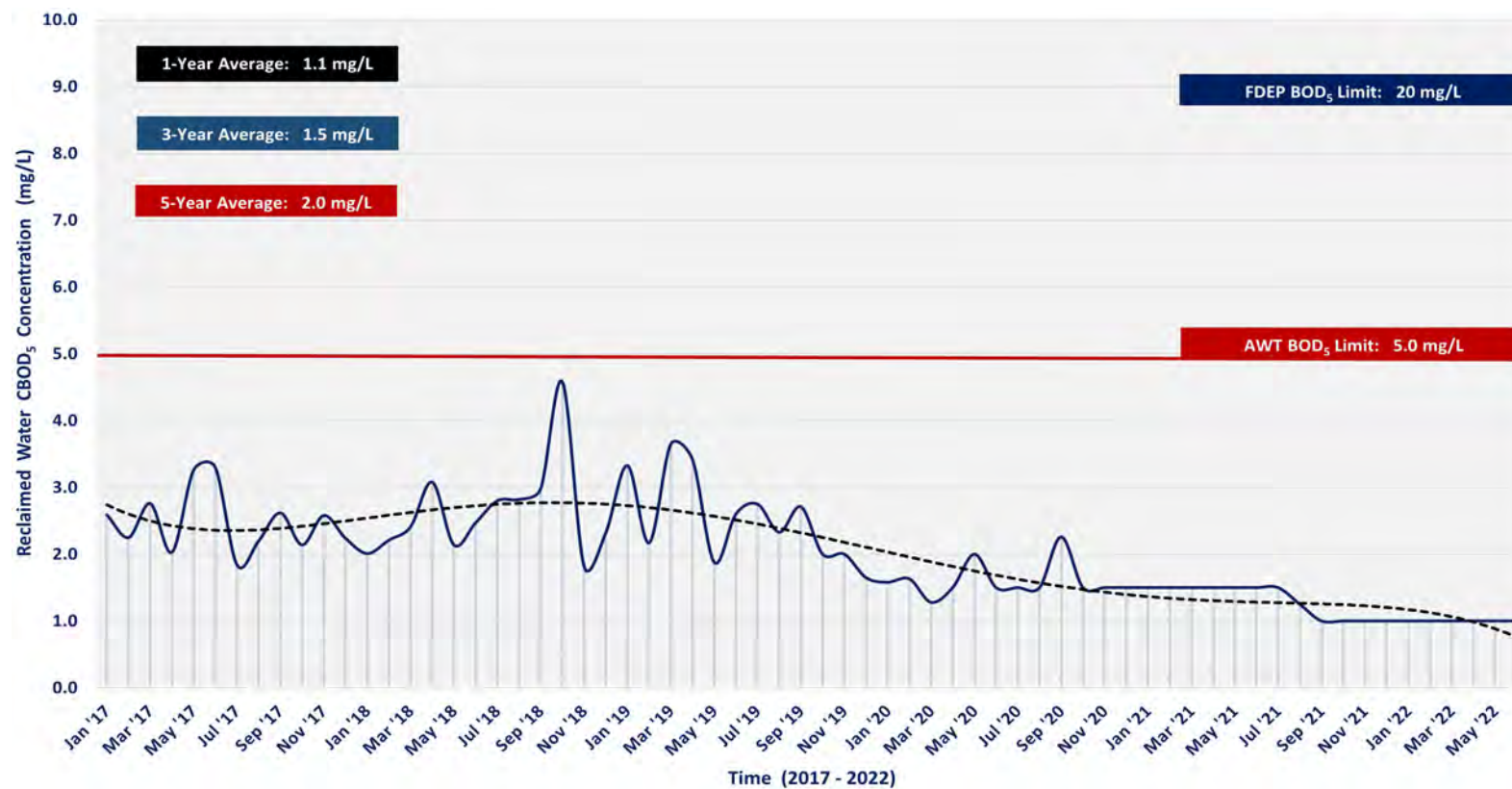
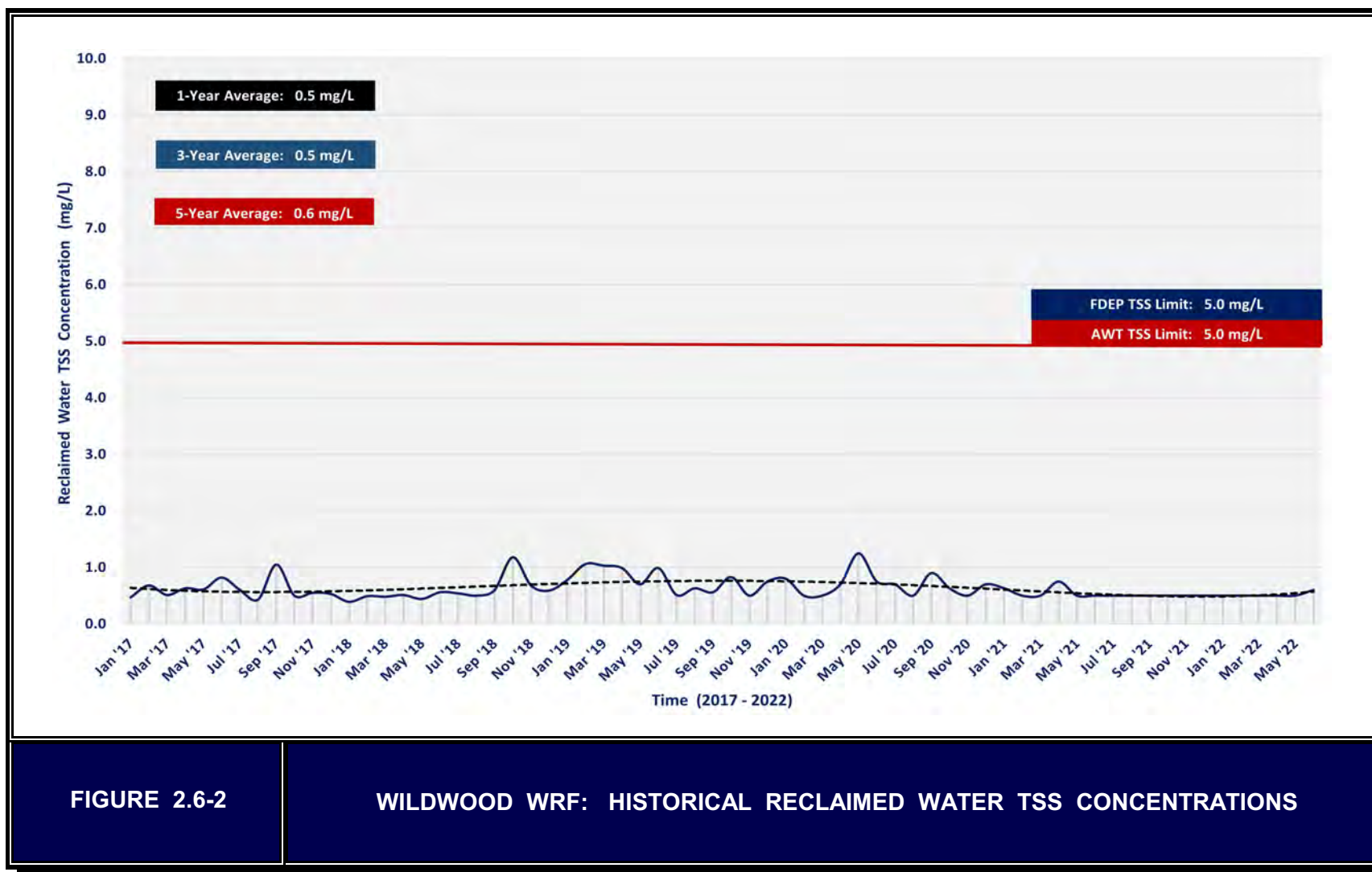
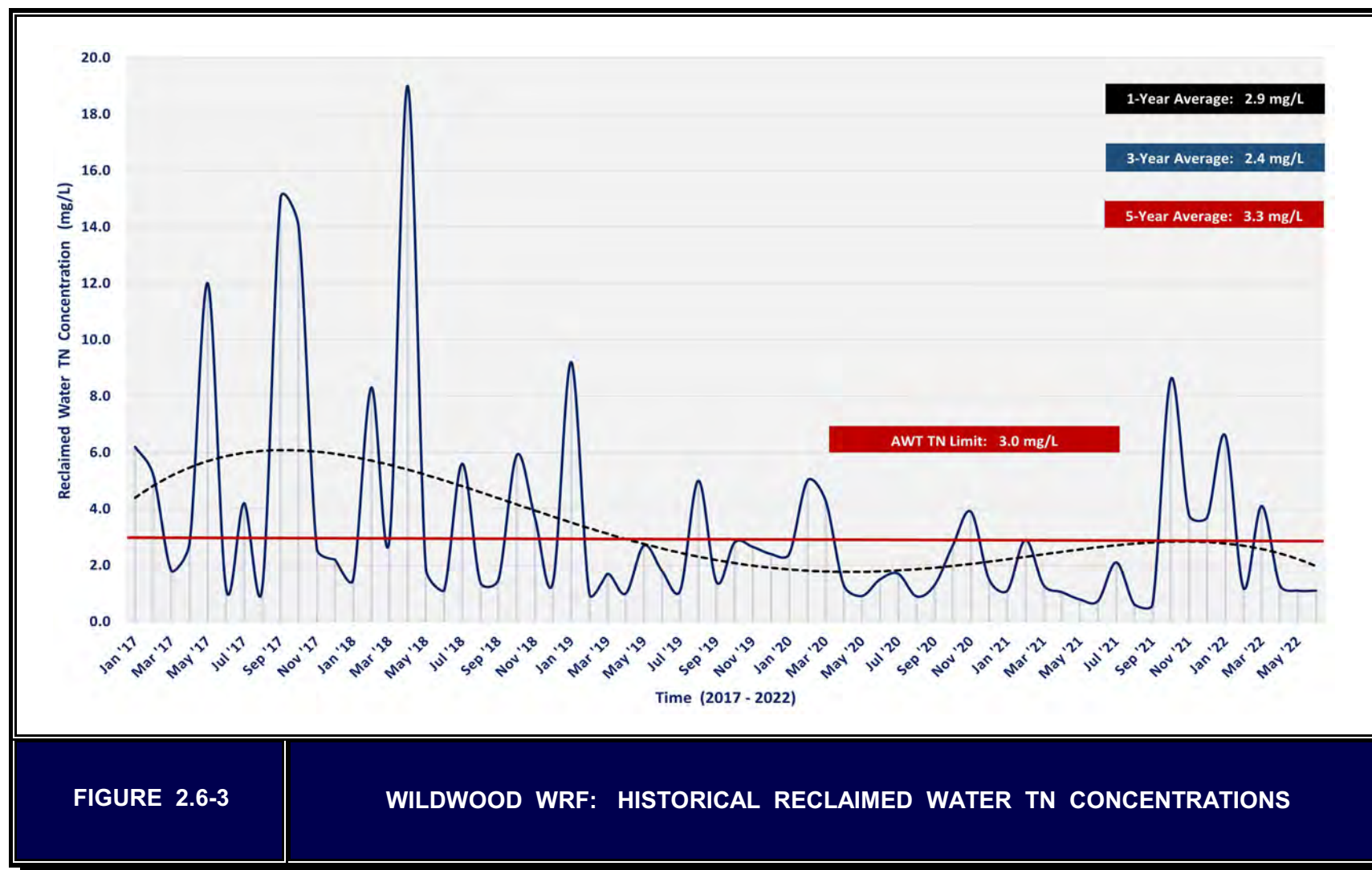


FIGURE 2.6-1

WILDWOOD WRF: HISTORICAL RECLAIMED WATER CBOD₅ CONCENTRATIONS





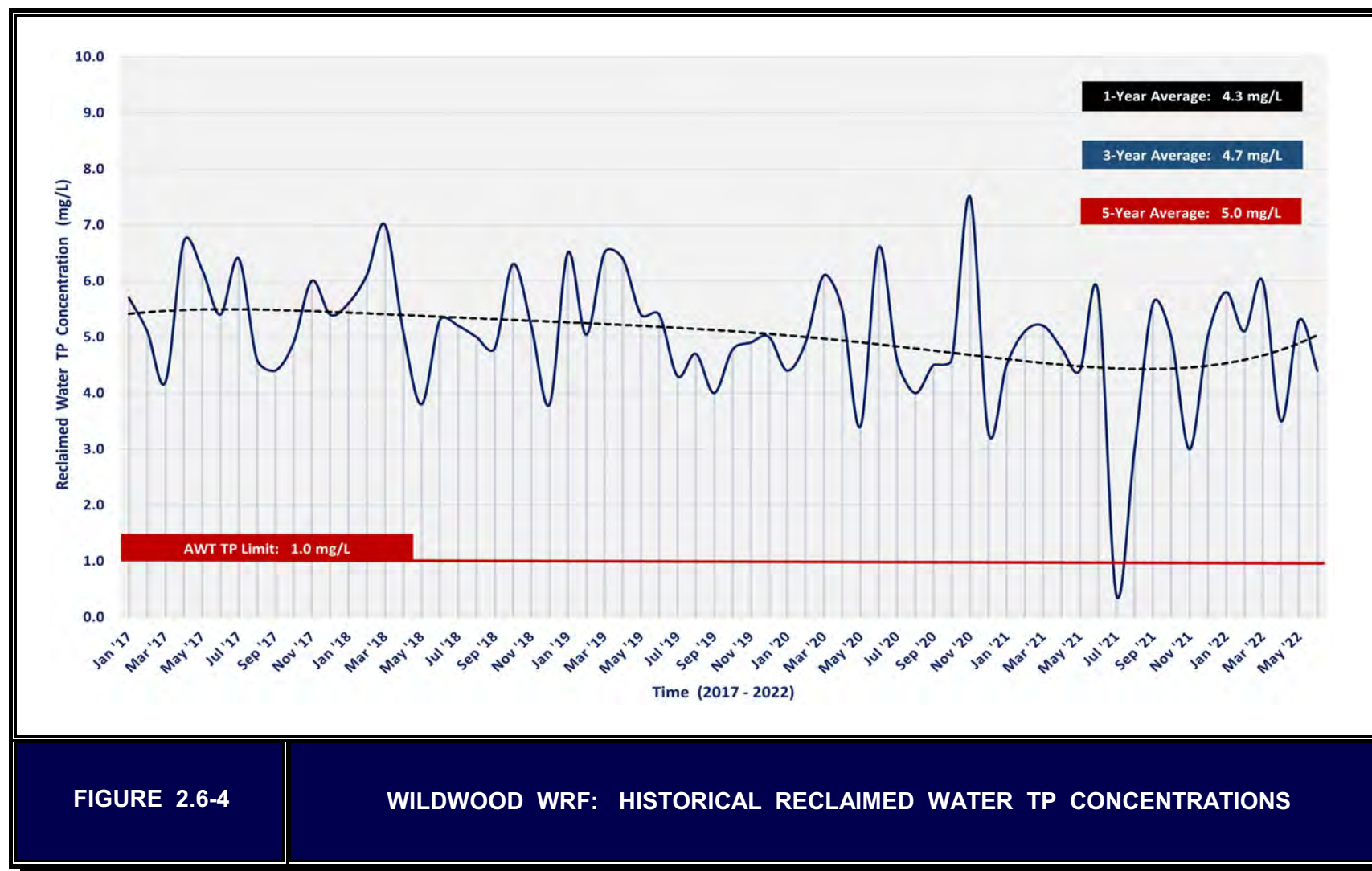


Table 2.6-2: Wildwood WRF Treatment System Efficiency (2020 - 2022)*						
Parameter	Influent Conc. (mg/L)	Effluent Concentration		Parameter Removal (lb/day)	Percent Removal	
		(mg/L)	(lb/day)		Design	Actual
CBOD ₅	154	1.3	16	1,927	95%	99.2%
TSS	193	0.6	8	2,428	95%	99.7%
TN	50	2.3	29	602	90%	95.4%
TP	8	4.8	61	40	90%	40.0%

* AADF (7/2020 - 6/2022): 1.513 MGD

Raw wastewater flow and reclaimed water data for Calendar Years 2021 and 2022 at the Wildwood WRF are presented in Table 2.6-3. The facility has been meeting the current effluent limitations required by the current FDEP Operations Permit during this period as is indicated in the aforementioned table.

All current operational loadings on the unit operations and processes at the Wildwood WRF are currently below the loading rates that were used to establish the design capacity for the facility and the facility is meeting all reclaimed water effluent requirements.

2.7 WILDWOOD WRF - HYDRAULIC ISSUES

The Wildwood WRF has undergone numerous modifications since the facility was originally constructed. Without any previous master planning of the facility infrastructure for future growth and expansion, the piping network constructed between various unit operations and processes has been undersized and poorly designed leading to increased headloss, uneven distributions of flow, and is not hydraulically designed to accommodate future wastewater flows. The two main hydraulic issues impacting the current operations of the treatment facility, and the hydraulic and treatment capacity of the WRF, are as follows:

- Poor hydraulic distribution of wastewater flow between the Kruger oxidation ditches and the Lakeside oxidation ditches
- Poor hydraulic distribution of the flow from the Lakeside oxidation ditches to the four secondary clarifiers leading to structure overflows when the raw wastewater flows exceed 2.30 MGD

The treatment facility hydraulic issues are briefly discussed in the following subsections of this Conceptual Design Report.

Table 2.6-3: Wildwood WRF - Reclaimed Water Quality (2021 - 2022)

Month/ Year	Raw Wastewater Flow Rate (MGD)	Reclaimed Water Quality Parameters					
		CBOD ₅ (mg/L)	TSS (mg/L)	TN (mg/L)	NO ₃ -N (mg/L)	TP (mg/L)	pH (S.U.)
Jan 2021	1.204	1.5	0.6	1.1	0.5	4.5	7.65
Feb 2021	1.284	1.5	0.5	2.9	1.0	5.1	7.82
Mar 2021	1.334	1.5	0.5	1.3	0.5	5.2	7.77
Apr 2021	1.394	1.5	0.8	1.1	0.5	4.8	7.81
May 2021	1.352	1.5	0.5	0.8	0.5	4.4	7.76
Jun 2021	1.454	1.5	0.5	0.7	0.8	5.8	7.74
Jul 2021	1.590	1.5	0.5	2.1	0.7	0.4	7.84
Aug 2021	1.616	1.3	0.5	0.6	0.5	3.0	7.79
Sep 2021	1.808	1.0	0.5	0.6	2.5	5.6	7.80
Oct 2021	1.571	1.0	0.5	8.6	10.8	5.0	7.83
Nov 2021	1.686	1.0	0.5	3.8	2.1	3.0	7.77
Dec 2021	1.660	1.0	0.5	3.7	3.5	5.0	7.74
WWRF Average - 2021	1.496	1.3	0.5	2.3	2.0	4.3	7.78

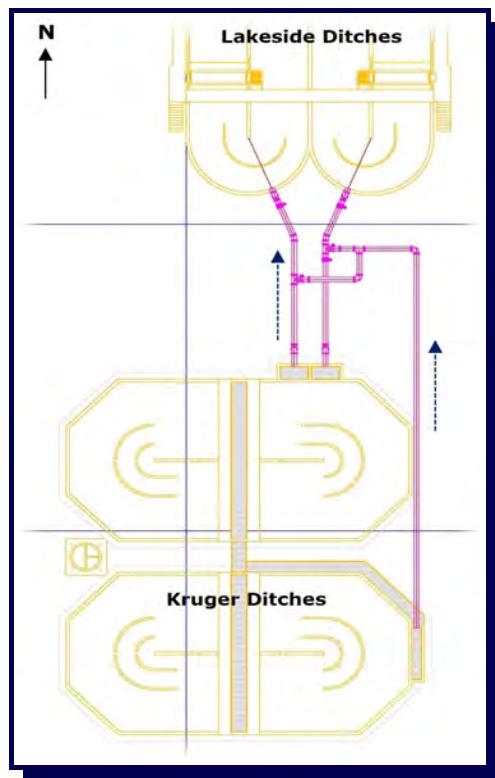
Table 2.6-3: Wildwood WRF - Reclaimed Water Quality (2021 - 2022)

Month/ Year	Raw Wastewater Flow Rate (MGD)	Reclaimed Water Quality Parameters					
		CBOD ₅ (mg/L)	TSS (mg/L)	TN (mg/L)	NO ₃ -N (mg/L)	TP (mg/L)	pH (S.U.)
Jan 2022	1.667	1.0	0.5	6.6	4.2	5.8	7.72
Feb 2022	1.693	1.0	0.5	1.2	1.9	5.1	7.78
Mar 2022	1.787	1.0	0.5	4.1	1.9	6.0	7.66
Apr 2022	1.796	1.0	0.5	1.3	0.7	3.5	7.65
May 2022	1.772	1.0	0.5	1.1	0.9	5.3	7.70
Jun 2022	1.763	1.0	0.6	1.1	0.9	4.4	7.73
Jul 2022							
Aug 2022							
Sep 2022							
Oct 2022							
Nov 2022							
Dec 2022							
WWRF Average - 2022	1.746	1.0	0.5	2.6	1.7	5.0	7.71

2.7.1 Hydraulic Issue between the Existing Oxidation Ditch Systems

As previously discussed, the equalization (EQ) basin pump station conveys the raw wastewater to the flow splitter structure located immediately upstream of the Kruger oxidation ditch system. The splitter structure is used to distribute a mixture of raw wastewater and RAS to the two Kruger oxidation ditches, which operate in a “parallel” configuration.

The effluent from each of the Kruger oxidation ditches overflows a weir gate system and is conveyed to the two Lakeside oxidation ditches by gravity. However, flow is unevenly distributed to each Lakeside oxidation ditch due to the design of the piping, fittings and valving network. Therefore, facility operators attempt to equalize the flow distribution to the Lakeside ditches by manually raising/lowering the Kruger weir gates and throttling a system of plug valves located upstream of the Lakeside system. Based on facility flow conditions, it appears that the east Lakeside oxidation ditch receives approximately sixty percent (60%) of the overall wastewater/RAS (MLSS) flow as the piping network directing flow to it has the least amount of headloss (path of least resistance). This condition leads to the following additional treatment facility process issues:



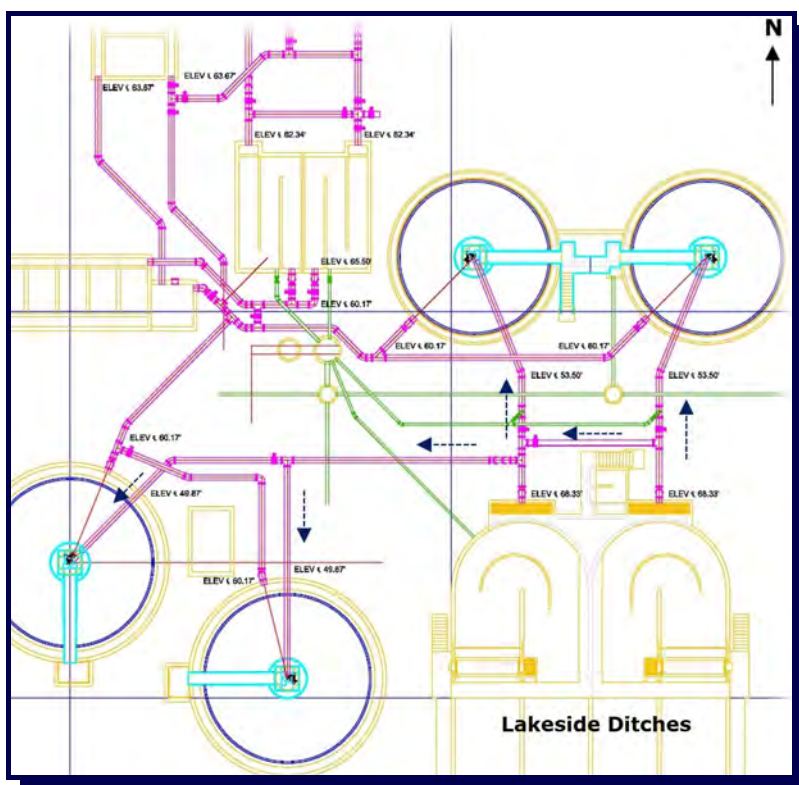
- Overloading of the east Lakeside oxidation ditch has the potential to reduce the treatment efficiency and overload the treatment system as wastewater flows and loadings increase and approach the original design condition parameters
- At design conditions, this unequal splitting of flow has the potential to cause an organic overload of the east Lakeside oxidation ditch and the rotor system may not be able to provide enough oxygen for proper treatment of the wastewater
- Unequal flow distribution to and from the Lakeside oxidation ditches, to the four (4) secondary clarifiers downstream, leads to overflowing of the clarifier structure(s) when flows exceed 2.30 MGD AADF

2.7.2 Hydraulic Issue between the Lakeside Ditches and the Secondary Clarifiers

The Lakeside oxidation ditch system was originally designed and constructed to discharge effluent (MLSS) to a system of two (2) 40-foot diameter secondary clarifiers which were built at the same time (1986). As flows increased at the facility, additional treatment capacity was required and the following infrastructure improvements were constructed:

- One (1) Kruger oxidation ditch and one (1) 50-foot diameter secondary clarifier (1996)
- One (1) Kruger oxidation ditch and one (1) 50-foot diameter secondary clarifier (2008)

However, the design concept that was developed at that time was to operate the two oxidation ditch systems in a “series” configuration (effluent from Kruger oxidation ditches is conveyed to the Lakeside oxidation ditches) and the effluent from the Lakeside oxidation ditches was to be distributed to all four secondary clarifiers. The Kruger oxidation ditches were constructed upstream, to the south, of the Lakeside ditches and the 50-foot diameter secondary clarifiers were constructed to the southwest of the existing 40-foot diameter secondary clarifiers.



The effluent from each of the Lakeside oxidation ditches overflows a weir gate system and is conveyed, in a large piping network, to the four (4) secondary clarifiers. However, due to the design of the piping, fittings and valving network that was constructed, and modified over the years, the following conditions exist:

- There are longer piping runs and more hydraulic fittings (bends, tees, etc.) in the piping network conveying flow to the two 50-foot diameter clarifiers
- Therefore, the headloss (resistance to flow) is greater in the piping network that is conveying effluent from the Lakeside oxidation ditches to the 50-foot diameter clarifiers leading to a reduction in hydraulic capacity

These conditions are causing hydraulic issues and an unequal distribution of flow to the system of secondary clarifiers. The majority of the flow is being conveyed from the Lakeside oxidation ditches to the smaller 40-foot diameter clarifiers (lower headloss and less resistance to flow). Therefore, facility operators attempt to equalize the flow distribution to the secondary clarifiers by throttling valves to induce headloss. In addition, they have also lowered the effluent weirs in the 50-foot diameter clarifiers to reduce the amount of static head in the system; thereby attempting to convey more flow to the larger, 50-foot diameter clarifiers. However, there is still a hydraulic imbalance in the piping network.

Unfortunately, during periods when the raw wastewater flows exceed 2.30 MGD, the 40-foot diameter clarifiers are hydraulically overloaded and wastewater overflows the clarifier structures. Hydraulic modeling of the system verified this condition as wastewater flows approach 2.35 MGD. Therefore, significant hydraulic piping system modifications are needed to resolve these issues and secondary clarifier rehabilitation is required to resolve significant corrosion and RAS pumping system issues.

2.8 WILDWOOD WRF - BIOLOGICAL TREATMENT SYSTEM CAPACITY

The Wildwood WRF is classified as a Wastewater Treatment plus Filtration Facility (Category III, Class B), utilizing the oxidation ditch modification of the activated sludge process to treat the raw wastewater from the service area. The facility is operating under FDEP Permit No. FLA013497 and has a permitted treatment capacity of 3.55 MGD AADF.

Secondary treatment of the raw, screened wastewater at the Wildwood WRF is provided by two (2) sets of oxidation ditch systems that are operating in a “series” configuration. The screened wastewater is conveyed to the Kruger oxidation ditches, which operate in a “parallel” configuration, for treatment of the organic wastes. The flow is then discharged from each oxidation ditch, independently, and is conveyed in a piping/valving network to the Lakeside oxidation ditches for additional treatment.

A description of potential biological treatment system flow configurations, typically utilized at wastewater treatment facility's, include the following:

Flow Configuration	Description
Series	The flow exiting one treatment system is conveyed into a second treatment system for additional removal of contaminants. A series configuration provides additional treatment and increased efficiency; however, it limits the hydraulic capacity of the overall system.
Parallel	The total flow to be treated is split between the various treatment units/systems at the facility (i.e., if there are four treatment units, each one receives 25% of the total flow), thereby increasing the hydraulic capacity of the overall system. A parallel configuration provides more hydraulic capacity and a high rate of contaminant conversion, and if properly designed, does not limit the treatment efficiency of the overall system.

As previously discussed in Section 2.7, there are significant hydraulic issues at the Wildwood WRF that are limiting the hydraulic capacity of the treatment system. The biological treatment capacity, operations and efficiency of the system is limited by the current "series" configuration of the oxidation ditch systems. As part of the scope of the work for the CDR, BLOWIN and hydraulic modeling of the biological treatment system was conducted to determine the actual treatment capacity of the Wildwood WRF. The following assumptions were made in setting up the biological treatment system model:

Assumptions

- Conversion of the oxidation ditch systems to a "parallel" operation through various facility improvements
- Improvements made to resolve the current hydraulic issues
- Typical activated sludge process parameters and biological reaction rate constants were utilized in the modeling scenarios



Two (2) treatment system scenarios were modeled as part of the facility treatment system capacity analysis. The modeling scenarios are summarized as follows:

Modeling Scenario No. 1 - Utilization of Calendar Year 2021 Influent Characteristics

- BOD₅: 160 mg/L
- TSS: 203 mg/L
- COD/BOD₅: 1.7 - 2.3
- TKN: 44 mg/L
- TP: 6 mg/L

Modeling Scenario No. 2 - Utilization of the Original System Design Influent Characteristics

- BOD₅: 250 mg/L
- TSS: 250 mg/L
- COD/BOD₅: 1.7 - 2.3
- TKN: 50 mg/L
- TP: 8 mg/L

A brief snapshot of the modeling results are presented in Table 2.8-1.

Parameter	<u>Scenario No. 1</u> Calendar Year 2021 Influent Characteristics	<u>Scenario No. 2</u> Original Design Influent Characteristics
AOR BOD Basis (lb O ₂ /lb BOD ₅)	1.2	1.2
AOR TKN Basis (lb O ₂ /lb TKN)	4.6	4.6
Denitrification Basis (lb O ₂ /lb NO ₃)	-2.86	-2.86
Total System AOR (lb O ₂ /day)	8,460	11,786
O ₂ Saturation (mg/L)	7.8	7.8
Design Residual DO - Aerobic (mg/L)	1.6	1.3
Total System SOR (lb O ₂ /day)	16,075	21,270
Total System SOR (lb O ₂ /hr)	670	886
SOTR Capability (lb O ₂ /hr)	880	880
Diurnal Safety Factor	1.30	0.99
No. of Rotors Operating/Ditch	2	2
Rotor Horsepower (hp)	40	40
Effluent BOD ₅ concentration (mg/L) ¹	< 5	< 5
Effluent NO ₃ -N Concentration (mg/L) ¹	< 6	< 7.5
Effluent NH ₃ -N Concentration (mg/L)	< 1 - 2	< 2
Effluent TN Concentration (mg/L) ^{1,2}	< 5	< 5
Effluent TP Concentration (mg/L) ^{1,2}	< 4	< 4
Projected Wildwood WRF Biological Treatment Capacity:		2.8 - 3.0 MGD AADF

¹ Meets existing FDEP Operating Permit limitations

² Does not meet AWT standards

The BIOWIN (biological) and hydraulic modeling of the existing Wildwood WRF biological treatment system infrastructure, with the improvements identified in the assumptions above, projects that the biological treatment system capacity is approximately 2.8 MGD AADF. Therefore, based on the raw wastewater flows being received at the treatment facility, as outlined in Section 2.3 of this CDR, significant facility improvements are required at this time to ensure that the available treatment capacity of the WRF is not exceeded and growth can continue within the Wildwood Wastewater Management System Service Area.

2.9 OTHER OPERATING AND INFRASTRUCTURE ISSUES

Upon conducting reviews of facility influent and effluent data, site visits and inspections of the facility, and two workshops with City management, utility, engineering and operations staff, various other operating and infrastructure issues exist at the Wildwood WRF that need to be addressed in the upcoming phased-improvements program. A listing of other facility operating and infrastructure issues were compiled from the workshops, staff meetings, and previous engineering reports and are presented below in Table 2.9-1.

Table 2.9-1: Other Facility Operating and Infrastructure Issues	
Current Infrastructure Issue	Description
Operational and reliability issues associated with the existing screening system	The single screening unit is corroding and is installed at a very high elevation above existing grade. This condition causes service area lift stations to overflow, during periods of heavy rainfall, due to the static head differential that must be overcome and increases operating costs (OPEX). In addition, the screening system control panel needs to be replaced due to corrosion issues, there are odor concerns due to the collection system residence time, and the screening system does not meet Class I Reliability requirements.
EQ basin concrete damage	There is concrete surface damage on the walls of both EQ basins that need to be repaired and then the interior and exterior surfaces need to be recoated in accordance with NACE and SSPC requirements.
EQ basin blower corrosion and the units are past their service lives	The existing EQ blowers and associated infrastructure are in poor condition, inefficient, show signs of excessive corrosion, are past their service lives. All of the blower units need to be replaced with high-efficiency PD blowers.
EQ basin pumps are undersized	The EQ basin pumps are sized to meet the AADF requirements of the facility only, are undersized, and cannot provide complete attenuation of incoming flows. All EQ basin pumps will need to be replaced with properly sized units.
Current "series" operation of the existing Oxidation Ditch Systems	The oxidation ditch systems are currently operating in a "series" configuration. The wastewater is conveyed by the existing EQ pumps to the Kruger oxidation ditches and distributed to them. The Kruger oxidation ditches receive all of the wastewater flow at the highest organic loadings, thereby, limiting the current rotor system's capacity to provide the required mass of oxygen for proper treatment (anaerobic/anoxic conditions exist instead of aerobic conditions).
Secondary clarifier rehabilitation (concrete damage)	There is concrete surface damage on the walls of the clarifiers that need to be repaired and then the interior and exterior surfaces need to be recoated.

Table 2.9-1: Other Facility Operating and Infrastructure Issues

Current Infrastructure Issue	Description
Corrosion of the secondary clarifier equipment replacement (40-foot diameter units)	There is severe corrosion of the internal mechanisms, equipment and walkways associated with the two (2) 40-foot diameter clarifiers. They will need to be replaced in their entirety due to age of the equipment and corrosion issues.
RAS pump and associated equipment replacement	Installation of an additional RAS pump or replacement of one RAS pump with a lower capacity pump to meet the desired minimum RAS flow rate required for proper operation of the WRF (at each RAS/WAS pump station. Replacement of the RAS flow meters and programming of the VFD's to be controlled based on the EQ pumping rate and/or RAS pit level.
Tertiary Filtration System does not meet Class I Reliability	The existing tertiary filtration system does not meet Class I Reliability Criteria and is incapable of meeting future projected wastewater flows
Pumping is required to convey tertiary effluent to the Chlorine Contact Chambers (CCC)	Pumping of the tertiary effluent is required to reach the elevated chlorine contact chamber (old converted sand filters). These pumps run 24 hours/day, 7 days per week, 365 days/year causing an increased electrical demand and cost (OPEX). New equal volume CCC's should be constructed, at grade, to eliminate the need for pumping of the filtered effluent.
Chlorine Contact Chambers (CCC) of unequal size and do not meet Class I Reliability Criteria	The CCC system is oversized for the facility design flow and is designed with two unequal sized CCC's, such that with the largest CCC basin out of service, the treatment facility does not meet Class I Reliability Criteria and FDEP requirements.
Reclaimed Water Distribution Pump Station improvements are necessary	Reclaimed water distribution pump station modifications and a new control building are needed
Lack of Reclaimed Water Ground Storage Tank(s)	The existing Wildwood WRF does not have any reclaimed water ground storage. Typical FDEP requirements are a minimum of 1 day of storage (3 days recommended). Ground storage tanks should be considered in the proposed improvements at the Wildwood WRF.
Lack of Reject Water Ground Storage Tank(s)	The existing Wildwood WRF does not have a reject water ground storage tank; it uses lined ponds which have algae and solids issues. Typical FDEP requirements are a minimum of 1 day of storage (3 days recommended). Reject water ground storage tanks should be considered in proposed improvements program at the WRF and the existing reject water ponds decommissioned and filled in.
Reject water storage pond liner integrity issues	The reject water pond liners need to be replaced due to their age and issues with integrity. The replacement could be eliminated if the City moves forward with installing a reject water ground storage tank system.
Reclaimed Water Disposal System Capacity and Pumping System limitations	Construction of a new R-12 pump station and control building are required for future expansion of the reclaimed water system. Additional reuse sites and RIB's may be required to meet the future effluent disposal requirements.
Biosolids management system is beyond its service life and equipment is inefficient and corroded	Replacement of the existing biosolids treatment and dewatering systems is required as the current infrastructure is beyond its service life, corroded and very inefficient.

It is recommended that the existing infrastructure issues need to be categorized into short-term and long-term renewal and replacement (R&R) projects and a time-frame developed to implement the improvements. However, many of these issues can be addressed by constructing more of the new 6.0 MGD Wildwood WRF improvements now and eliminate spending more capital infrastructure dollars on the old, aging and soon to be decommissioned treatment facility. The proposed capital improvements associated with the new 6.0 MGD AADF treatment facility are presented in Section 6 of this Conceptual Design Report.

SECTION 3

NUTRIENT REMOVAL PRINCIPLES

3.1 GENERAL

This Section of the Conceptual Design Report (CDR) discusses the general principles of nutrient removal from wastewater, factors affecting the processes and includes a discussion of the following:

- Biological Nitrogen Removal
- Biological Phosphorus Removal
- Chemical Phosphorus Removal

3.2 PRINCIPLES OF BIOLOGICAL NITROGEN REMOVAL

3.2.1 General

The biological removal of nitrogen in wastewater treatment systems occurs by various primary mechanisms, including the following:

Mechanism	Description
Biomass Synthesis	The biological synthesis of a portion of the nitrogen in the wastewater into microbial cellular mass (nitrogen assimilation)
Ammonification	Conversion of organic nitrogen, via microbial activity and hydrolysis, to ammonia ($\text{NH}_3/\text{NH}_4^+$)
Nitrification	A two-step biological process for the conversion of ammonia ($\text{NH}_3/\text{NH}_4^+$) to nitrates (NO_3^-) in an aerobic environment
Denitrification	<i>The conversion of nitrate (NO_3^-) to nitrogen gas (N_2) by reacting the nitrate with organic carbon under anoxic conditions</i>

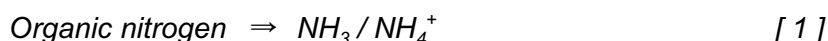
3.2.2 Biomass Synthesis and Sludge Wasting

BOD₅ removal in biological treatment systems occurs via microbial action and cell growth. For domestic wastewaters, fifteen to thirty percent (15 - 30%) of the influent nitrogen can be removed by biomass synthesis and sludge wasting. The removal efficiency is a function of the BOD/TN ratio and the biomass solids retention time.

If the Waste Activated Sludge (WAS) is processed by anaerobic digestion, approximately 50% of the nitrogen removed can be released in the digester as ammonia and returned eventually to the biological treatment system with dewatering sidestreams. Therefore, there is only a 10 - 15% net removal of nitrogen that occurs via biomass synthesis.

3.2.3 Ammonification

Ammonification is the conversion of soluble organic nitrogen into ammonia (NH₃) or ammonium (NH₄⁺) that occurs as bacteria consume soluble organic matter (BOD₅) containing nitrogen. The majority of the organic-nitrogen contained in the raw wastewater is converted as it travels through the collection system to the wastewater treatment facility. The formation of ammonia/ammonium from organic nitrogen, by microbial action, occurs as follows:



3.2.4 Nitrification

Nitrification is the sequential biological oxidation of ammonia or ammonium to nitrate (NO₃⁻) through a two-step process by two species of nitrifying bacteria in an aerobic environment. In the first step, ammonia is converted to nitrite by *Nitrosomonas* species and other autotrophic bacteria genera as follows:



The second step involves the conversion of nitrite (NO₂⁻) to nitrate (NO₃⁻) by *Nitrobacter* species and other autotrophic bacteria genera as follows:



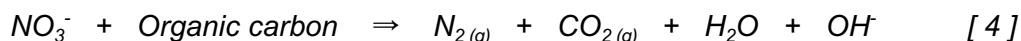
Both of the major species are autotrophic bacteria as they use carbon dioxide (CO₂) as the source of carbon for building cellular tissue. The two-step nitrification process is usually very rapid and therefore it is rare to find high concentrations of nitrite (NO₂⁻) in the effluent.

The nitrification reaction stoichiometry indicates the following:

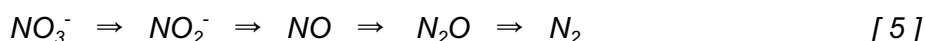
- 4.57 grams of O₂ are required per gram of ammonia-nitrogen converted
- 7.14 grams of alkalinity, measured as calcium carbonate (CaCO₃), are consumed per gram of ammonia-nitrogen consumed

3.2.5 Denitrification

Denitrification is the biological process where nitrate is transformed into nitrogen gas. Denitrifying organisms are primarily facultative heterotrophic bacteria that oxidize organics anaerobically by reducing nitrate in the absence of molecular oxygen or other oxygen sources. Denitrification by denitrifying microorganisms, in the absence of oxygen, occurs as follows:



Nitrate reduction follows as series of intermediate products as shown below:



The denitrification reaction stoichiometry indicates the following:

- Oxygen recovery is 2.86 mg O₂ per mg nitrate reduced
- Alkalinity recovery is 3.57 mg CaCO₃ per mg nitrate reduced
- Heterotrophic biomass production is approximately 0.40 mg VSS per mg COD consumed

Denitrification can be achieved in three (3) general ways:

- Supplying an exogenous carbon source such as Micro-C, methanol or acetate to the denitrification zone or reactor
- Using carbonaceous BOD in the wastewater as a degradable carbon source by either: (a) recycling a large amount of nitrified effluent back to an anoxic reactor at the head of the treatment system; or (b) diverting a portion of the raw influent or primary effluent flow to a zone containing nitrates
- Using endogenous carbon present in cell mass as the degradable carbon source

The process variables that significantly affect biological denitrification kinetics include carbon substrate type and concentration, dissolved oxygen concentration, alkalinity, pH and temperature.

3.2.6 Simultaneous Nitrification-Denitrification (SNdN)

Simultaneous nitrification-denitrification (SNdN) refers to a condition in the activated sludge or biofilm in which the bulk liquid dissolved oxygen (DO) concentration is low enough that the DO diffusing into the floc is removed before it can penetrate the entire floc depth. Therefore, nitrification is occurring on the exterior portions of the floc and denitrification is occurring in the anoxic, interior portion. Simultaneous nitrification-denitrification typically occurs in oxidation ditches and extended aeration processes with sufficient Solids Retention Time (SRT) and with aerobic and anoxic zones as flow moves downstream from the aeration or aerobic zone.

In simultaneous nitrification-denitrification (SNdN) systems, the nitrification and denitrification rates are lower than that for systems with separate nitrification zones with higher DO concentration and separate denitrification zones with no DO present.

Therefore, the reactor volumes for a simultaneous nitrification-denitrification system are larger than that for a system with a separate anoxic denitrification zone and higher DO aerobic nitrification zone.

3.2.7 Factors affecting Nitrogen Removal

A. Carbon Source

The quantity of carbon, in proportion to the nitrogen present in the wastewater, necessary to reduce the amount of nitrogen is a critical factor affecting the removal of nitrogen from wastewater streams. Relevant factors include the following:

- BOD / TKN Ratio: *A ratio of four (4) or greater is sufficient for biological nitrogen removal to occur.*
- COD / TKN Ratio: *Normal domestic wastewater contains a sufficient COD/TKN ratio to remove 65 - 85 percent of the nitrogen in single-pass process, attached-growth systems and moving-bed biofilm reactors.*
- Readily biodegradable COD to TKN Ratio (rbCOD / TKN)
- Volatile Fatty Acids (VFA's)

Simultaneous nitrification-denitrification (SNdN) in oxidation ditches can provide up to ninety percent (90%) nitrogen removal in the extended-aeration mode. Additional nitrogen removal can be achieved by installing a pre-anoxic zone. Processes such as the 4-Stage Bardenpho Process can fully utilize influent carbon and meet most limits except for very low targets.

External carbon sources such as Micro-C, methanol, acetate, molasses, and others may be necessary depending on the biological treatment system employed to achieve low nitrogen concentrations in the effluent. The advantage of the external carbon source is that the operation is independent of the nature and volume of the influent wastewater, giving the facility Operators much more flexibility. The disadvantage is that the additional carbon source will increase capital costs due to the construction of chemical storage, feed pumps, and piping and will require substantial operating costs for purchasing the chemicals and handling the extra sludge generated. The carbon source is typically added to the separate-stage anoxic zone or denitrification filters.

B. Number of Anoxic Zones

A single anoxic basin with an internal recycle stream can typically achieve reasonable rates of Total Nitrogen (TN) removal in the range of 6 - 8 mg/L. Internal recycle systems return nitrates produced by nitrification in the aeration (aerobic) zone to the anoxic zone for denitrification. With the anoxic zone at the beginning of the process, carbon source addition is not usually necessary since domestic wastewater typically provides enough carbon to achieve 65 - 85% removal.

The denitrification rate increases with increasing internal recirculation, up to a maximum of 500%. Denitrification in wastewaters with BOD/TKN ratios less than four (4) or COD/TKN ratios less than ten (10) typically is not benefitted by high internal recirculation as the wastewater has insufficient carbon to support an elevated denitrification rate.

Having two (2) anoxic zones allows lower TN effluent concentrations to be achieved as more of the nitrates produced after nitrification in the aeration (aerobic) zone can be treated by an internal recycle to the first anoxic zone or by flowing through the second anoxic zone. Reaeration is usually recommended after the second anoxic zone to both strip nitrogen gas formed in the anoxic zone and to decrease the possibility of denitrification in the secondary clarification system. This has the effect of reducing nitrogen gas release in the secondary clarifier(s), which could result in rising sludge. In addition, maintaining aerobic conditions prevents phosphorus release in the secondary clarifier(s). Adding a carbon source to the secondary anoxic zone can further increase denitrification by ensuring that sufficient carbon is available for the process to occur.

C. Alkalinity

Alkalinity is consumed as part of the nitrification process because hydrogen ions (H^+) are created when ammonia-nitrogen is converted to nitrate-nitrogen. Denitrification restores a portion of the alkalinity during the conversion of nitrate-nitrogen to nitrogen gas. As previously discussed, the nitrification process consumes 7.14 grams of alkalinity, as calcium carbonate ($CaCO_3$), per gram of ammonia-nitrogen removed. Denitrification produces 3.57 grams of alkalinity, as $CaCO_3$, per gram of nitrate-nitrogen removed. Therefore, to convert one (1) gram of ammonia-nitrogen to one (1) gram of nitrogen gas, approximately 3.57 grams of alkalinity, as $CaCO_3$, is consumed. Nitrification can generally occur between pH values from 6.5 - 8.0 standard units (s.u.). The recommended minimum alkalinity in the secondary effluent, for efficient conversion, is 50 - 100 mg/L as $CaCO_3$. If the alkalinity is below these minimum recommended levels, chemical addition (sodium hydroxide or lime) may be necessary to maintain alkalinity and pH levels.

D. Temperature

Temperature affects the biokinetic rate of both nitrification and denitrification reactions. At lower temperatures, the nitrification and denitrification rates decrease, leading to inefficient performance in winter months if operational changes are not made to compensate for the decreased biokinetic rates. Typical wastewater temperatures at a treatment facility range between 10 and 25 °C which is sufficient for efficient nitrification to occur (4 - 35 °C).

Denitrification is also subject to temperature, although to a lesser extent than nitrification. On the basis of a wastewater temperature range of 10 - 25°C, the denitrification rate would be expected to vary by a factor of approximately 1.50. Alternative carbon sources should be explored to determine if an additional carbon supply could provide better denitrification performance in cold weather conditions (fall/spring) than others. Alternatively, external carbon might not be needed at all during warm weather conditions (spring/summer), because the process might be able to meet the treatment objectives and permit conditions with the carbon available in the raw wastewater.

E. Dissolved Oxygen

Nitrification requires the presence of sufficient dissolved oxygen (DO) and the rate of nitrification can be limited when the DO concentration is too low to support a sufficiently high oxygen transfer rate. In domestic activated sludge treatment systems with hydraulic detention times of 6 - 8 hours, the nitrification rate is maximized when the DO concentration is 2.0 mg/L or greater. Fixed-film

systems may need higher DO concentrations to prevent the attached biomass from becoming anaerobic, which could lead to poor system performance.

However, the presence of DO, at concentrations of 0.2 mg/L or greater decrease the denitrification rate in the anoxic zone. Denitrification is made most efficient when DO is kept low throughout the anoxic zone. Therefore, low DO levels in the internal recycle or RAS lines can effectively reduce the required hydraulic detention time of the anoxic zone.

F. Hydraulic Detention Time (HDT)

The Hydraulic Detention Time (HDT) affects the amount of nitrification and denitrification that can occur in a wastewater treatment facility. The aerobic zone(s) of single nitrification/denitrification processes must be large enough to allow most of the carbonaceous BOD to be consumed before nitrification can begin. The size of the anoxic zone(s) must be sufficient to allow denitrification to occur without consuming the entire carbon source that might be needed for biological phosphorus removal.

Some wastewater treatment facility's are designed with *swing* zones that can be operated as an *aerobic* zone during the summer months and an *anoxic* zone during the winter months, when low temperatures cause a decrease in the denitrification rates. However, sufficient aerobic detention time must be maintained for adequate nitrification.

G. Solids Retention Time (SRT)

The Solids Retention Time (SRT) is critical in that it must be long enough to maintain nitrification. The microorganisms responsible for nitrification have a much slower growth rate than other heterotrophic bacteria. Therefore, doubling of the nitrifying microbial population requires an SRT that is 10 - 20 times longer than that for other heterotrophic bacteria. Maintaining longer solids retention times can also reduce the amount of energy required for mixing if reactor/tank sizes and liquid volumes can be reduced.

The optimum SRT for a given wastewater treatment facility depends on wastewater temperature, DO concentration in the aerobic zone, pH, alkalinity, inhibition from chemicals, and variations in hydraulic flow and organic load.

Denitrifying microorganisms are relatively slow-growing and can be subject to washout at high flows in the bioreactor or secondary clarifier. Therefore, proper secondary clarifier design must ensure the maximum retention for the slower growing microorganisms to maintain reliable nitrogen removal performance.

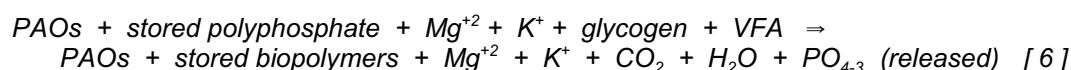
3.3 PRINCIPLES OF BIOLOGICAL PHOSPHORUS REMOVAL

3.3.1 General

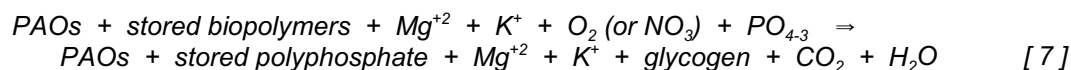
Biological phosphorus removal in wastewater treatment facility's is accomplished by encouraging the growth of Phosphate-Accumulating Organisms (PAOs). PAOs are heterotrophic bacteria that occur naturally in the environment and in aerobic activated sludge. The growth of PAOs is encouraged by cycling them between anaerobic and aerobic conditions.

Under anaerobic conditions, the heterotrophs break the high-energy bonds in internally accumulated polyphosphate, resulting in the release of phosphate (PO_4^{3-}) and the consumption of organic matter in the form of volatile fatty acids (VFAs) or other easily biodegraded organic compounds. VFAs include short-chained carboxylic acids such as acetic, propionic, butyric and valeric. When the heterotrophs are then put under aerobic conditions, they take up phosphate, forming internal polyphosphate molecules. This *luxury uptake* results in more phosphate being incorporated in the microbial cells than was released in the anaerobic zone, thereby reducing the total phosphate concentration in solution. When the microorganisms are wasted, the contained phosphate is also removed.

The anaerobic biological phosphorus release by PAOs is represented by the following biochemical equation:



The aerobic biological phosphorus uptake by PAOs is represented by the following biochemical equation:



Microorganisms also remove phosphate as part of the normal BOD removal process in a municipal treatment facility, typically 1.5 - 2.0%, on a dry weight basis.

When these organisms enriched in polyphosphate are wasted, the contained phosphate is also removed. PAOs that are exposed to an anaerobic environment followed by an aerobic environment are capable of removing 2 - 4 times more phosphorus than those used in conventional activated sludge systems. Therefore, the fraction of phosphorus in WAS can be at least 8%, on a dry solids basis. The key to removing phosphorus, biologically, is a sufficient supply of VFAs.

To obtain effluent total phosphorus concentrations below 1.0 mg/L, the following minimum ratios of Substrate (BOD₅) to Total Phosphorus (TP) are recommended:

Table 3.3-1: Minimum Substrate to TP Ratio's to Achieve Low TP	
Substrate Type to TP Ratio	Recommended "Minimum" Ratio
COD / TP	40 - 45
BOD / TP	20
rbCOD / TP *	10 - 16
VFA / TP	4 - 16

* rbCOD is the *readily biodegradable COD* and is the most accurate measure of the potential for effective biological phosphorus removal.

To meet low level phosphorus permit limits, biological nutrient removal combined with chemical polishing and effective filtration processes, are typically required.

3.3.2 Factors Affecting Phosphorus Removal

A. Volatile Fatty Acid (VFA) Availability

A key factor in determining the effectiveness of biological phosphorus removal is the relative amount of organic material that can be used by the PAOs. If VFAs or rbCOD is not present in a sufficient ratio relative to the amount of ortho-phosphorus, the process becomes less reliable and phosphorus removal can be diminished.

Generation of VFAs, at the treatment facility, can be accomplished by the following:

- Adding a fermentation unit to process either primary sludge or RAS
- Returning supernatant from an existing anaerobic digester
- Converting a sludge thickener

Fermentation units can be single-stage or two-stage. They are optimized by adding a mixer that allows VFAs in the solids to enter the anaerobic zone directly. A source of elutriating water, either primary effluent or final effluent, is fed to the fermentation unit to flush out the VFAs produced and sent to the

anaerobic zone. Production of VFAs from a fermentation unit typically yields 0.066 to 0.15 g VFA/g total solids (both expressed as COD). Complete-mix fermentation units are typically operated with a Hydraulic Detention Time (HDT) of 6 - 12 hours, a Solids Retention Time (SRT) of 4 - 8 days, and a 1 - 2% solids concentration.

B. Solids Retention Time (SRT)

Biological phosphorus removal performance is related to the Solids Retention Time in the treatment system. Longer retention times are required in the winter months and shorter times required in the summer months.

A minimum system Solids Retention Time of 3 - 4 days, based on total reactor volume, is sufficient for biological phosphorus removal in temperate climate conditions. As long as there are sufficient VFAs available, higher Solids Retention Times, up to 30 days, will not increase phosphorus uptake because the PAO concentration in the mixed liquor will increase until either the VFAs or the available phosphates become limiting.

If the Solids Retention Time becomes too great, the quality of the effluent will decrease as endogenous respiration will cause the release of phosphorus as the biomass degrades.

C. Temperature

Although the biological phosphorus removal process is not significantly affected by temperature, the fermentation process is slower at low temperatures. Therefore, lower phosphorus removal might occur in the winter months because of reduced VFA production in treatment facility's that use fermentation units. The temperature effect has a direct influence on the sludge age needed for adequate generation of VFAs.

Low temperatures can also lower phosphorus uptake, although this is not typically an issue in well operated and properly acclimated treatment facility's. Reduced phosphorus removal performance in the winter months is typically caused by reduced fermentation or increased DO and nitrate inputs to the anaerobic zone.

At the upper end of the temperature range, the phosphorus uptake activity of PAOs is typically reduced above 30°C and seriously inhibited activity occurs at 40°C. At temperatures above 30°C, Glycogen-Accumulating Organisms (GAOs) flourish and are detrimental to enhanced biological phosphorus removal.

D. Dissolved Oxygen and Nitrates in the Anaerobic Zone

When dissolved oxygen is present in the anaerobic zone of the treatment facility, heterotrophic aerobic microbes use the oxygen and will compete with the PAOs for VFAs. This condition results in less VFA storage and, therefore, less biological phosphorus removal. If oxygen is available, PAOs can metabolize VFAs completely, will not release phosphorus in the anaerobic zone during VFA storage, and will not take up excess phosphorus in the aerobic zone.

The presence of nitrates in the anaerobic zone will deplete the amount of VFAs available to PAOs, just as the presence of dissolved oxygen does. Nitrates can also inhibit fermentation of rbCOD and reduce the production of VFAs since most of the fermenting microorganisms are facultative and can use nitrate as an electron acceptor to fully oxidize the non-VFA rbCOD instead of producing VFAs as the end product.

Oxygen and nitrate can be inadvertently added back to the anaerobic zone of the treatment facility as presented in Table 3.3-2.

Table 3.3-2: Oxygen and Nitrate Introduction to the Anaerobic Zone	
Oxygen Introduction to the Facility Anaerobic Zone	Nitrate Introduction to the Facility Anaerobic Zone
Return Activated Sludge (RAS) stream	Return Activated Sludge (RAS) stream
Other recycle streams	Mixed liquor recycled from anoxic zones
Backmixing from inadequately baffled aerobic zones	Backmixing from inadequately baffled anoxic zones
	Recycle streams such as supernatant, filtrate and centrate from sludge handling facilities

Significant nitrate interference of the biological phosphorus removal system at the treatment facility is much more common than dissolved oxygen interference. Controlling nitrate introduction to the anaerobic zone is critical to the proper design and operation of a biological phosphorus removal facility.

E. Dissolved Oxygen in the Aerobic Zone

PAOs require oxygen to digest the storage products and uptake and retain phosphorus in the aerobic zone. Maintaining a sufficiently high dissolved oxygen transfer in the aerobic zone enhances process stability and is a key

factor in biological phosphorus removal. The appropriate dissolved oxygen concentration in the mixed liquor, for a non-limiting oxygen transfer rate, is a function of the Solids Retention Time (SRT), the Mixed Liquor Suspended Solids (MLSS) concentration and the actual hydraulic detention time in the reactor.

Dissolved oxygen concentrations in various treatment systems are presented in Table 3.3-3.

Table 3.3-3: DO Requirements for Effective Biological Phosphorus Removal	
Treatment System	Dissolved Oxygen Requirements (mg/L)
High Rate Systems	> 2.0
Long Detention Time Systems	< 0.5

Re-aeration is typically required to ensure that there is sufficient DO in the mixed liquor suspended solids in the secondary clarification system to prevent the release of phosphorus during secondary clarification.

F. pH

Low pH can reduce and even prevent biological phosphorus removal from occurring in a wastewater treatment facility. Research and operational experience has shown the following and needs to be accounted for in design and operation of BNR facilities:

- It is not possible to establish Biological Phosphorus Removal (BPR) when the pH in the anaerobic zone is less than 5.5, even if an abundant amount of VFAs are present in the anaerobic zone
- At pH's below 6.9, a decrease in the efficiency of the BPR process occurs
- Low pH values in the aerobic zone inhibit biological phosphorus removal
- PAOs have the advantage over the GAOs if the aerobic zone pH is 7.0 or greater
- Robust continuous-flow BPR systems commonly experience a large pH swing between the anaerobic and aerobic zones

G. Hydraulic Detention Time (HDT)

Biological phosphorus removal can be impacted by the Hydraulic Detention Time (HDT) of both the anaerobic and aerobic zones. In the anaerobic zone, sufficient time is needed for the fermentation of non-VFA rbCOD to VFAs and for the storage of PHAs. If most of the fermentation is to take place in the anaerobic zone, a Hydraulic Detention Time of 1 - 2 hours is typically required. VFA uptake and storage as PHAs occurs fairly rapidly. Therefore, the Hydraulic Detention Time can be much shorter if fermentation of rbCOD in the anaerobic zone is not a significant source of VFAs. Detention times of 30 - 60 minutes are typically required.

The anaerobic zone hydraulic detention time typically varies from 5 - 15% of the total nominal Hydraulic Detention Time of a full Biological Nutrient Removal (BNR) system removing both nitrogen and phosphorus. The actual value depends primarily upon whether or not VFAs are supplied to the anaerobic zone from a source other than the influent wastewater.

H. Secondary Phosphorus Release

Biological phosphorus removal occurs in a two-step process, as previously discussed, in which phosphorus is released in the anaerobic zone by PAOs and then taken up by the same PAOs in the aerobic zone. The microorganisms favored in the anaerobic zone are capable of absorbing more phosphorus in the aerobic zone than was released in the anaerobic zone, leading to a *net reduction in phosphorus* when these microorganisms are removed from the treatment process through secondary clarification and wasting of biosolids (WAS) to achieve steady-state conditions in the system.

However, if the PAOs are put under anaerobic conditions following phosphorus uptake, there will be unintended *secondary release* of phosphorus. Anaerobic conditions can arise in the following locations:

- Secondary clarifiers with long SRT's
- Inside tertiary filtration systems
- Biosolids handling operations
- Activated sludge process reactors if aeration is not maintained at a sufficiently high level or if the extent of oxygen *tapering* through a plug flow system is too great

The released phosphorus is commonly returned to the headworks or the secondary treatment process, via the RAS from the secondary clarifiers or supernatant/filtrate/centrate from sludge handling operations. This recirculated phosphorus increases the load on the secondary treatment process and decreases the overall biological phosphorus removal that can be achieved.

To minimize *secondary* phosphorus release, the following practices are typically implemented at a wastewater treatment facility:

- Minimizing the amount of time that MLSS and RAS are held before recirculation
- Reducing return flows from biosolids handling operations
- Treating the biosolids handling return streams before introduction to the secondary treatment process
- Side stream treatment
- Alum addition to the tertiary filtration system

3.4 PRINCIPLES OF CHEMICAL PHOSPHORUS REMOVAL

3.4.1 General

Chemical precipitation is commonly used to remove phosphorus at wastewater treatment facilities in the United States. Chemicals such as metal salts or lime can be added to primary, secondary, or tertiary processes or at multiple locations within the treatment facility. Solids removal following chemical precipitation can be conventional, such as primary or secondary clarification, or advanced, such as tertiary filtration or alternative technologies. Chemical precipitation can be used alone or in conjunction with Biological Phosphorus Removal (BPR) to reduce the costs associated with the chemical dose and sludge production.

The two most commonly used metal salts are *aluminum sulfate* (alum) and *ferric chloride* (FeCl_3). *Sodium aluminate* ($\text{Na}_2\text{Al}_2\text{O}_4$) can serve as a source of alum, although it can increase the pH substantially. Various forms of *polyaluminum chloride* (PAC or $\text{Al}_n(\text{OH})_m\text{Cl}_{(3n-m)}$) can also be used for chemical precipitation. Ferrous sulfate (FeSO_4) and ferrous chloride (FeCl_2), which are available as byproducts of steel-making operations (pickle liquor) are also used. Lime is typically available in solid form as either quicklime (CaO) or hydrated lime $\text{Ca}(\text{OH})_2$. Chemical precipitants used for phosphorus removal are presented in Table 3.4-1.

Table 3.4-1: Chemicals Used for Phosphorus Removal

Chemical	Formula	Description	Commercial Soln
Aluminum Sulfate (Alum)	$\text{Al}_2(\text{SO}_4)_3 \cdot 14(\text{H}_2\text{O})$	Crystallized, dry form or liquid	48%
Sodium Aluminate	$\text{Na}_2\text{Al}_2\text{O}_4$	Powder or liquid form	20%
Polyaluminum Chloride (PACl)	$\text{Al}_n\text{Cl}_{(3n-m)}(\text{OH})_m$	Range in the degree of basicity and aluminum concentration	51%
Ferric Chloride	FeCl_3	Orange-brown aqueous solution	37 - 47%
Pickle liquor (Ferrous sulfate or ferrous iron)	FeSO_4 or Fe^{+2}	Green aqueous solution	Varies
Lime	CaO or $\text{Ca}(\text{OH})_2$	Dry white powder or liquid form	

Chemical precipitation will remove only the *phosphate fraction* of total phosphorus in the wastewater. Influent phosphate is typically 50 - 80% of total phosphorus and generally exists in one of two forms, H_2PO_4^- and HPO_4^{2-} . Polyphosphates will not react with metal salts or lime; however, they are converted to phosphate during biological treatment. Organically-bound phosphorus typically makes up the smallest fraction of total influent phosphorus (< 1.0 mg/L). The colloidal and particulate portion is generally removed during solids separation processes. The soluble organic fraction may either be hydrolyzed into orthophosphate during the treatment process, if biodegradable, or will pass through the treatment facility if non-biodegradable.

3.4.2 Chemical Reactions

The metal salt dose for chemical phosphorus removal is a critical design and economic parameter for chemical treatment systems. In addition to chemical dose, the design and performance issues that can affect the phosphorus removal efficiency in the system are as follows:

- Wastewater characteristics
- Method of chemical addition
- Chemical addition feeding point(s)

- Reaction pH
- Flocculation method
- Time after chemical addition

The metal salt dose is commonly described in terms of the moles of metal added (M_{dose}) per mole of soluble phosphorus in the influent (P_{in}). The stoichiometric dose is based on the addition of one mole of metal salt per mole of phosphorus. The metal will react with the phosphorus to form a metal-phosphate precipitate as follows:



At relatively high effluent phosphorus concentrations, above 1.0 mg/L, the stoichiometric relationship for metal salt dose is commonly observed. The molar ratio increases above the stoichiometric ratio as lower effluent phosphorus concentrations are required (< 0.50 mg/L). This can be attributed to substantial metal hydroxide formation in addition to metal phosphorus precipitates.

3.4.3 Factors Affecting Chemical Phosphorus Removal

A. Phosphorus Species

Phosphorus in the raw wastewater occurs in three (3) forms:

- Organically-bound phosphorus
- Polyphosphates
- Orthophosphates

Organically-bound phosphorus can be settled in the primary clarifiers or transformed into orthophosphates by the microorganisms in the secondary treatment process.

Polyphosphates are soluble and pass through the primary clarifiers. In the secondary treatment process, the polyphosphates are converted biologically into orthophosphates.

Orthophosphates are also soluble and will pass into the final effluent if they are not removed biologically or chemically. Orthophosphates readily form a precipitate following the addition of metal salts, forming a floc that can then be settled or filtered from the wastewater secondary effluent.

B. Chemicals Used

Alum ($\text{Al}_2(\text{SO}_4)_3 \cdot 14(\text{H}_2\text{O})$) and *ferric chloride* (FeCl_3) are often used for chemical phosphorus removal. The choice of which chemical to use is made on the basis of jar testing, chemical costs and the impact on downstream processes. Alum sludge can be more difficult to thicken and dewater than ferric chloride sludge. However, ferric chloride is more corrosive and requires special piping and fittings.

Ferrous sulfate (FeSO_4) is a viable alternative if a source is available. The presence of other metals or species that react with phosphate can cause simultaneous precipitation of multiple metal phosphates or complexation effects that could require higher aluminum or ferric doses than expected.

C. Metal to Phosphorus Ratio

The phosphorus removal percentage increases and effluent phosphorus concentration decreases as the molar chemical dose for metal salts increases. However, the incremental phosphorus removal diminishes with increased dosages. For typical influent phosphorus concentrations, ferric to phosphorus molar doses above 1.5 - 2.0 are sufficient to remove 80 - 98% of the soluble phosphorus. To reach effluent TP concentrations below 0.10 mg/L requires molar ratios of approximately 6 - 7. A higher dosage is required when using alum, PACl or sodium aluminate.

For a given amount of phosphorus to be removed, the amount of chemical that needs to be fed is less for treatment facilities that utilize tertiary chemical treatment following biological phosphorus removal (BPR) rather than one- or two-point chemical phosphorus removal systems.

D. Feed Point Location

Chemicals for phosphorus removal can be added at the following locations:

- Primary clarifiers (upstream)

- Biological treatment system
- Secondary clarifiers (upstream)
- Tertiary treatment process

To form a good settling floc mass, the chemical needs to be well-mixed with the wastewater at the feed location.

E. Number of Feed Points

Alum or ferric chloride can be fed at one, two, or more locations in the treatment facility. Single-point application typically works well for facilities that need to achieve moderate phosphorus removal concentrations (approximately 0.5 mg/L). Two feed points, which might be either primary and secondary clarifiers or secondary clarifiers and tertiary treatment, are typically used to achieve lower phosphorus concentrations and can use less chemicals than dosing in one location. Tertiary treatment processes typically operate more efficiently if the TP concentration in the secondary effluent is less than 1.0 mg/L.

F. Mixing Requirement

Rapid mixing at the dosage point is required to ensure that the metallic salt and phosphate molecules react. Mixing requirements are generally in the following ranges to promote efficient mixing and phosphorus removal:

- Velocity Gradient (G): 200 - 300 sec⁻¹
- Hydraulic Detention Time (HDT): 10 - 30 seconds

After rapid mixing at the dosage point, slow mixing (flocculation) is needed to form flocs that can be settled or removed through a solids separation process. This process is critical for meeting low effluent phosphorus requirements. Movement of the wastewater through the treatment facility is sufficient for floc formation. Flocculation processes are typically limited by insufficient time or conditions that disrupt floc formation (pumping and aeration).

G. pH and Alkalinity

Chemical precipitation of phosphorus from wastewater is most efficient within a pH range of 5.5 to 7.2. Between pH 7.2 and 10, phosphorus removal

efficiency declines as the surfaces of metal hydroxides are more negatively charged, and soluble iron hydroxides begin to form. At low pH values, the solubility of the precipitant is reduced, and at extremely low pH values, metal hydroxide precipitation is limited.

Alum and ferric chloride are acidic and therefore capable of lowering the pH of the facility effluent. If sufficient alkalinity is not available to adequately buffer the wastewater, pH adjustment may be required.

H. Suspended Solids Removal

Solids separation methods are critical for determining the efficiency of phosphorus removal by chemical precipitation as a large portion of the effluent phosphorus is contained in chemical precipitates. Solids separation technologies, such as clarification and filtration, are used in combination to achieve low effluent TP levels. Polymers may be required in addition to the metal salts for phosphorus precipitation to enhance removal for fine particles and colloids.

Gravity separation in primary and/or secondary clarifiers is a common solids separation method employed at treatment facilities. Tertiary clarifiers used in chemical precipitation processes are very similar to primary and secondary clarifiers, with the exception that flocculation zones are provided to ensure proper flocculation time after chemical addition.

Tertiary filtration following clarification with chemical addition is commonly used as a polishing step to reduce TSS and to achieve effluent TP concentrations below 0.50 mg/L.

I. Sludge Handling Operations

Sludge production and handling is generally considered to be one of the disadvantages of chemical phosphorus removal. Chemical precipitation methods always produce additional solids due to generation of metal- or calcium-phosphate precipitates and metal hydroxide sludge. The amount of increased sludge production will depend on the location of chemical addition, the chemical dose used, and the constituents present in the wastewater effluent.

The addition of metal salts to the primary clarifier system, for the purpose of enhancing phosphorus removal, can increase primary treatment sludge production by 50 - 100%. Secondary sludge production will be reduced as additional TSS and BOD are removed in the primary clarifier. The total overall facility sludge production can be expected to increase by 60 - 70%.

The addition of metal salts to the secondary treatment process to achieve effluent phosphorus concentrations in the range of 0.50 to 1.0 mg/L, with the stoichiometric metal salt dose in the range of 2.0, will generally lead to a 35 - 45% increase in secondary sludge production. The total overall facility sludge production can be expected to increase by 10 - 25%.

For tertiary applications to achieve effluent TP concentrations of less than 0.10 mg/L, the chemical stoichiometric dose is typically 2 - 3 times that required for secondary treatment. The amount of phosphorus to be removed is much less than in the primary or secondary regimes. The total overall facility sludge production can be expected to increase by 10 - 40%.

The use of metal salts can result in increased inorganic salts (salinity) in the sludge and in the effluent. Salinity can create potential environmental issues when:

- Biosolids are land applied
- Effluent is returned to a receiving waters or existing water supply reservoirs
- Reclaimed water spray irrigation is applied to public or restricted access sites

High total salt concentrations can reduce germination rates for crops and negatively affect the soil structure, in addition to potential taste and odor problems.

Phosphorus can also be released from the chemical sludge if the sludge is exposed to or stored in an anaerobic environment. Return flows, such as supernatant or water from sludge thickening or dewatering operations, can contain high levels of phosphorus. Maintaining aerobic conditions in the sludge is critical.

SECTION 4

NUTRIENT REMOVAL TECHNOLOGIES

4.1 GENERAL

This Section of the Conceptual Design Report identifies the nutrient removal technologies available to reduce the nutrient concentrations from the reclaimed water/effluent produced at the Wildwood WRF and will be subdivided into discussions of the following groups of technologies:

- Nitrogen Removal Technologies
- Phosphorus Removal Technologies
- Combined Nitrogen and Phosphorus Removal Technologies

Nitrification is an aerobic process in which autotrophic bacteria oxidize ammonia or nitrite for energy production. Ammonia-nitrogen ($\text{NH}_3\text{-N}$) is first converted to nitrite (NO_2^-) by ammonia oxidizing bacteria. The nitrite produced is then converted to nitrate (NO_3^-) by nitrite oxidizing bacteria. Both reactions usually occur in the same process unit at a treatment facility. Denitrification is the biological reduction of nitrate or nitrite to nitrogen gas (N_2) in the absence of oxygen or under “anoxic” conditions.

The raw wastewater entering the treatment facility is approximately 70 - 80% ammonia. Therefore, Total Nitrogen (TN) removal requires that nitrification occur first followed by denitrification. The Wildwood WRF was originally designed to remove oxygen demanding wastes, ammonia-nitrogen and partially remove nutrients in the facility effluent. There were no limits on nitrate or Total Nitrogen. However, due to the environmental degradation of surface and ground waters throughout the State, and upcoming nutrient regulations, the City is being proactive and improvements to the Wildwood WRF are being proposed to meet Advanced Wastewater Treatment (AWT) Standards.

Biological nitrogen removal can be accomplished by a variety of treatment configurations using suspended growth, attached growth, or a combination of these systems. Nitrification, denitrification and biochemical oxygen demand (BOD) removal can be accomplished in a single process with bioreactors followed by secondary clarifiers. Systems can also be designed as separate stage systems with nitrification and BOD removal occurring in the

same bioreactor or in separate bioreactors, and denitrification occurring in a tertiary process. Membrane bioreactors can be used for solids separation instead of secondary clarifiers.

Sidestream treatment processes, for supernatant, filtrate and/or centrate streams, can also be used to enhance the nitrification process at the treatment facility. Supplemental carbon (Micro-C, methanol, fermented wastewater or biosolids, acetic acid, ethanol, sugar, glycerol, etc.) may be required in denitrification systems, and advanced solids separation methodologies such as membrane bioreactors (MBR) and effluent filtration can be used to achieve very low total nitrogen (TN) concentrations.

Biological Nitrogen Removal Technologies are presented in Table 4.1-1 and discussed thoroughly herein.

Table 4.1-1: Biological Nitrogen Removal Technologies		
Configuration	Type	Technology
Single Process Unit for Nitrification and Denitrification	Suspended Growth	Cyclically Aerated Activated Sludge (CAAS) Process
		Modified Ludzack-Ettinger (MLE) Process
		4-Stage Bardenpho Process
		MLE or 4-Stage Bardenpho w/Membrane Bioreactor
		Sequencing Batch Reactor (SBR)
		Oxidation Ditch with Anoxic Zone
		BIODENITRO - Dual Oxidation Ditch
		Step Feed Activated Sludge Process
	Attached Growth or Hybrid	Schreiber Process
		Simultaneous Nitrification Denitrification (SNdN)
		Integrated Fixed Film Activated Sludge (IFAS)
		Membrane Bioreactor (MBR)
		Moving Bed Biofilm Reactor (MBBR)
Separate Stage - Nitrification	Suspended Growth	Nitrification - Sidestream Treatment
	Attached Growth or Hybrid	Biological Aerated Filters (BAF)
Separate Stage - Denitrification	Suspended Growth	Suspended Growth Reactors
	Attached Growth	Denitrification Filter - Upflow, Continuous Backwash - Downflow

4.2 NITROGEN REMOVAL TECHNOLOGIES

4.2.1 Cyclically Aerated Activated Sludge (CAAS) Process

In a Cyclically Aerated Activated Sludge (CAAS) Process, a conventional activated sludge process reactor is utilized and the aeration system is programmed to turn “off” periodically. This sequencing produces aerobic and anoxic zones thereby allowing simultaneous nitrification-denitrification (SNdN) to occur in the same reactor. A flow schematic of the CAAS Process is presented in Figure 4.2-1. The conversion of an existing activated sludge process to the CAAS Process is simplistic and cost effective with little capital expenditure required.

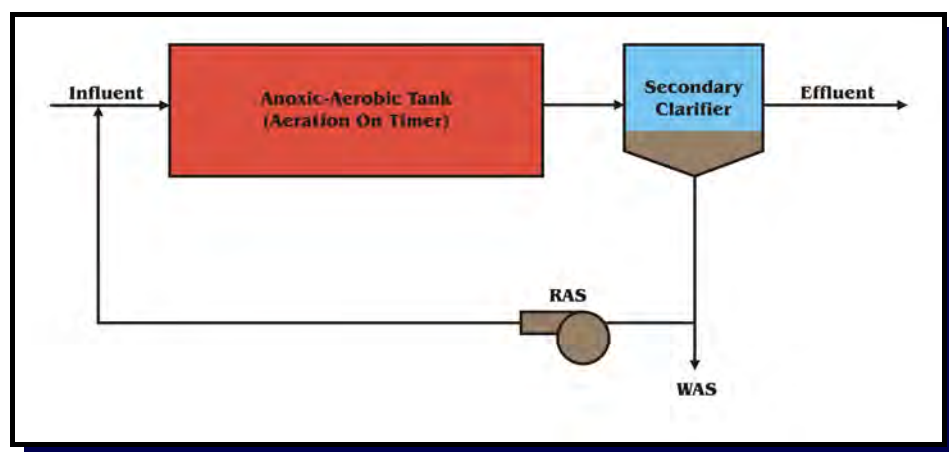


Figure 4.2-1: Cyclically Aerated Activated Sludge (CAAS) Process

The CAAS Process can be used to retrofit existing treatment facilities if sufficient solids retention times can be maintained to allow nitrification to occur. The length of the cycle time depends on the loading rate and the target limit, with the hydraulic detention time being approximately 2 - 4 times the cycle time. If the aerobic solids retention time is sufficient to achieve nitrification, the cyclic process can reduce effluent TN concentrations.

Aeration of the biological reactor can be provided by diffusers or surface aerators. Sequencing batch reactors (SBRs) and oxidation ditches can be designed to operate as cyclically aerated activated-sludge systems providing SNdN.

Typical effluent TN concentrations achieved by the Cyclically Aerated Activated Sludge (CAAS) Process are in the range of 6 - 15 mg/L.

4.2.2 Modified Ludzack-Ettinger (MLE) Process

One of the most commonly used nitrogen removal processes at wastewater treatment facilities is the Modified Ludzack-Ettinger (MLE) Process. It is classified as a pre-denitrification, single sludge, suspended growth system and is depicted in Figure 4.2-2. The MLE process consists of an initial anoxic zone followed by an aerobic zone. Return Activated Sludge (RAS) is mixed with the influent raw wastewater prior to the anoxic zone. An internal recycle carries nitrate-rich MLSS, created during the nitrification process in the aerobic zone, along with mixed liquor (RAS and influent wastewater) to the anoxic zone for denitrification. Nitrification occurs in the aerobic zone along with the removal of virtually all remaining soluble BOD.

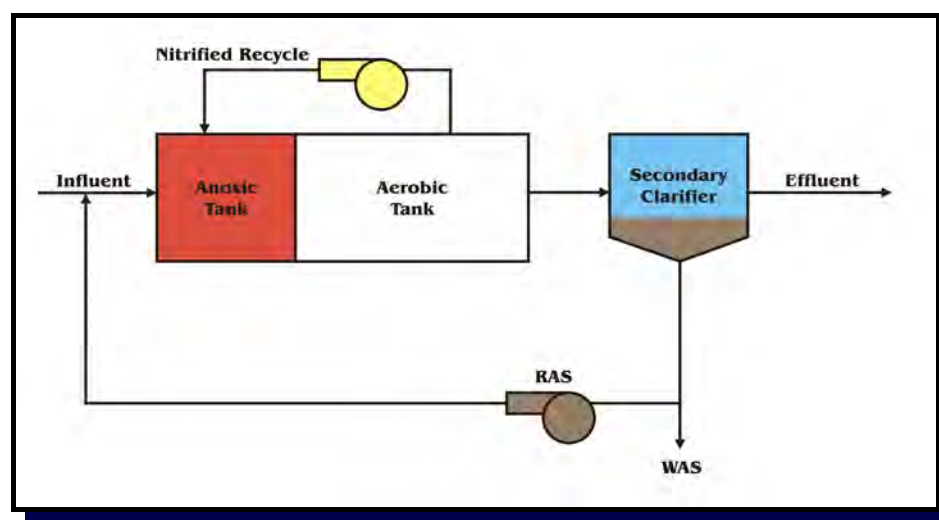


Figure 4.2-2: Modified Ludzack-Ettinger (MLE) Process

The extent of denitrification in the system is directly related to the mixed liquor recycle flow. Higher recycle rates will increase the amount of denitrification occurring in the system. The maximum denitrification potential of the MLE Process is 82% at a recycle rate of 500% and is limited by the following factors:

- Carbon source availability
- Anoxic and aerobic zone sizing
- Process kinetics
- The mass flow rate of oxygen recycled from the aerobic zone back to the anoxic zone (can negatively affect the denitrification rate in the anoxic zone)

Since only recycled nitrate has the opportunity to be denitrified, the MLE process alone cannot achieve extremely low final total nitrogen (TN) concentrations. An external carbon source is typically required to maintain denitrifying activity.

Typical effluent TN concentrations achieved by the Modified Ludzack-Ettinger (MLE) Process are in the range of 5 - 10 mg/L.

4.2.3 4-Stage Bardenpho Process

The 4-stage Bardenpho Process, depicted in Figure 4.2-3, consists of the following reactor zones:

- Primary anoxic zone
- Primary aerobic zone, with an internal recycle to the primary anoxic zone
- Secondary anoxic zone
- Secondary aerobic zone

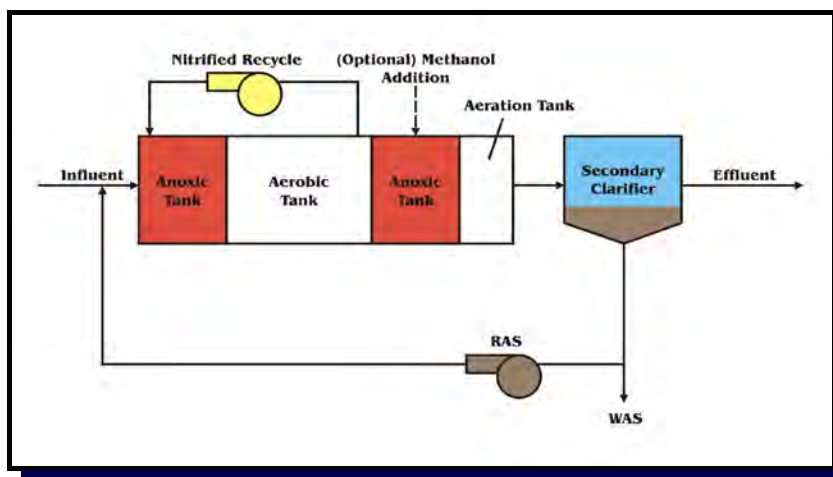


Figure 4.2-3: 4-Stage Bardenpho Process

The primary anoxic zone receives nitrate-rich MLSS from the primary aerobic zone, via an internal recycle loop that provides up to 500% recycle, and accomplishes the bulk of the denitrification. The secondary anoxic zone removes nitrates from the primary aerobic zone that are not recycled to the primary anoxic zone. Although the available carbon source might be adequate, it is likely that the secondary anoxic zone will require supplemental carbon, with the associated generation of additional biosolids and increased operation and maintenance costs.

The secondary aerobic zone removes the nitrogen gas from the effluent before it enters the secondary clarifiers. The aeration provided in the secondary aerobic zone:

- Reduces the possibility of denitrification in the secondary clarifiers
- Provides enhanced settling of the MLSS in the secondary clarifiers
- Improves the overall operation of the secondary clarifiers

The 4-Stage Bardenpho Process has been used in numerous reactor configurations including plug flow (PFR), complete-mix (CSTR), oxidation ditches and oxidation ditches with external secondary basins. However, the 4-Stage Bardenpho Process requires a large footprint and has increased operating and maintenance costs.

Typical effluent TN concentrations achieved by the 4-Stage Bardenpho Process are in the range of 3 - 6 mg/L.

4.2.4 MLE or 4-Stage Bardenpho Process with a Membrane Bioreactor (MBR)

Membrane Bioreactors (MBRs) use hollow-fiber or plate membranes for solids-liquid separation instead of conventional secondary clarification. MBR's can be used in conjunction with either an MLE or 4-Stage Bardenpho System to provide biological nitrogen removal. The membranes can either be immersed in the final aerobic zone, or they can be operated as a separate, stand-alone unit. If they are operated as a separate unit, an internal recycle system is required to return a portion of the solids retained by the membranes to the anoxic zone. Schematic diagrams of a 4-Stage Bardenpho System with an internal MBR and external MBR are presented in Figures 4.2-4 and 4.2-5, respectively.

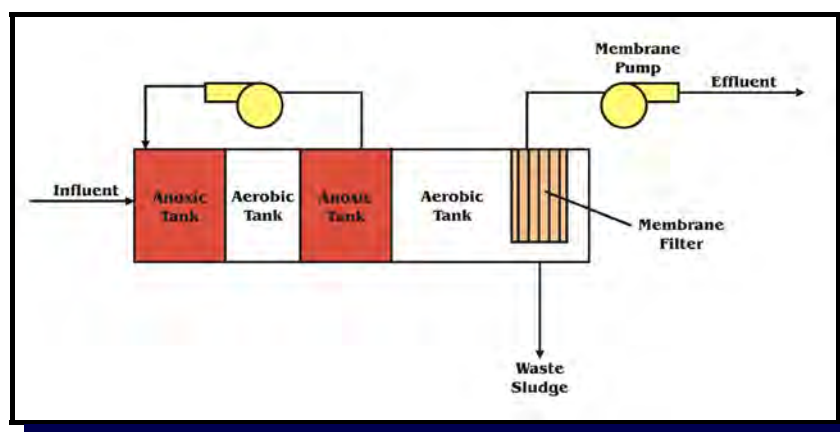


Figure 4.2-4: 4-Stage Bardenpho Process with an Internal MBR

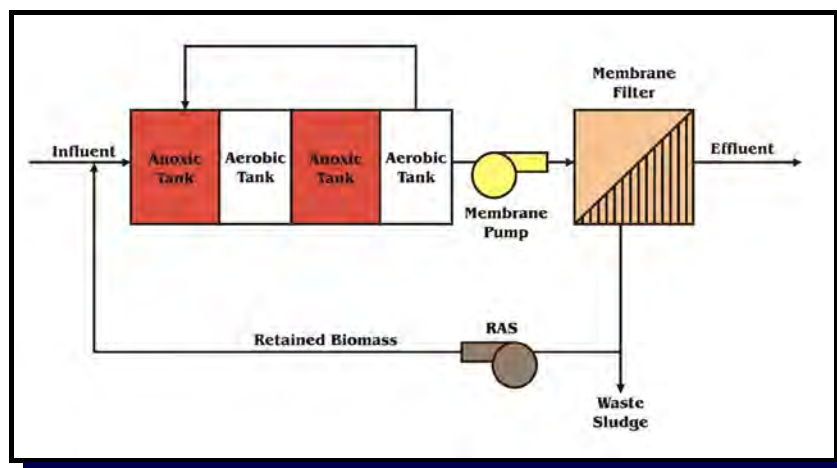


Figure 4.2-5: 4-Stage Bardenpho Process with an External MBR

Low pressure membranes (ultrafiltration or microfiltration) are commonly used and can be pressure or vacuum driven. Despite similar design solids residence times and design principles, MBR systems operate at a higher mixed liquor suspended solids (MLSS) concentration, typically in the range of 8,000 - 18,000 mg/L. This results in smaller reactor volumes and space requirements than conventional biological nitrogen removal systems with secondary clarifiers. Membrane separation provides for greatly reduced TSS in the effluent, typically well below 1.0 mg/L, and, hence, slightly greater removal of nitrogen and phosphorus.

Membranes are fabricated from either organic polymers or inorganic materials. The membranes are designed in modular units and are typically configured as either hollow fiber bundles or plate membranes. All membrane systems use an air scour method to reduce buildup on the membranes (biological or chemical fouling) and require periodic cleaning, 2 - 4 times per year (in reactor or external cleaning of membranes) using citric acid or sodium hypochlorite (NaOCl) solution.

MBR systems must be utilized in conjunction with biological nutrient removal technologies and therefore have a significantly larger capital and operational cost. When operated at the same solids retention time as conventional treatment systems, the MBR system produces more sludge because of greater effluent TSS capture and the addition of a supplemental carbon source to the secondary anoxic zones to meet lower effluent TN concentrations. Additional pumping is typically required to get water through the membrane, therefore increasing power requirements and electrical costs.

Typical effluent TN concentrations achieved by an MLE or 4-Stage Bardenpho Process with a Membrane Bioreactor (MBR) Process are typically less than 5 mg/L (with the addition of an external carbon source).

4.2.5 Sequencing Batch Reactor (SBR)

Sequencing Batch Reactors (SBRs) are *fill and draw* batch systems in which all treatment steps are performed sequentially for a discrete volume of wastewater in single or multiple reactor basins. A schematic diagram of an SBR system is presented in Figure 4.2-6.

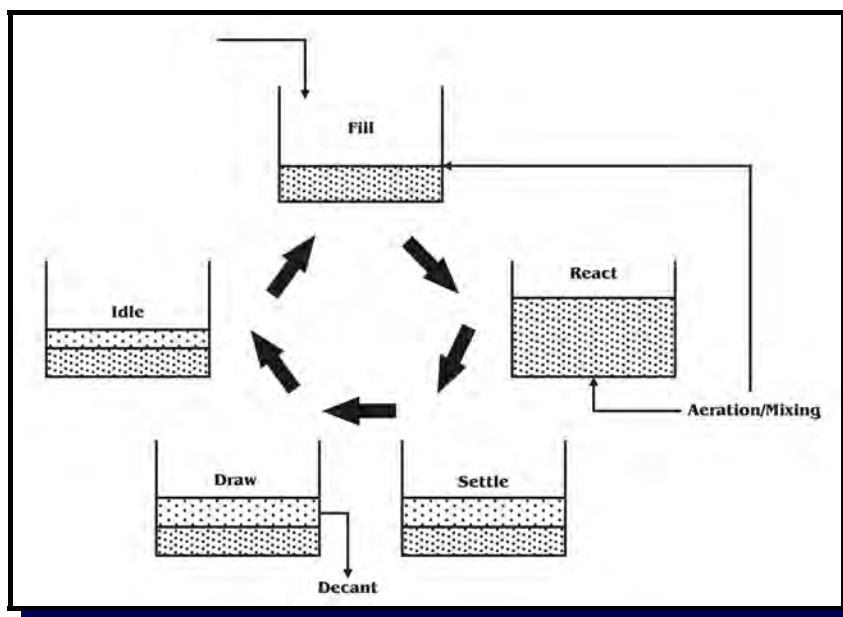


Figure 4.2-6: Sequencing Batch Reactor (SBR)

Typical operational sequences or phases for SBRs occur in five general phases:

Phase	Description
Fill	Filling of the reactor with raw wastewater and other process streams as required (mixing is maintained)
React	Microbial reaction of the reactor constituents in both aerobic and anoxic cycles to remove oxygen demanding wastes and a portion of the nutrients
Settle	Mixing is turned off so the microorganisms/solids can settle
Draw	A decanting phase where treated effluent and WAS are drained from the reactor (separate decanting periods)
Idle	Period after partially decanting the reactor and before the next "Fill Phase" begins

The use of multiple SBRs allows for the continuous feeding and batch processing of the raw wastewater and process streams. The control system allows the SBR to operate in a similar fashion as other suspended growth processes such as the MLE or 4-Stage Bardenpho System (multiple aeration and anoxic periods). The key to the SBR process is the control system, which consists of a combination of level sensors, timers, and microprocessors which can be configured to meet system needs for nitrogen removal.

A moderate-to-large footprint is typical as system designs require multiple SBRs operated in a parallel configuration and the use of a post-SBR flow equalization basin to attenuate flow variations to downstream processes. Total nitrogen removal can be accomplished in SBRs through the use of multiple aeration and anoxic zones, with an external carbon source added to meet low TN requirements.

Typical effluent TN concentrations achieved by an SBR System are in the range of 5 - 14 mg/L.

4.2.6 Oxidation Ditch with an Internal Anoxic Zone(s)

Oxidation ditch processes use looped channels that provide a continuous circulation of wastewater and activated sludge. They typically operate in a racetrack/oval configuration around a central barrier/wall, with mixed liquor flowing at about 1.0 ft/sec and long solids retention times (10 - 30 days). The aeration systems typically consist of rotating brushes (rotors) or turbines that move and mix the wastewater as well as transfer oxygen to the MLSS. Therefore, no additional pumping or piping is typically required compared to conventional activated sludge systems or other biological treatment systems, thereby reducing energy costs. A schematic diagram of an oxidation ditch system is presented in Figure 4.2-7.

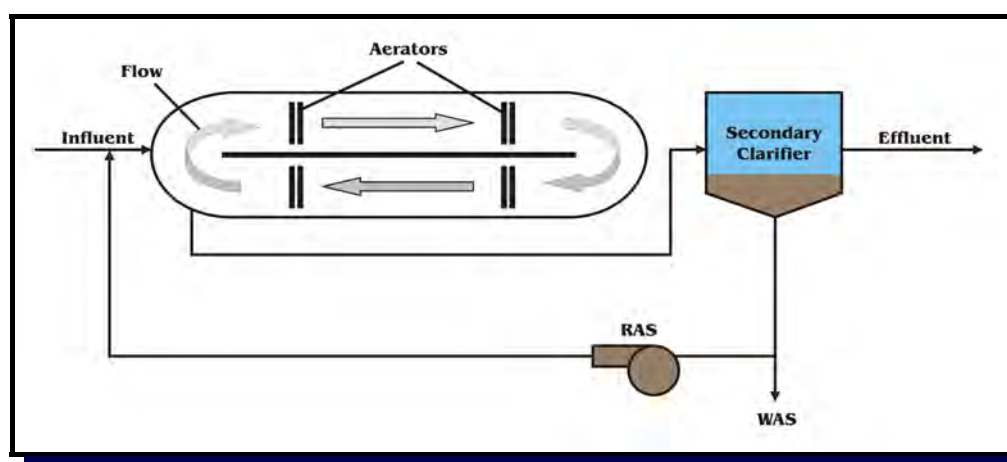


Figure 4.2-7: Oxidation Ditch with an Internal Anoxic Zone(s)

Oxidation ditches can be operated to remove a substantial amount of TN due to the following:

- Long SRTs that ensure complete nitrification
- High MLSS concentrations (3,000 - 6,000 mg/L) that encourage simultaneous nitrification-denitrification (SNdN)
- The unique dissolved oxygen profiles along the flowpath that can be manipulated by controlling oxygen transfer with the rotor/mixing systems

Oxidation ditches typically have a large footprint and are specifically designed to remove nitrogen by cycling the flow within the ditch between aerobic and anoxic conditions. TN removal can be enhanced by using sophisticated automatic controls that monitor either dissolved oxygen concentration or ORP, to turn rotors/mixers “on” and “off” to maintain desired dissolved oxygen/ORP setpoints along the flow path within the oxidation ditch.

As an alternative to internal anoxic zones, anoxic basins can be constructed before or after the oxidation ditch system. If there are aerobic zones downstream of anoxic zones, an internal recycle loop or an external anoxic basin is required to provide for denitrification of any additional nitrates.

Typical effluent TN concentrations achieved by an Oxidation Ditch System with an internal anoxic zone(s) are in the range of 3 - 10 mg/L.

4.2.7 BIODENITRO® (Dual Oxidation Ditch) Process

The BIODENITRO® process, a variation of the oxidation ditch activated sludge process, consists of two oxidation ditches, side by side, that are operated in series. A schematic diagram of the BIODENITRO® Process is presented in Figure 4.2-8.

A mixture of raw wastewater and RAS is fed alternately to each of the oxidation ditches where they are alternately aerated (rotors) to produce aerobic, nitrification zones and mixed (submersible mixers employed to keep fluid moving) to produce anoxic, denitrification zones. The ditches periodically switch modes in a patented control methodology known as *Phased Isolation Ditch (PID)* control and are operated under dissolved oxygen or ORP control. The BIODENITRO® system also provides process flexibility to better handle wet weather events by reducing the solids loading to the secondary clarifiers. The process results in the wastewater passing through multiple aerobic and anoxic zones before discharging to the secondary clarifiers, thereby significantly reducing both effluent TN and TP concentrations.

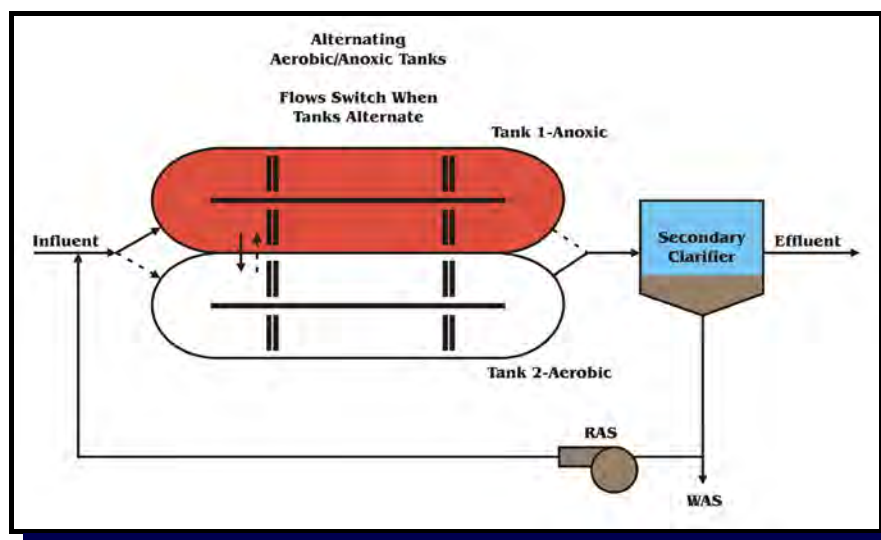


Figure 4.2-8: BIODENITRO® (Dual Oxidation Ditch) Process

The BIODENITRO® Process requires a moderate footprint due to the need for dual oxidation ditches and secondary clarifiers. However, since the influent flow is continually switched between oxidation ditches, the need for additional food or an external carbon source is typically eliminated. The process is also very energy efficient as mechanical rotors and submersible mixers are turned “on” and “off” to promote aeration and mixing of the flow and the generation of aerobic and anoxic zones.

To accomplish low effluent nitrogen concentrations, an “external” anoxic zone following the BIODENITRO® Process may be required. Typical effluent TN concentrations achieved by the BIODENITRO® Process are in the range of 2 - 8 mg/L.

4.2.8 Step Feed Activated Sludge Process

The step feed activated sludge process, for biological nitrogen removal, splits the influent flow and directs a portion of it to each of three or more anoxic-aerobic zone combinations, in series, with similar portions of the influent flow going to each zone but a lesser amount to the last anoxic-aerobic combination prior to secondary clarification to minimize the discharge of ammonium in the effluent. The biomass in the later stages is not just treating influent flow but is also reducing nitrate from the upstream zones. A schematic diagram of the Step Feed Activated Sludge Process for biological nitrogen removal is presented in Figure 4.2-9.

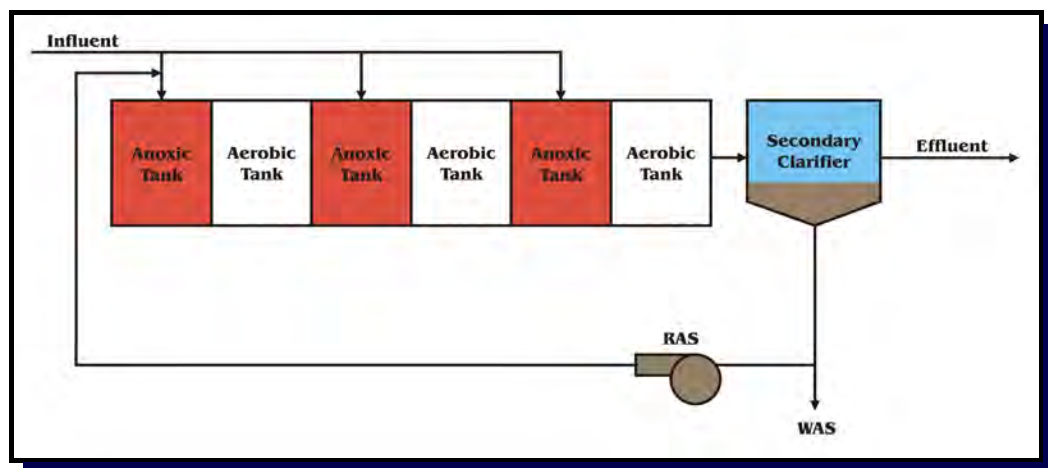


Figure 4.2-9: Step Feed Activated Sludge Process for Biological Nutrient Removal

The step feed system provides a small measure of process flexibility to better handle wet weather events by reducing the solids loading to the secondary clarifiers. The biomass inventory is greatest in the first zone of the reactor and then decreases throughout the basin in proportion to the flow split going into each zone. The last zone maintains the least amount of biomass in inverse proportion to the flow and thus the MLSS concentration is the lowest. The solids loading rate to the secondary clarification system will therefore be the lowest for the flow. The microorganisms in the later zones treat not only the fresh wastewater feed, but also constituents in the flow from upstream zones.

The footprint for the Step Feed Activated Sludge Process System is typically large to accommodate both nitrification and denitrification processes in a single reactor. Total Nitrogen removal can be accomplished in Step Feed Systems through the use of multiple anoxic and aerobic basins, with an external carbon source added to meet low TN effluent requirements.

Operational challenges associated with the Step Feed System for TN removal include the need to control the:

- Dissolved oxygen concentration of upstream aeration zones preceding the downstream anoxic zones to ensure that proper denitrification can occur.
- Flow splitting to the step feed points within the biological reactor.

Typical effluent TN concentrations achieved by the Step-Feed Activated Sludge Process for biological nitrogen removal are in the range of 5 - 14 mg/L.

4.2.9 Integrated Fixed Film Activated Sludge (IFAS) Process

Integrated Fixed Film (IFAS) systems are hybrids that have attached growth media installed in an activated sludge process basin. The media for attached growth can be of the following types:

- Fixed Type: Including rope or some other stranded material.
- Floating Type: Including sponges, packing material or plastic media.

Floating media can be *free-floating* or *retained* in the basin by enclosing them in cages or installing retention screens on the effluent discharge. The *free floating* media systems require more energy input than *fixed* media systems due to the need for mixing. A schematic diagram of an IFAS System is presented in Figure 4.2-10.

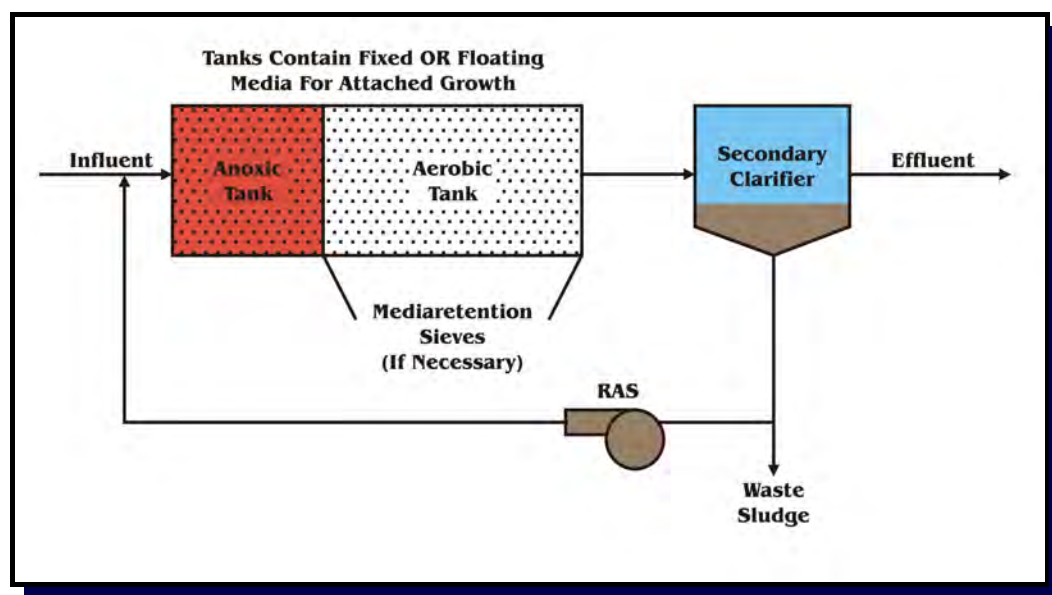


Figure 4.2-10: Integrated Fixed-Film Activated Sludge (IFAS) Process

IFAS Systems typically have higher treatment rates and generate sludges with better settling characteristics and lower mass than conventional activated sludge systems focused on removing mainly oxygen demanding wastes (BOD_5). Since the media can be held in zones within the overall basin, there is the possibility of having simultaneous nitrification-denitrification (SNdN) occurring in the same basin, in separate anoxic and aerobic zones. To obtain very low nitrogen concentrations in the effluent, two distinct anoxic zones are typically required (one is used for final polishing of the effluent).

A fine mechanical screening system (1 - 2 mm) is required upstream of the secondary treatment process to prevent material like hair and fine fibrous material from interfering with the surface area of the IFAS system media.

To promote nitrification and denitrification, higher residual dissolved oxygen concentrations are typically needed when non-porous media are used in the aerobic zone to penetrate the slime layer, if the objective is to maximize nitrification. However, lower dissolved oxygen concentrations are required to establish simultaneous nitrification-denitrification (SNDN). Porous media systems typically operate at dissolved oxygen concentrations of 1.5 - 2.0 mg/L.

IFAS Systems require a moderate sized footprint using the activated sludge process. Depending upon the effluent TN concentration required, an external carbon source may be needed and is typically fed into the secondary anoxic zones to maintain denitrifying activity. This addition will generate additional sludge and yield an increase in the facility operation and maintenance (O&M) costs.

Typical effluent TN concentrations achieved by the IFAS System are in the range of 2 - 8 mg/L. Higher RAS rates tend to promote better TN removal.

4.2.10 Separate Stage Denitrification System

Separate-stage denitrification systems are typically used in treatment facilities that are regularly achieving nitrification in their existing biological treatment system and need to add denitrification capabilities. Suspended growth systems are not that common and typically have short solids retention times and a small aerated zone following the denitrification zone to oxidize excess methanol and release nitrogen gas bubbles contained in the denitrified mixed liquor. A flow diagram of a downflow-type denitrification filtration system is presented in Figure 4.2-11.

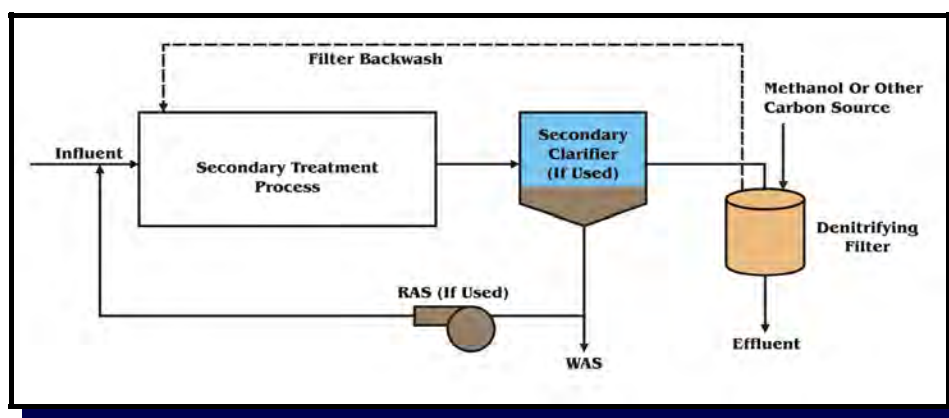


Figure 4.2-11: Separate Stage Denitrification System

The denitrification filter has the advantage of providing both denitrification and effluent filtration in a single unit. An external, supplemental carbon source must be added to the influent flow to the denitrification filters as the BOD₅ has been removed in the upstream biological treatment system.

There are two general types of denitrification filters that are commonly employed.

■ Upflow Denitrification Filters

Upflow continuous backwash denitrification filters have the advantage of remaining operational during backwashing, as they are an integral part of the filtering process. Wastewater effluent enters the bottom of the filter where an external carbon source (Micro-C, methanol, etc.) is added. The effluent flows up through an influent pipe and is dispersed into the filter media through a series of distributors. Filtered water discharges at the top of the filter and flows to the next unit operation/process at the treatment facility. Filter media continuously travel downward, are drawn into an airlift pipe at the center of the filter, and are scoured and cleaned before being returned to the filter bed.



■ Downflow Denitrification Filters

Downflow denitrification filters are deep bed filters with a media depth (sand, gravel anthracite and other media in some combination) of 8 - 12 feet. Additional components include support gravel, and a block underdrain system. Wastewater effluent is directed over a system of weirs onto the top of the denitrification filters where a supplemental carbon source (micro-C, methanol, etc.) is added. Backwashing, including air scouring and backwashing with air and water, is conducted at regular intervals to remove entrapped solids from the filter. During the filter operation, nitrate in the effluent is converted to nitrogen gas and becomes entrained in the filter media, thereby increasing the head loss through the filter. To release the entrained nitrogen gas, most downflow denitrification systems have a nitrogen-release cycle that turns on the backwash pump(s) for a short period of time thereby *bumping* and *agitating* the filter media.



The performance of denitrifying filters is a function of a variety of variables, including, but not limited to, the following:

- Dissolved oxygen concentration entering the filter (inhibits denitrification)

- Underdrain and backwashing systems
- Filter Media
- Flow control and carbon source feed system (potential to increase effluent BOD₅ concentration)

Denitrification filters typically have a smaller footprint than attached growth systems and other add-on denitrification systems. However, they typically require additional hydraulic head, an external carbon source, potential pumping of the influent and increased operational and energy costs.

Typical effluent TN concentrations achieved by denitrification filters for biological nitrogen removal are in the range of 3 - 10 mg/L, assuming efficient upstream nitrification in the biological treatment system.

4.2.11 Moving Bed Biofilm Reactor (MBBR)

A Moving Bed Biofilm Reactor (MBBR) uses plastic media with a large surface area to increase biomass within the biological reactor. The MBBR media is submerged in a completely mixed anoxic or aerobic zone and contained in the zone with retention screens or sieves. There is no mixed liquor recycle in the MBBR treatment system. The plastic media is typically fabricated of polyethylene with a specific gravity slightly less than 1.0. The MBBR carrier elements from most manufacturers are shaped like cylinders or wheels with internal and external fins. These shapes provide a high surface area per unit volume ratio that is protected from shear forces, allowing better biofilm growth. A flow schematic of an MBBR system is presented in Figure 4.2-12.

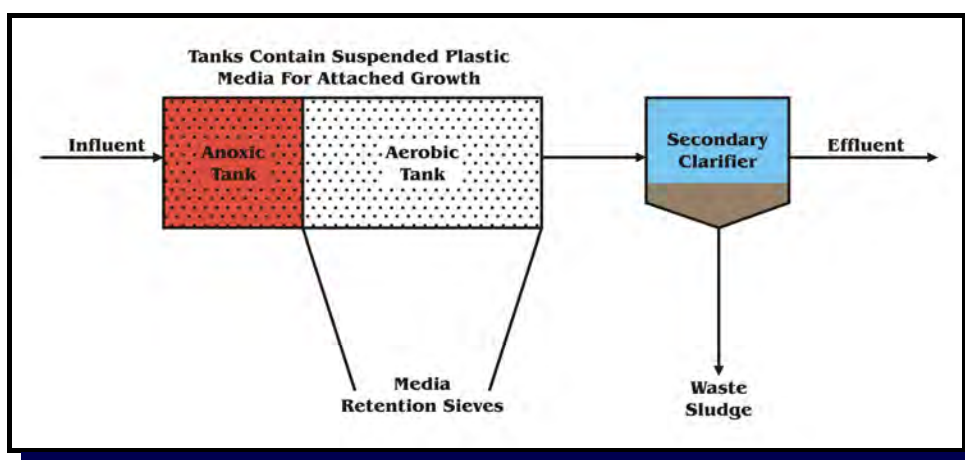


Figure 4.2-12: Moving Bed Biofilm Reactor (MBBR)

Mixing of the zones is provided as follows:

- Anoxic Zone(s): *Slow-speed submersible mixers.*
- Aerobic Zone(s): *Coarse or fine bubble aeration.*

The MBBR process combines the activated sludge and biofilm process technologies. High-rate biofilm processes are highly efficient in removing organic and nitrogen loads.

MBBR systems require a moderate sized footprint; however, if a recycle stream is included in the process, a larger footprint is required. An external carbon source and/or post-reactor treatment may be required depending on how the system is operated and the required effluent TN concentration. This additional infrastructure increases the amount of sludge generated and cause an increase in the facility capital and O&M costs.

Typical effluent TN concentrations achieved by an MBBR System are in the range of 4 - 15 mg/L.

4.2.12 Schreiber Process

The Schreiber countercurrent aeration process provides nitrification and denitrification in one treatment basin. The wastewater enters a circular basin equipped with a rotating bridge that provides mixing as presented in Figure 4.2-13.

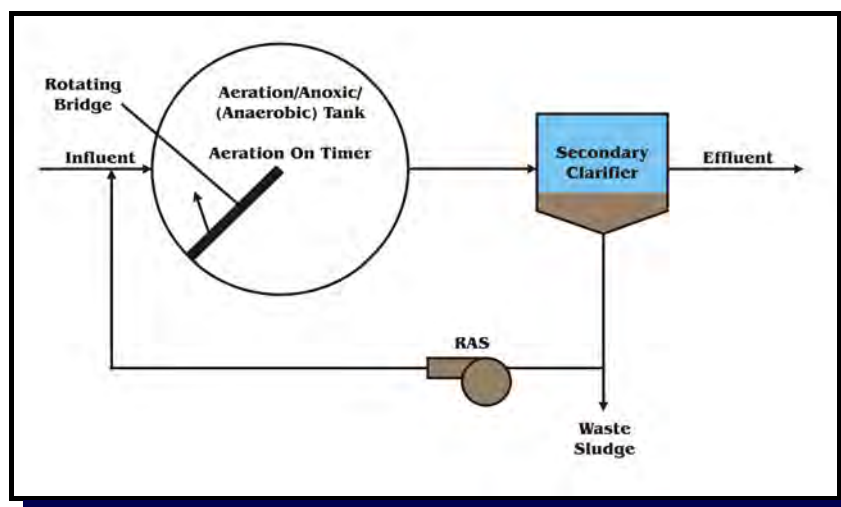


Figure 4.2-13: Schreiber Process

Aeration is provided by fine-bubble diffusers attached to the rotating bridge. Sequencing between aerobic and anoxic conditions can be provided and the aeration can be turned off while the bridge continues to keep the tank mixed. The system footprint is approximately that of a conventional activated-sludge system with additional equipment built-in.

Since the Schreiber Process includes alternating aerobic/anoxic conditions in one tank, low effluent TN concentrations are possible, when the system is optimized. The performance can be further enhanced with additional anoxic zones downstream of the primary reactor and the addition of an external carbon source. In the standard Schreiber configuration, the need for additional food is typically reduced as all treatment occurs in one tank.

Typical effluent TN concentrations achieved by the Schreiber Process System are in the range of 6 - 14 mg/L.

4.2.13 Sidestream Treatment

Biosolids handling processes, such as thickening and dewatering, result in a liquid sidestream that is generally recycled to the head of the treatment facility and combined with the raw influent wastewater. The concentration of nitrogen and phosphorus in facility sidestreams depends on the following:

- Influent concentrations
- Treatment technology utilized
- Solids treatment technology and equipment

The highest nutrient concentrations typically result from anaerobically digested or thermally conditioned sludge.

A discussion of various patented sidestream nutrient removal processes, designed to remove nitrogen from recycle streams, is discussed below.

A. InNitri Process

The InNitri Process (**In**expensive **Nitrification**) uses bio-augmentation, the seeding of nitrifiers, to treat ammonia-laden water, in a separate nitrification reactor (small, sidestream aeration-clarifier system). This process reduces the ammonia-nitrogen load in the recycle stream conveyed to the facility headworks.

The recycle stream then provides a seed of nitrifying bacteria to the biological treatment system. The WAS from the InNitri system is discharged to the main biological treatment system to supplement the nitrifiers in that reactor, thereby reducing the SRT needed to maintain nitrification at low temperatures. The constant feed of nitrifiers is beneficial for facilities that must nitrify or achieve low effluent TN concentrations. A flow schematic of the InNitri Process is presented in Figure 4.2-14.

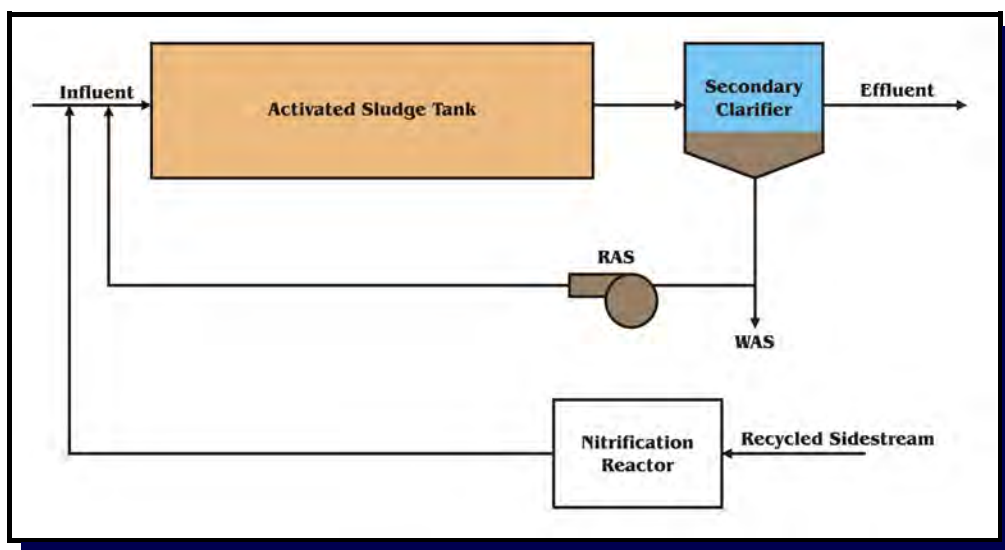


Figure 4.2-14: InNitri Process

B. Bio-Augmentation Batch Enhanced (BABE) Process

The BABE (**B**io**A**ugmentation **B**atch **E**nhanced) Process uses a single batch reactor (operating at 20 - 25 °C) to treat a mixture of high ammonia sidestreams from dewatering, RAS from the main biological treatment system, and residual biomass remaining in the reactor from the preceding cycle. The batch reactor is operated both aerobically and anoxically and therefore the high ammonia concentration is completely nitrified and then partially denitrified during each cycle of the batch reactor to obtain removal of nitrogen. Alkalinity lost during the nitrification process is partially recovered during denitrification, and the sidestream does not require neutralization before being conveyed to either the facility headworks or the biological treatment system. The RAS is partially seeded with nitrifiers and denitrifiers by the BABE process during this operation which enhances the population in the biological treatment system. A flow schematic of the BABE Process is presented in Figure 4.2-15.

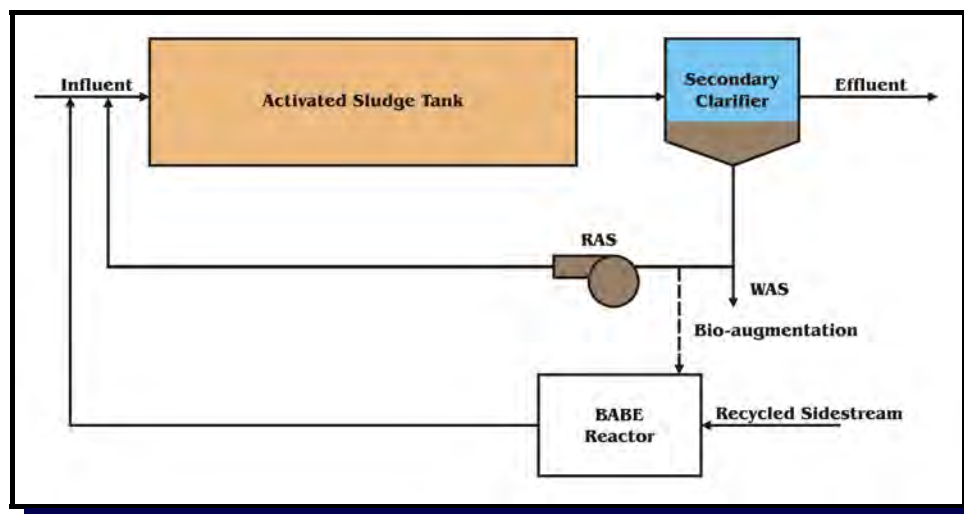


Figure 4.2-15: Bio-Augmentation Batch Enhanced (BABE) Process

C. Bio-Augmentation Regeneration/Reaeration (BAR) Process

The **Bio-Augmentation Regeneration/Reaeration (BAR)** Process operates by recycling ammonia-laden filtrate or centrate from the dewatering of aerobically digested sludge to the head of an integral aeration tank. The sidestream is fully nitrified which seeds the facility's biological treatment system with additional nitrifying bacteria and allows for a reduced solids retention time (SRT) in the unit. A flow schematic of the BAR Process is presented in Figure 4.2-16.

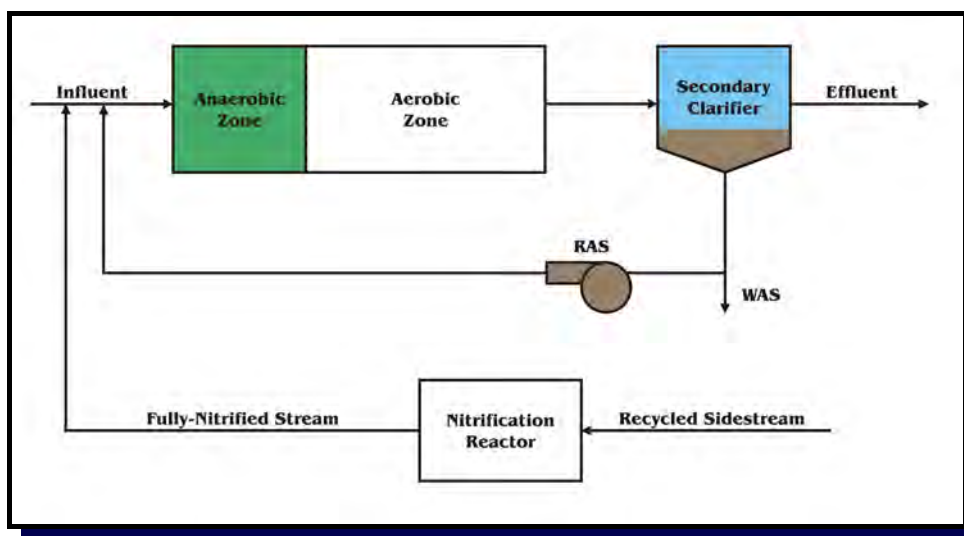


Figure 4.2-16: Bio-Augmentation Regeneration/Reaeration (BAR) Process

D. MAUREEN Process

The **M**ainstream **A**utotrophic **R**ecycle **E**nabling **E**nhanced **N**-removal (MAUREEN) Process was developed for a two-sludge treatment configuration and involves recycling of RAS from the nitrification stage to a reactor where the ammonia oxidizing bacteria (AOB) are used to oxidize the filtrate/centrate ammonia to nitrite. The nitrite is then reduced to nitrogen gas, and the AOB's are sent to the high-rate carbon removal stage for bio-augmentation of the first sludge stage activated sludge to accomplish some nitrification in that stage. A flow schematic of the MAUREEN Process is presented in Figure 4.2-17.

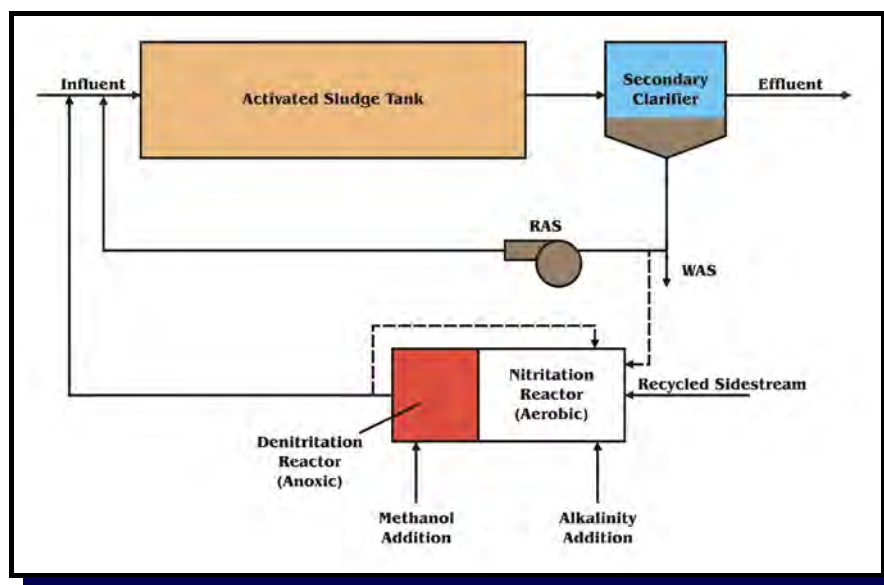


Figure 4.2-17: MAUREEN Process

E. SHARON Process

The SHARON (**S**ingle-reactor for **H**igh-Activity **A**monia **R**emoval **O**ver **N**itrite) Process takes place in a single reactor operated without biomass recycle where the solids and hydraulic retention times (HRT) are equal and nitrite is produced aerobically via the process known as **nitritation**. The SHARON Process is designed to treat high ammonia concentration sidestreams from sludge digestion. The system is designed to convert ammonia to nitrite (nitritation), then denitrify the nitrite to nitrogen gas (denitrification), thus avoiding the conversion of nitrite to nitrate and the need to reduce nitrate back to nitrite to obtain nitrogen removal. The process is typically operated at elevated temperatures (30 - 40°C) with a hydraulic retention time of 1 - 2 days to favor the growth of ammonia oxidizers (*Nitrosomonas sp.*) over nitrite oxidizers (*Nitrobacter sp.*). An external heat source and heat exchanger are required.

Compared to full nitrification and denitrification, the SHARON Process reduces:

- The amount of oxygen required for nitrification by 25 percent
- The amount of COD needed for denitrification by 40 percent

Supplemental carbon may be required to carry out efficient denitrification. A flow schematic of the SHARON Process is presented in Figure 4.2-18.

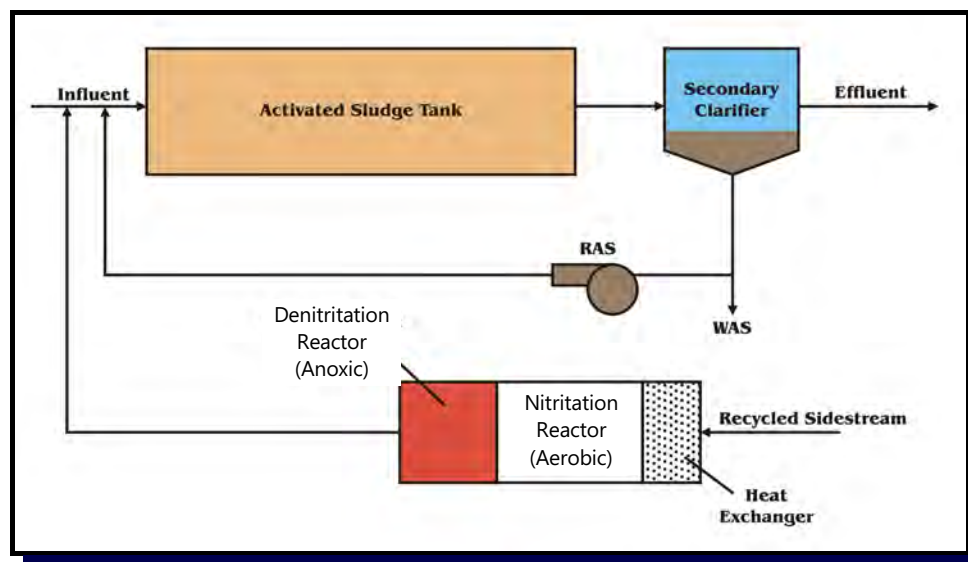


Figure 4.2-18: SHARON Process

F. ANAMMOX Process

The ANAMMOX (**AN**aerobic **AMM**onia **OX**idation) Process uses autotrophic bacteria to provide nitrogen removal, through nitrification and denitrification, by anaerobically oxidizing ammonia using nitrite. In the conventional ANAMMOX process the first stage oxidizes approximately 50% of the ammonia to nitrite (nitritation), and a 50-50 mixture of ammonium and nitrite is conveyed to the second-stage reactor, where the autotrophic bacteria use ammonium as an electron donor and reduce nitrite to nitrogen gas (denitrification). These microorganisms are favored by elevated temperatures (above 35 °C), and grow very slowly. An external heat source and heat exchanger may be required.

The ANAMMOX process requires 37.5% of the amount of oxygen needed for nitrification to nitrate, assuming nitrification of the entire ammonium load and the need for organic carbon is completely eliminated. A flow schematic of the ANAMMOX Process is presented in Figure 4.2-19.

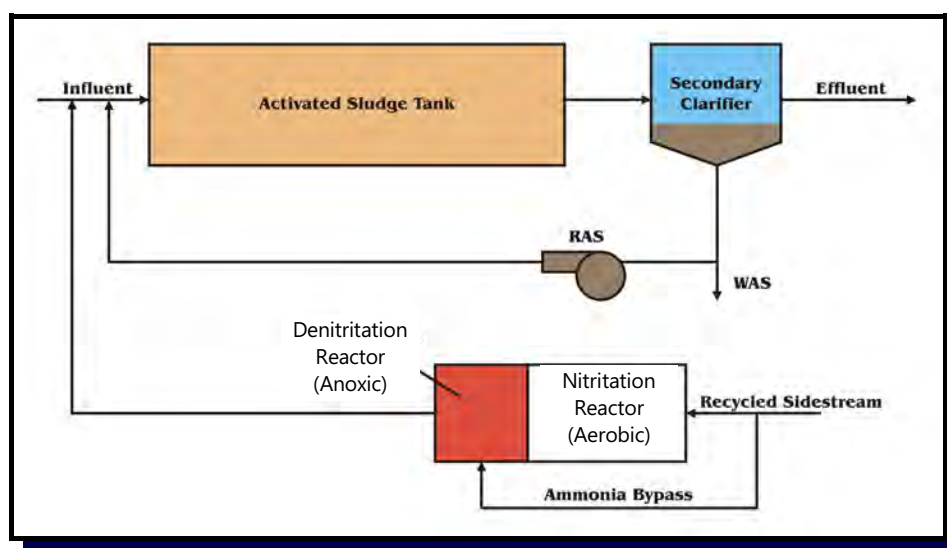


Figure 4.2-19: Anaerobic Ammonia Oxidation (ANAMMOX) Process

G. Flow Equalization

Flow equalization of facility sidestreams can be an effective management technique to reduce the impact of the sidestreams on the main treatment train(s). A flow equalization basin can be sized to hold the total volume of recycle/sidestream flows for a certain period of time so that they can be sent to the treatment system at:

- Selected flow rates
- Selected times during the day to minimize the impact on the treatment system (low flow periods at night when loading rates are low)

A flow equalization basin can also be designed to settle and remove solids to reduce the nutrient loading back to the treatment facility. The settled solids are then collected and processed in the facilities biosolids management system.

Aeration within the flow equalization basin or as a separate process has also been shown to reduce the ammonia load back to the treatment facility by up to 50% if sufficient mixing and detention time is provided. A picture of a typical flow equalization basin is presented in Figure 4.2-20.



Figure 4.2-20: Flow Equalization Basin

4.3 PHOSPHORUS REMOVAL TECHNOLOGIES

Phosphorus can be effectively removed from wastewater in a treatment facility by the following methods:

- Biological uptake by microorganisms
- Chemical precipitation with a metallic cation
- A combination of biological and chemical removal technologies

Depending on the target TP effluent concentration, a treatment facility may be required to employ both removal technologies. Such a combined approach is particularly beneficial when influent TP concentrations are high and effluent TP concentrations are required to be very low. In these instances, biological phosphorus removal is used to remove the bulk of the phosphorus, and chemical polishing follows to achieve the final concentration; such an approach tends to reduce sludge formation. Nevertheless, any chemical precipitation of phosphorus will generate a large quantity of sludge that must be treated and disposed of; which increases the operational costs of the treatment facility.

Phosphorus removal technologies are presented in Table 4.3-1 and discussed thoroughly herein.

Table 4.3-1: Phosphorus Removal Technologies		
Configuration	Type	Technology
Chemical Precipitation followed by Solids Separation	Pre-, Co- or Post-Precipitation	Addition of lime or metal salt at one or multiple locations within the treatment facility to react with phosphorus to form a precipitate. Solids can be removed through Tertiary Clarification or advanced solids separation processes (Actiflo, DensaDeg, DynaSand D2, CoMag, etc.). Tertiary Filtration can remove additional solids and produce an effluent with a very low TP concentration.
Biological Phosphorus Removal	Suspended Growth	Fermentation
		Anaerobic/Oxic (A/O) or Pho-Redox
		Oxidation Ditch with Anaerobic Selector

As previously discussed in Section 3.3 of this Conceptual Design Report, biological phosphorus removal in wastewater treatment facility's is accomplished by encouraging the growth of phosphate-accumulating organisms (PAOs). PAOs are heterotrophic bacteria that occur naturally in the environment and in aerobic activated sludge. Under anaerobic conditions, the microbes break the high-energy bonds in internally accumulated polyphosphate, resulting in the release of phosphate (PO_4^{3-}) and the consumption of organic matter in the form of Volatile Fatty Acids (VFA's) or other easily biodegraded organic compounds.

When the microbes are then put under aerobic conditions, they take up phosphate, forming internal polyphosphate molecules. This "*luxury uptake*" results in more phosphate being included in the cells than was released in the anaerobic zone, so the total phosphate concentration in solution is reduced. When the microorganisms are wasted, the contained phosphate is also removed.

All biological phosphorus removal technologies are designed and operated to cycle treatment through anaerobic and aerobic conditions (zones) to encourage the growth of PAOs and the uptake of phosphorus. However, nitrate in the recycle stream can inhibit the efficiency of biological phosphorus removal. Therefore, nitrification and denitrification are typically necessary treatment processes required in a treatment facility to efficiently enhance the removal of phosphorus.

As previously discussed in Section 3.4, chemical phosphorus removal is a time-tested removal method; however, it generates additional sludge. If this sludge is exposed to or stored in an anaerobic environment, some of the phosphorus can be released.

4.3.1 Chemical Phosphorus Removal

Chemical precipitation is a very reliable method to remove phosphorus from the wastewater effluent at a treatment facility. To achieve this removal, various chemicals and polymers are added to the effluent where they chemically react with soluble phosphates to form insoluble precipitates. These precipitates are removed in a solids-liquid separation process such as clarification and/or filtration.

The effectiveness of chemical phosphorus removal is a function of the phosphorus species present, chemical used, metal to phosphorus ratio, feed point location, number of feed points, mixing of the chemical, pH and alkalinity of the effluent, and the solids-liquid separation process.

The chemical can be added in various configurations dependent upon the effluent TP concentration required, the facility biosolids management system and biological treatment system operation. Chemical addition for TP removal can be applied at the following locations within a treatment facility:

- Primary clarifiers
- Biological Treatment System (Aeration Basin)
- Secondary clarifiers
- Upstream of tertiary filters
- Tertiary clarifiers
- Other tertiary treatment systems

The direct addition of metal salts to the biological treatment system followed by secondary clarification is typically used to remove effluent TP concentrations down to 0.5 - 1.0 mg/L. Care must be taken with the addition of chemical to the primary clarifiers and biological treatment system so that too much chemical is not added so as to take the phosphorus below the concentration needed to sustain the secondary treatment microorganisms.

Tertiary treatment processes, using direct addition of the metal salt, are typically used to remove effluent TP concentrations below 0.5 mg/L.

A flow schematic of the potential locations for chemical addition for phosphorus removal, in a conventional secondary treatment facility, is presented in Figure 4.3-1.

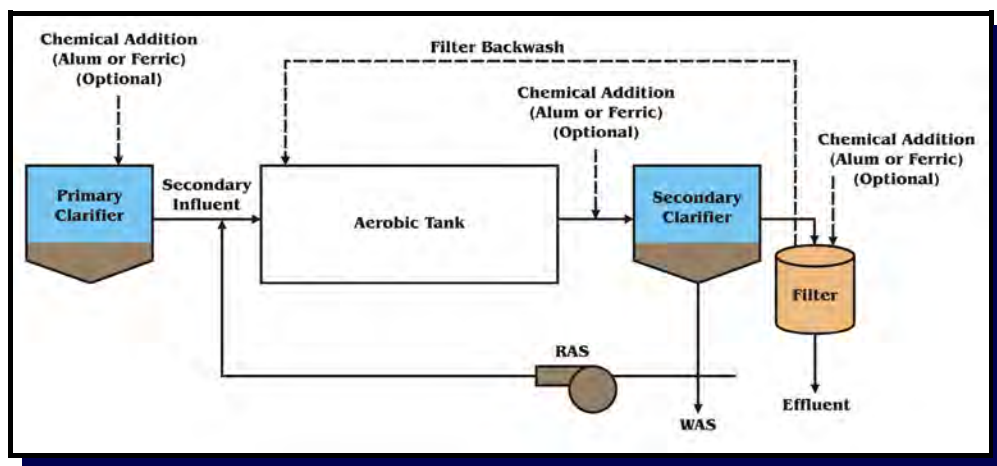


Figure 4.3-1: Chemical Addition Locations for Total Phosphorus Removal

A. Chemical Addition and Tertiary Clarification

Tertiary clarifiers are very effective for the removal of chemically generated phosphorus precipitates. Their performance can be enhanced by the addition of polymers following precipitation to aid flocculation and sedimentation. The use of tertiary clarifiers upstream of tertiary filters has the potential to achieve low solids concentrations and thus low phosphorus effluent levels.

Tertiary clarifiers that could be used include:

- Conventional tertiary clarifiers, of the secondary-clarifier type and make.
- Solids-Contact Clarifiers

Solids-contact clarifiers mix the secondary effluent with coagulants and previously settled solids, forming larger floc particles. After mixing in the center of the clarifier, the wastewater moves outward to the settling zone, where the solids move downward to the bottom and the treated water exits the unit over a peripheral weir system. Solids are removed from the clarifier for treatment and disposal.

- Upflow Buoyant-Media Clarifiers

The upflow buoyant-media clarifier mixes the coagulant and polymer with the secondary effluent, allows flocculation to occur, and provides clarification.

■ Tube Clarifiers

A tube clarifier has submerged, inclined tubes in a portion of the clarifier unit. The water flows up through the tubes at a low velocity and solids flow downward to the bottom of the clarifier,

■ Plate Clarifiers

A plate clarifier has submerged, inclined plates installed in a portion of the clarifier. The water flows upward between the plates, at a low velocity, and solids settle onto the plates and slide down to the bottom of the clarifier, from which they are pumped out for final treatment and disposal.

For the tertiary clarification process to be successful, the velocity through the unit operation must be low enough to allow the solids/precipitates in the secondary effluent to settle. Typical effluent TP concentrations achieved by chemical addition and Tertiary Clarification are less than 0.5 mg/L. A flow schematic of a conventional Tertiary Clarification system for phosphorus removal, is presented in Figure 4.3-2.

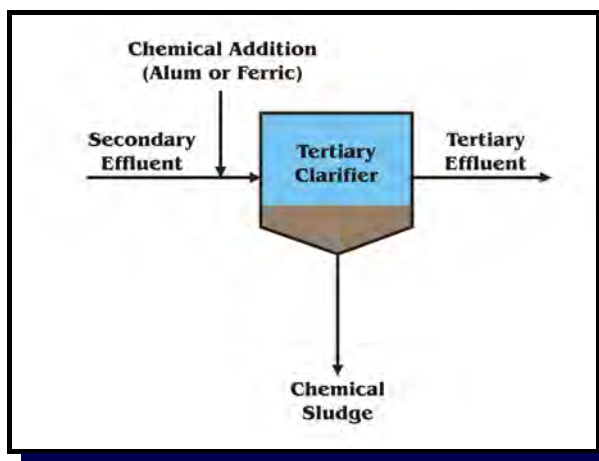


Figure 4.3-2: Tertiary Clarifier for TP Removal

B. Chemical Addition and Tertiary Filtration

Tertiary filters are currently used in many wastewater treatment facility's to polish secondary effluents by removing suspended solids. Therefore, since phosphate is associated with suspended solids, tertiary filters have been found

to provide effective phosphorus removal. Adding chemicals can increase the effectiveness of the tertiary filters by precipitating the soluble phosphorus into a solid form that can be captured by the filters. It is imperative that rapid mixing be provided before entering the tertiary filter to ensure that the chemicals are distributed throughout the secondary effluent, allowing floc mass to form. Several varieties of tertiary filters can be used in multiple configurations, including the following:

- Mono-media Filters

Sand is typically used in single-medium filters. The size and uniformity of the sand depend on the application and characteristics of the secondary effluent at the facility. The sand's uniformity coefficient is one of the critical design parameters, for effective phosphorus removal, as varying sizes can provide smaller pores yielding enhanced filtration.

- Dual-media Filters

Dual-media filters typically use anthracite in combination with sand. Anthracite can adsorb organic compounds in addition to filtering solids and precipitates. Anthracite is softer than sand, and abrasion during backwashing can decrease the size of the anthracite particles. These smaller particles could cause blinding of the filter by trapping larger solids on the surface of the media, which would block the passage of the water if the anthracite is not removed during the backwash cycle. Other media combinations in dual-media filters include activated carbon and sand, resin beds and sand, and resin beds and anthracite.

- Multi-media Filters

Multimedia beds can contain anthracite, sand, and garnet or ilmenite. Garnet and ilmenite have a higher density than sand, allowing them to settle to the bottom of the filter after backwashing. In addition, garnet and ilmenite can have a smaller pore size than sand, allowing the smallest solids to be trapped by the garnet before the secondary effluent exits the filter when operated in a downflow mode.

- Moving-Bed Filters

A moving-bed filter cleans a portion of the granular media, typically sand, continuously so that operation does not need to stop to perform a backwash cycle. The filter can operate in a downflow or upflow mode.

- Pulsed-Bed Filters

Pulsed-bed filters have a relatively shallow bed containing approximately ten (10) inches of sand or alternate medium. Secondary effluent is applied to the top of the filter. Diffusers are located on the top of the bed surface. Once the water level reaches the air-mix probe, air is supplied to the diffusers, suspending the larger particles above the bed; and filtration continues during this process. When the bed is pulsed, effluent is not discharged from the filters.

- Traveling Bridge/Automatic Backwash Filters

The automatic backwash filter or traveling bridge filter has a relatively shallow sand depth (~ 12 inches) and the width of the unit is typically fixed. The length of the traveling bridge filter is determined by the amount of surface area required for a given filtration application. Secondary effluent is applied to the top of the sand and filters downward through the media. A traveling bridge and backwash hood move along the length of the filter to backwash one cell of the filter at a time (indexed cells). This allows the remaining filter cells to stay in operation while a portion of the filter is backwashed.

- Disc-Filters

Disc-filters, which use alternative media (polyester, cloth, stainless steel, etc.) can be used to capture the solids and precipitate rather than sand filtration units. Disc-filter units typically consist of a central drum, discs with filter media panels, support frame with cover over the entire filter, backwash spray assembly with integrated pump, backwash discharge assembly, drive mechanism and automatic controls. Each filter panel typically consists of a structural welded stainless steel flat bar frame with a ten micron (10 μ m) filter media mounted. Disc-filters have a significantly smaller footprint, generate significantly less backwash filtrate, produce a very low effluent TSS and TP concentration, and are more cost-effective than traditional filtration systems.

Filters can also be operated in series to improve TP and suspended solids removal. A clarification system is typically used to remove solids from the tertiary filter backwash before the treated backwash is returned to the facility headworks for treatment.

C. ACTIFLO® Process

ACTIFLO® is a sand-ballasted, high-rate clarification process (Figure 4.3-3) consisting of three internalized treatment units for the removal of solids and TP:

- Coagulation
- Flocculation
- Sedimentation/Clarification

A coagulant (metal salt) is added to the secondary effluent and the mixture is conveyed into the coagulation basin where rapid mixing occurs. The pH is then adjusted to optimize phosphorus removal based on the characteristics of the secondary effluent. The effluent is then hydraulically conveyed to the flocculation basin and mixed with fine sand and a polymer.

The fine sand, referred to as *microsand*, provides a large surface area onto which the formed floc can attach. The floc is ballasted by the microsand, increases the sedimentation rate, reduces the surface area of the sedimentation basin and is easy to dewater. The solids are settled in a Lamella gravity tube clarifier. The microsand is recovered in a hydrocyclone (cyclonic separator) and returned to the process. A tertiary filter typically follows the ACTIFLO® Process to capture additional suspended solids and is effective in reducing the effluent total phosphorus (TP) concentration.

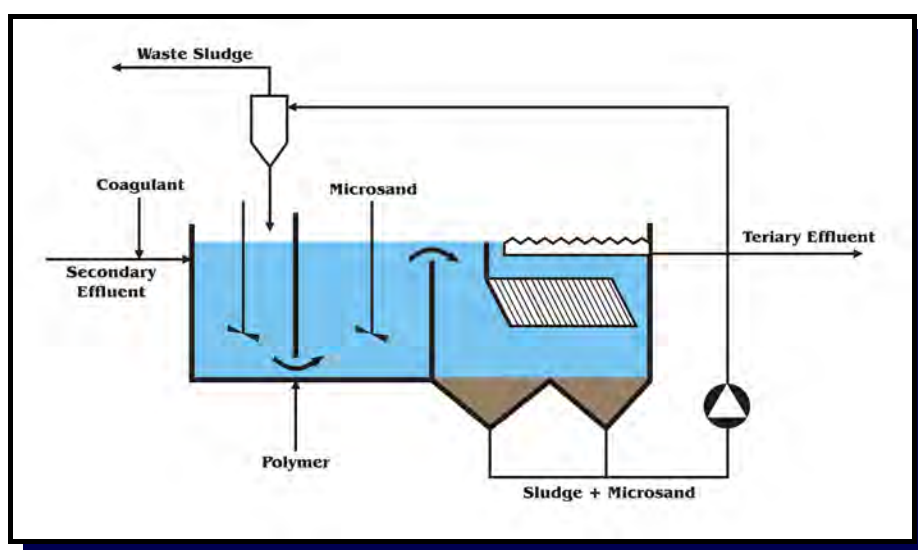


Figure 4.3-3: ACTIFLO® - Sand Ballasted, High-Rate Clarification Process

D. DensaDeg Process

The DensaDeg Process is a high-rate solids contact clarification process that consists of a reactor zone (coagulation), a pre-settling/thickening zone (flocculation), and a clarification zone as presented in Figure 4.3-4. Metal salts are mixed with the influent, and the pH is adjusted to optimize phosphorus removal based on the secondary effluent characteristics.

The secondary effluent then enters the reactor and is mixed with sludge returned from the solids contact clarifier. The reactor tank contains a turbine and draft tube that promote floc formation and separate the solids. Polymer is added to increase the sludge density. In the pre-settling/thickening zone, the sludge settles to the bottom of the unit due to the increased density and continues to thicken. Sludge is returned to the reactor zone or removed from the process for further treatment. In the clarification zone, the supernatant flows up through the settling tubes as the effluent from the process. Additional phosphorus can be removed by following the process with tertiary filtration.

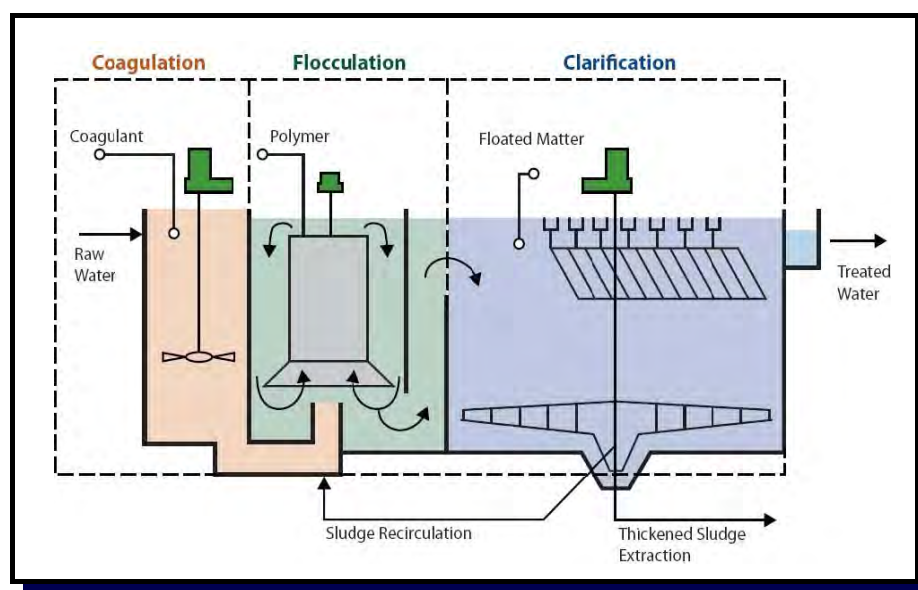


Figure 4.3-4: DensaDeg High-Rate Solids Contact Clarification Process

E. DynaSand D2 - Advanced Filtration System

The Dynasand D2 - Advanced Filtration System consists of a deep bed upflow filter and a standard bed upflow filter operated in series as presented in Figure 4.3-5. The deep bed filter contains coarse sand and uses a proprietary process

called *continuous contact filtration*, which allows coagulation, flocculation, and separation to occur within the filtration system. The standard bed filter is filled with a finer sand mix. Both filters are continuously backwashed during operation. The backwash water from the filters is treated in a Lamella gravity tube settler (a high-rate, gravity plate clarifier) to remove solids before being returned to the facility headworks for further treatment. A coagulant (alum, etc.) is typically added upstream of both filtration units and is used to coagulate and flocculate suspended solids and phosphorus compounds.

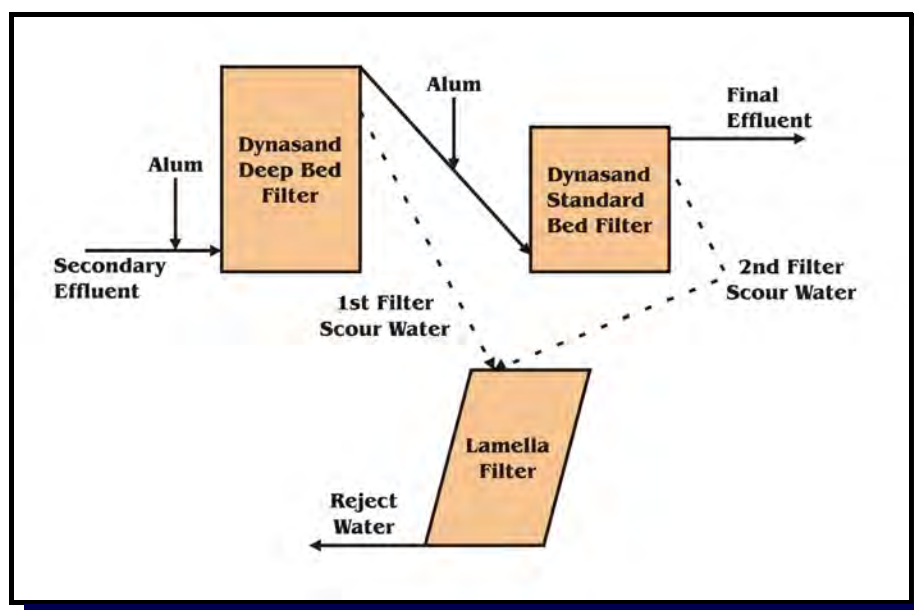


Figure 4.3-5: DynaSand D2 - Advanced Filtration System

F. CoMag Process

The CoMag Process is a technology that consists of ballasted flocculation, solids contact clarification, and high gradient magnetic separation as presented in Figure 4.3-6. The flocculation tank has three (3) compartments. In the first compartment, secondary effluent is mixed with a metal salt and the pH is adjusted to optimize phosphorus removal based on the effluent characteristics. Then fine, high density magnetic particles (magnetite) are added, and in conjunction with the metal salts and polymer, promote floc formation and high rate settling in the second compartment. In the third compartment, a polymer is added to increase the flocculation rate. The flocculated and ballasted effluent enters a solids contact clarifier for gravity settling of the solids. Most of the solids are returned to the flocculation tank to enhance solids removal. The remaining solids are wasted from the system. A magnetic separator captures

solids that passed through the clarifier by attracting the magnetic particles that were added in the second compartment of the flocculation tank. The effluent is then sent to the facility disinfection process at the treatment facility. The backwash from the magnetic separator is mixed with the wasted sludge and passes through a magnetic ballast recovery system to minimize the loss of the magnetic ballast. The remaining sludge is sent to the facility sludge management system. The recovered magnetic ballast is returned to the flocculation tank (2nd compartment). Total phosphorus concentrations of less than 1.0 mg/L TP can be achieved.

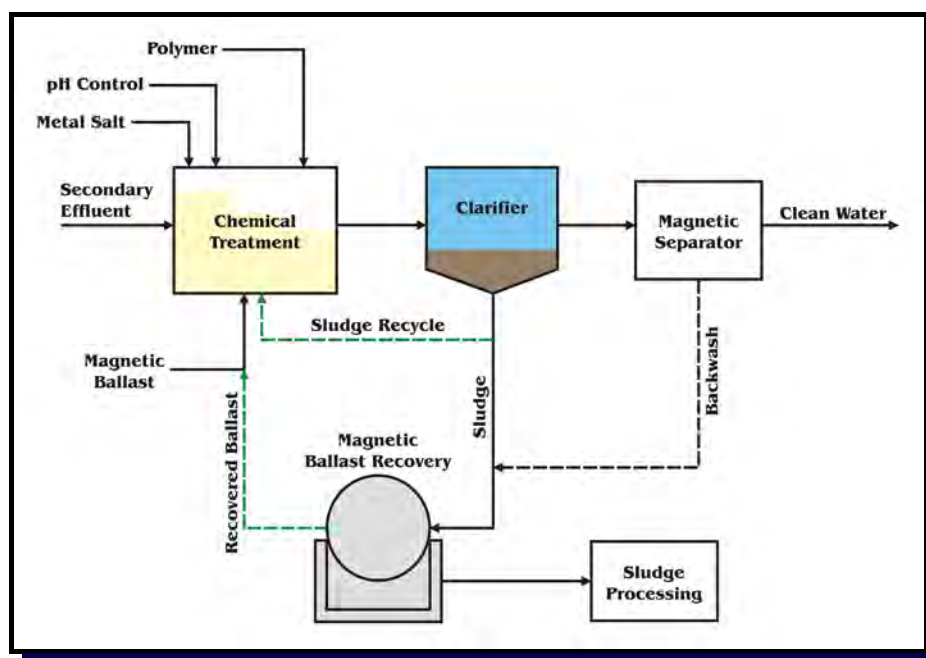


Figure 4.3-6: CoMag Process (High Gradient Magnetic Separation)

G. Blue Pro Process

The Blue Pro Process is a technology that consists of the addition of a chemical, typically ferric chloride, to form a ferric phosphate precipitate. This step is followed by a proprietary pre-reactor zone and moving-bed filter. The process uses continuous backwashing filters containing a bed of hydrous ferric oxide-coated media, in which ferric phosphate and other pollutants are filtered.

The abrasion of the sand particles against one another in the moving bed filter exposes new adsorption sites on the media. The process can be operated in a dual-stage mode with two Blue Pro filtration systems in series as presented

in Figure 4.3-7. The reject water from the filters in the Blue Pro Process is returned to the facility headworks for further treatment. TP concentrations of less than 1.0 mg/L have been achieved in pilot and testing systems.

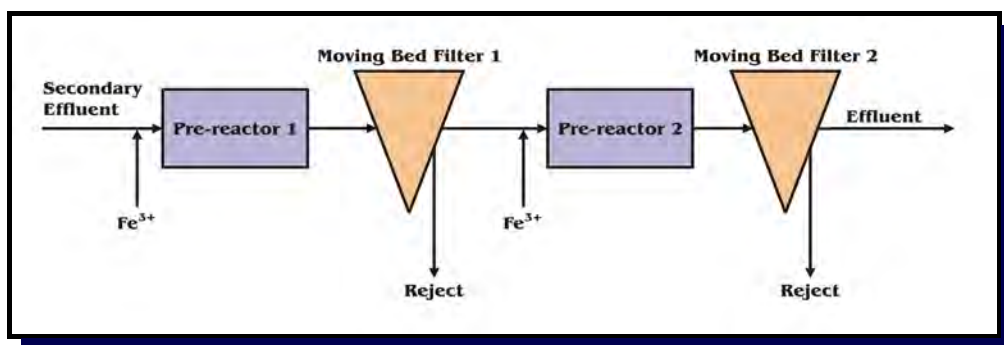


Figure 4.3-7: Blue-Pro Process

H. Trident HS System

The Trident HS system is a technology consisting of two clarification processes followed by filtration as presented in Figure 4.3-8. Metal salts and polymer are added upstream of the gravity tube clarifier, which contains a recycle flow of precipitated solids to decrease the variation of the influent quality entering the clarifier unit. From the tube clarifier, additional polymer is added before the wastewater enters an upflow adsorption clarifier containing coarse media. The adsorption clarifier consists of a buoyant-media bed to remove additional solids before filtration. The accumulated solids are flushed from the clarifier using air and water from the gravity tube clarifier. A mixed-media, downflow gravity filter follows the two-stage clarification process for applications where the effluent phosphorus concentrations must be less than 0.10 mg/L. The filter is backwashed using air and water simultaneously.

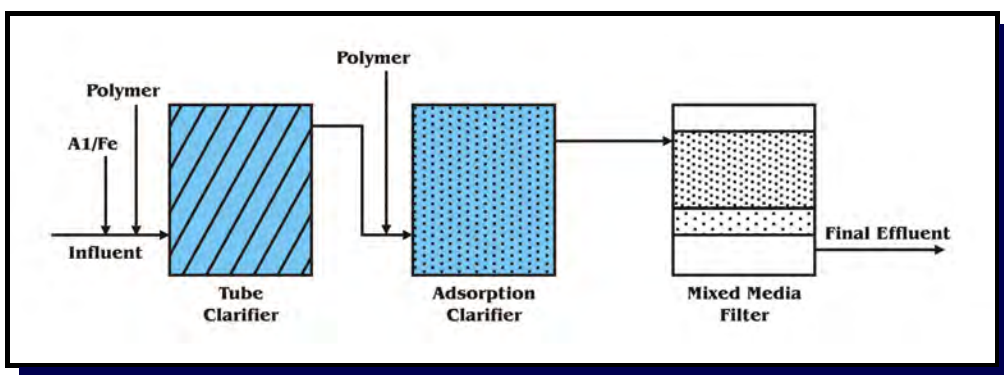


Figure 4.3-8: Trident HS System

4.3.2 Fermentation Process

The Fermentation process is one option that can be employed at a treatment facility to promote biological phosphorus removal and is carried out under anaerobic conditions with Volatile Fatty Acids (VFAs) providing the carbon source for the microorganisms. If the influent has a very low VFA concentration, for adequate phosphorus removal, greater than approximately 4:1 mass of VFAs to mass of phosphorus in the influent to be removed, the VFA concentration must be increased.

The VFAs can be formed by on-site fermentation of primary sludge or RAS or can be supplied from an outside source. The distinct advantage of fermenting sludge on-site to generate VFAs is the reduction in the amount of sludge to be disposed of. Fermenting the primary sludge is preferred to using secondary sludge as it reduces the amount of phosphate released from the sludge.

Fermentation is particularly helpful for large treatment plants in cold climates and for plants where the strength of the wastewater tends to be low. A flow schematic of the fermentation process is presented in Figure 4.3-9.

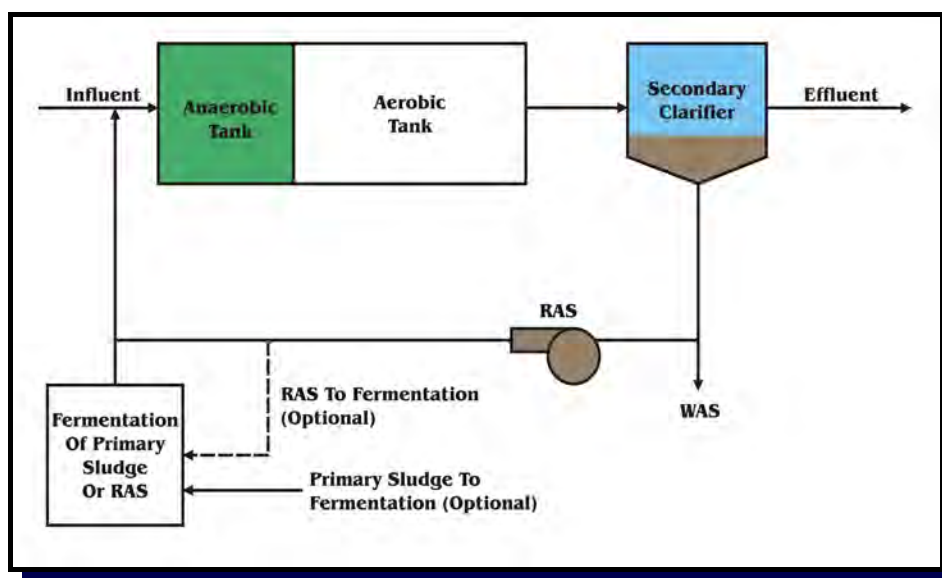


Figure 4.3-9: Fermentation Process

4.3.3 Anaerobic/Oxic (A/O or Phoredox) Process

The Anaerobic/Oxic (A/O or Phoredox) Process is a conventional activated sludge system with an anaerobic zone upstream of an aerobic zone as presented in Figure

4.3-10. The RAS is pumped from the secondary clarifier and is mixed with the influent raw wastewater prior to the anaerobic zone. Phosphate accumulating organisms (PAO's) release phosphorus, which is subsequently taken up in the aerobic zone of the treatment system.

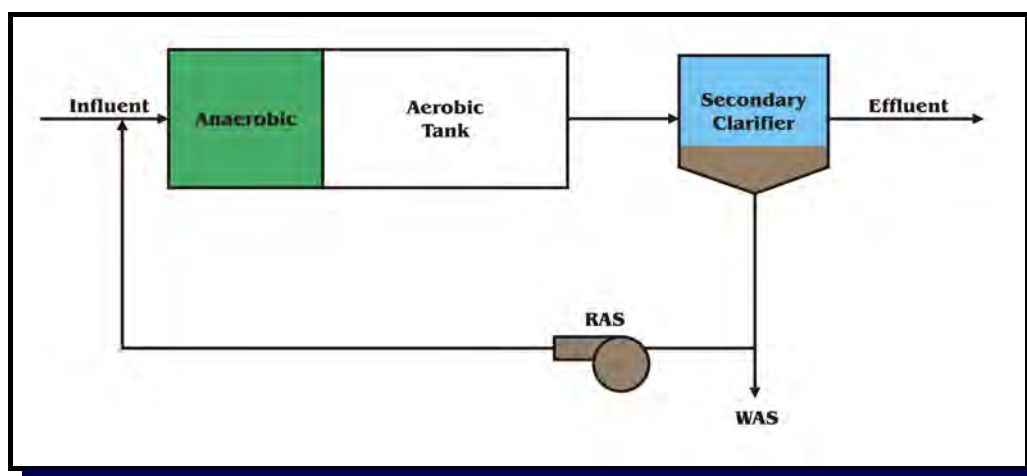


Figure 4.3-10: Anaerobic/Oxic (A/O or Phoredox) Process

The A/O Process is designed and operated with a low Solids Retention Time (SRT) to avoid issues associated with nitrification. With no nitrates in the RAS, the process is reliable and easy to operate. However, one potential problem is associated with nitrates being recycled from the aerobic zone of side streams and their potential to inhibit the anaerobic growth (selection) of PAO's. If nitrates are present in the recycle stream, the anaerobic zone can be split into an anoxic chamber for nitrate denitrification and a series of anaerobic zones for biological phosphorus removal.

The A/O Process has a medium-sized footprint and can be retrofitted into an existing basin by installing baffle walls and mixers to produce an anaerobic zone. If sufficient volatile fatty acids are available, an additional carbon source is not needed. Since there is additional pumping required with the system, operation and maintenance costs, as well as electrical costs are higher than other biological phosphorus removal systems. However, the A/O process typically generates less sludge due to the operation of the system under anaerobic conditions.

To accomplish low effluent TP concentrations, chemical addition and precipitation is typically required. Typical effluent TP concentrations achieved by the A/O Process are in the range of 0.2 - 2.5 mg/L.

4.3.4 Oxidation Ditch with an Anaerobic Selector

Oxidation ditches for phosphorus removal are a modification of the standard design with the requirement that an anaerobic zone/selector be established. The anaerobic zone is typically configured as an external tank upstream of the oxidation ditch or it can be set up within the oxidation ditch if the dissolved oxygen balance is carefully managed (filamentous organisms can potentially grow within the system). A flow schematic of the Oxidation Ditch with an Anaerobic Selector System is presented in Figure 4.3-11.

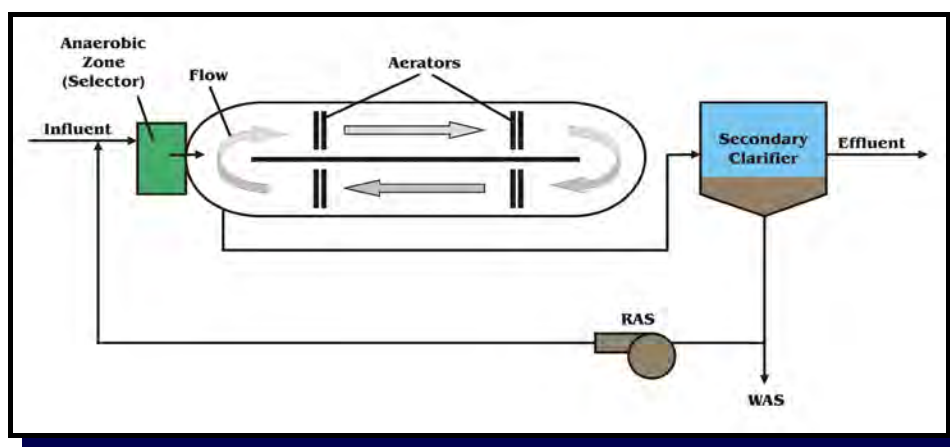


Figure 4.3-11: Oxidation Ditch with an Anaerobic Selector System

Oxidation ditches designed and operated for phosphorus removal only, but not nitrogen removal, typically encounter problems with low alkalinity because nitrification will deplete alkalinity. The oxidation ditches do not necessarily need to be operated with anoxic zones, although doing so can aid in the partial recovery of alkalinity.

To obtain very low total phosphorus concentrations, typically under 0.10 mg/L, additional carbon, in the form of volatile fatty acids, is needed if sufficient readily biodegradable chemical oxygen demand (rbCOD) is not available in the influent. The additional carbon is typically added upstream of the secondary clarification system to avoid depleting that nutrient from the biological process. Lower TP effluent levels can be achieved by close monitoring and control of the anaerobic zone flow and dissolved oxygen levels. Chemical addition and precipitation may also be required.

The footprint of an oxidation ditch system is large compared to other technologies; however, it doesn't require any additional recycle pipes or pumping and needs minimal energy to operate. Typical effluent TP concentrations achieved by the Oxidation Ditch with an Anaerobic Selector are in the range of 0.5 - 2.0 mg/L.

4.4 COMBINED NITROGEN AND PHOSPHORUS REMOVAL TECHNOLOGIES

There are various treatment technologies that can be employed to effectively remove both nitrogen and phosphorus from the wastewater prior to final discharge to the reclaimed water distribution system or the RIB's. As previously discussed in Section 3 of this Conceptual Design Report, "Nutrient Removal Principles", there are many issues that must be resolved in the design and operation of combined nitrogen and phosphorus removal technologies to ensure that discharge limitations are consistently met. Combined nitrogen and phosphorus removal technologies are presented in Table 4.4-1 discussed herein:

Table 4.4-1: Combined Nitrogen and Phosphorus Removal Technologies		
Configuration	Type	Technology
Biological	Suspended Growth	Anaerobic/Anoxic/Oxic or 3-Stage Phoredox Process
		5-Stage Bardenpho Process
		University of Capetown (UCT) Process
		Modified UCT Process
		Oxidation Ditch with Anoxic and Anaerobic Zones
		BIODENIPHO Process
		Virginia Initiative Process (VIP)
		USBF Process
		Westbank Process
		Sequencing Batch Reactor (SBR) - BNR
Hybrid Chemical / Biological		Blue Plains Process
		Biological/Chemical Phosphorus and Nitrogen Removal (BCFS)

4.4.1 Anaerobic/Anoxic/Oxic (A2/O or 3-Stage Phoredox) Process

The Anaerobic/Anoxic/Oxic (A2/O) Process, often referred to as the 3-Stage Phoredox Process, consists of a biological reactor with an anaerobic zone, anoxic zone and aerobic zone. RAS is recycled to the head of the anaerobic zone along with the raw wastewater. Simultaneous nitrogen and phosphorus removal occurs in the A2/O Process. The concentration of nitrates in the Return Activated Sludge (RAS) is reduced, due to the inclusion of the anoxic zone, thereby enhancing the efficiency of the anaerobic process. An internal recycle stream returns nitrates from

the aerobic zone to the anoxic zone enhancing the amount of denitrification. A flow schematic of the A2/O Process is presented in Figure 4.4-1.

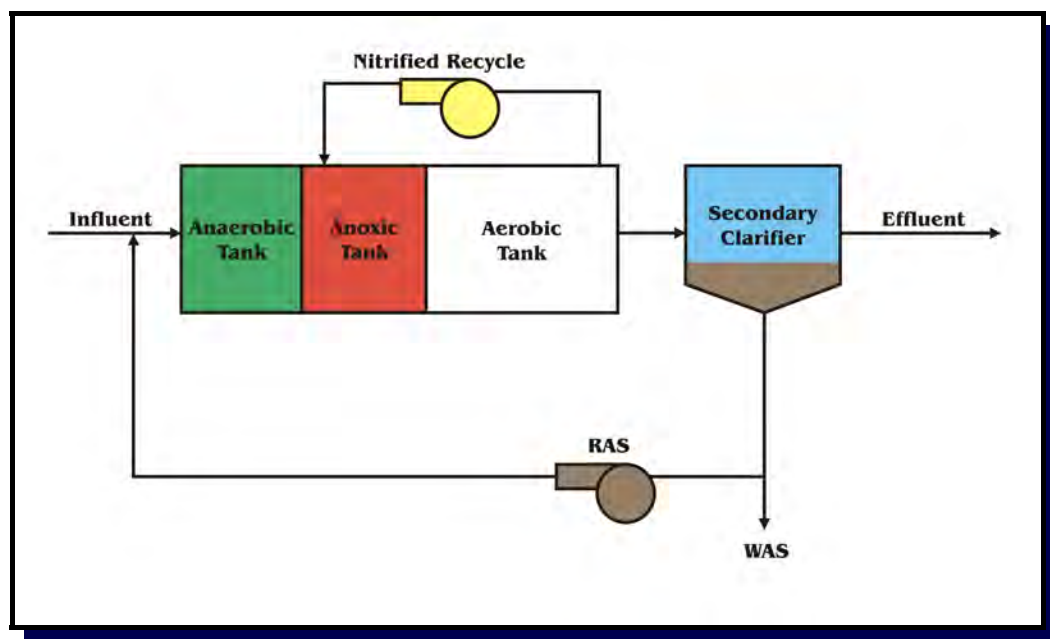


Figure 4.4-1: A2/O (Anaerobic/Aerobic/Oxic) Process

Since nitrates are typically present in the RAS, phosphorus removal using the A2/O Process can be somewhat unreliable. With A2/O, as with all combined nitrogen-phosphorus biological systems, some phosphorus is taken up in the anoxic zone by the PAO's. The sludge residence time in each zone must be sufficient to allow complete phosphate release or uptake. The secondary clarification system must be operated to regularly waste solids to avoid the release of phosphate by the endogenous respiration of the PAO's. With only one anoxic zone, an external carbon source may be required if VFA's aren't sufficient in the fluid to meet the required effluent limitations.

The footprint for the A2/O Process is moderate-to-large in size, compared to other technologies, and does not require any additional recycle piping or pumping. However, the A2/O Process requires a substantial energy for process operation.

Typical effluent TN and TP concentrations achieved by the A2/O Process are in the range of 6 - 9 mg/L TN and 0.1 - 1.0 mg/L TP, respectively. Lower effluent TP concentrations can be achieved through the addition of chemical feed facilities, tertiary clarification and tertiary filtration following the A2/O Process.

4.4.2 5-Stage Bardenpho Process

The 5-Stage Bardenpho process consists of the 4-Stage Bardenpho Process with an upstream anaerobic zone/selector added. A nitrate-rich liquor is recycled from the primary aerobic zone to the primary anoxic zone. The RAS is recycled from the secondary clarification system and is fed with the raw wastewater to the head of the anaerobic zone. Since the nitrates in the RAS are typically low, from 1 to 3 mg/L, they do not have the potential to significantly interfere with the phosphorus removal process.

Supplemental carbon addition, to the secondary anoxic zone, may be required:

- As a carbon source for complete denitrification
- To minimize the volume of the secondary anoxic zone
- To support phosphorus uptake

A flow schematic of the 5-Stage Bardenpho Process is presented in Figure 4.4-2.

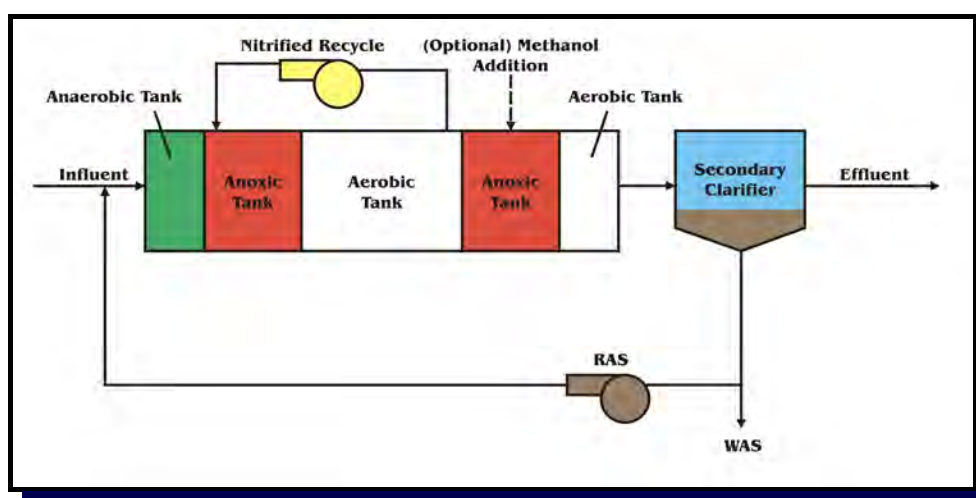


Figure 4.4-2: 5-Stage Bardenpho Process

The footprint size of the 5-Stage Bardenpho Process is large and significant recycle pumping and energy are required for an efficiently operating nutrient removal system. For low TP concentrations, downstream chemical feed facilities, tertiary clarification and tertiary filtration may be required.

Typical effluent TN and TP concentrations achieved by the 5-Stage Bardenpho Process, with chemical addition, tertiary clarification and tertiary filtration, are in the range of 0.9 - 4.0 mg/L TN and 0.1 - 1.1 mg/L TP, respectively.

4.4.3 University of Capetown (UCT) Process

The University of Capetown (UCT) Process is a variation of the A/O Process and consists of three (3) stages consisting of an anaerobic zone, anoxic zone, and aerobic zone. A nitrate-rich internal recycle stream returns nitrates from the aerobic zone to the head of the anoxic zone. A second nutrient rich internal recycle stream returns wastewater from the anoxic zone to the head of the anaerobic zone. RAS is directed to the head of the anoxic zone to:

- Minimize the amount of nitrates entering the anaerobic zone
- Allow for denitrification
- Avoid interference from nitrate with the activation of the PAO's in the anaerobic stage

The intent of the UCT Process is to keep the concentration of VFA's and the phosphate-accumulating reactions high, without competition from denitrification reactions using the VFA's. A flow schematic of the University of Capetown (UCT) Process is presented in Figure 4.4-3.

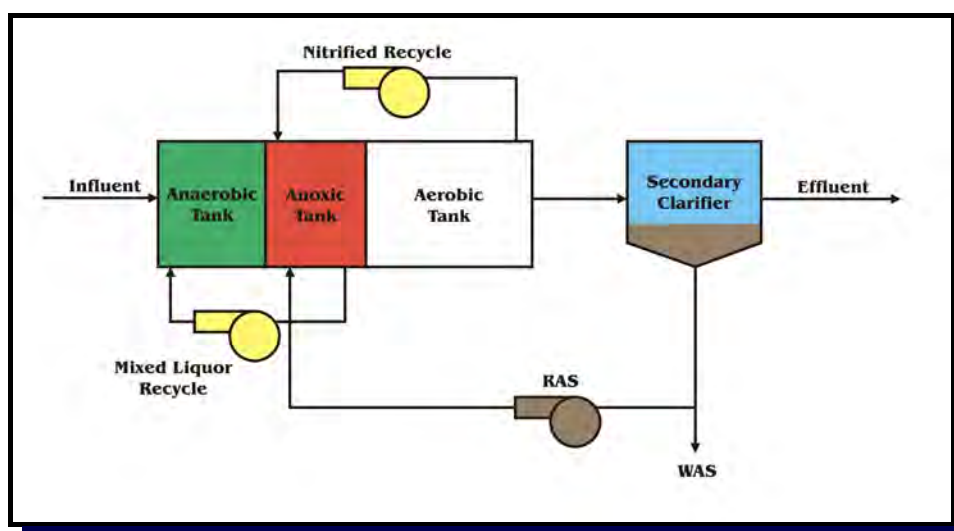


Figure 4.4-3: University of Capetown (UCT) Process

The UCT Process has a medium-sized footprint and requires extensive pumping, piping, and control for the multiple recycle streams. If sufficient VFA's are present in the system, a supplemental carbon source is not required. Achieving a very low phosphate concentration requires downstream chemical feed facilities, tertiary

clarification and tertiary filtration. Typical effluent TN and TP concentrations achieved by the UCT Process, with chemical addition, tertiary clarification and tertiary filtration, are in the range of 8 - 10 mg/L TN and 0.3 - 1.0 mg/L TP, respectively.

4.4.4 Modified University of Capetown (UCT) Process

The Modified UCT Process is another variation of the A/O Process and involves an anaerobic zone followed by two anoxic zones and an aerobic zone upstream of the secondary clarification system. The two anoxic zones in series are designed to eliminate the return of nitrates to the anaerobic zone. The nitrate rich recycle from the aerobic zone is recycled to the head of the secondary anoxic zone. The nitrate containing RAS is recycled to the head of the primary anoxic zone where it is denitrified. The denitrified RAS is recycled from the end of the primary anoxic zone back to the head of the anaerobic zone and mixed with the incoming wastewater. If sufficient VFA's are present, a supplemental carbon source (Micro-C, methanol, etc.) is not typically required. To achieve a very low effluent TP concentration requires downstream chemical precipitation, sedimentation and tertiary filtration. A flow schematic of the Modified University of Capetown (UCT) Process is presented in Figure 4.4-4.

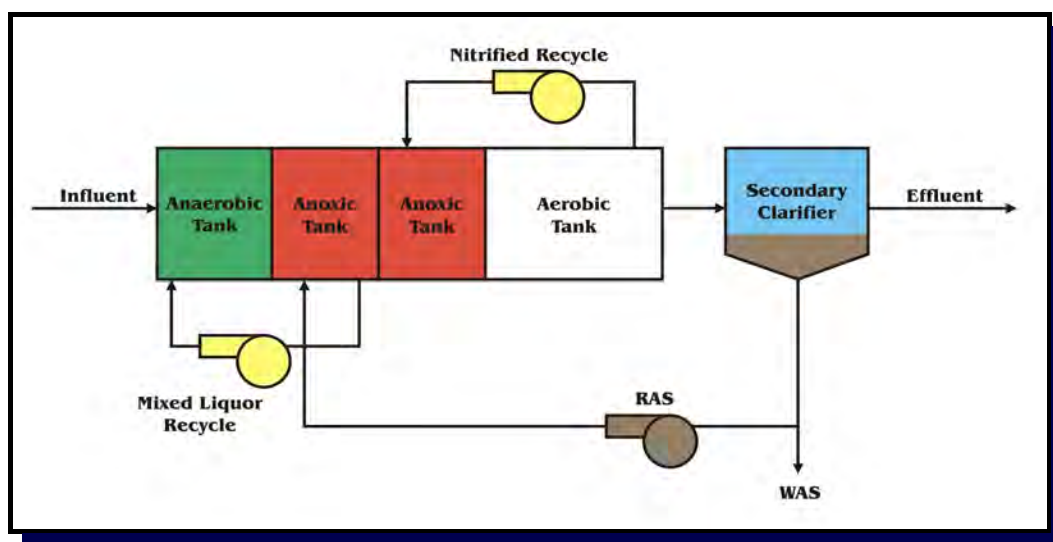


Figure 4.4-4: Modified University of Capetown (UCT) Process

The Modified UCT Process has a medium-to-large footprint and requires extensive pumping, piping, and control for the multiple recycle streams.

Typical effluent TN and TP concentrations achieved by the Modified UCT Process, with VFA addition, are in the range of 5 - 6 mg/L TN and 0.3 - 2.7 mg/L TP, respectively.

4.4.5 Oxidation Ditch with Anoxic and Anaerobic Zones

Oxidation ditches that are biologically configured to remove nitrogen, through the establishment of internal anoxic zones, can be modified with an upstream anaerobic selector to accomplish biological phosphorus removal in a combined system. A flow schematic of the Oxidation Ditch with Anoxic and Anaerobic Zones Process is presented in Figure 4.4-5.

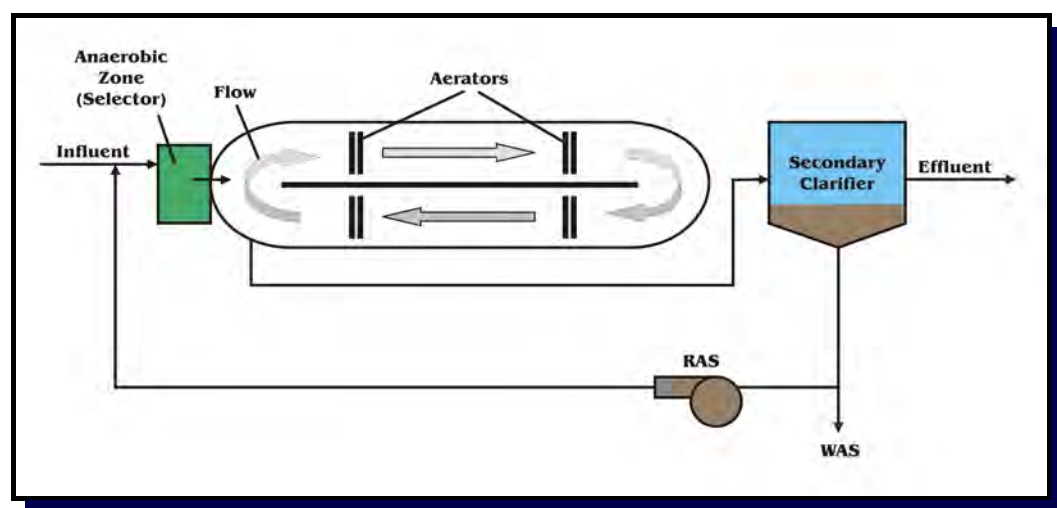


Figure 4.4-5: Oxidation Ditch with Anoxic and Anaerobic Zones

Due to the very high internal recycle within an oxidation ditch, very low nitrate concentrations can be achieved in the mixed liquor prior to secondary clarification. This system configuration minimizes the nitrate concentration in the RAS flow to the anaerobic zone (selector) thereby improving the efficiency of the biological phosphorus removal process. Various oxidation ditch configurations have been developed to simultaneously achieve biological nitrogen and phosphorus removal to low effluent concentration levels.

The Oxidation Ditch with Anoxic and Anaerobic Zones Process has a large footprint. However, the system requires very little piping, if any, and no pumping requirements as the flow moves by gravity (hydraulic grade line). Typical effluent TN and TP concentrations achieved by the Oxidation Ditch with Anoxic and Anaerobic Zones are in the range of 2 - 5 mg/L TN and 0.3 - 2.5 mg/L TP, respectively.

4.4.6 BIODENIPHO® Process

The BIODENIPHO® Process is similar to the BIODENITRO® Process, with the exception that an anaerobic zone (selector) is placed upstream of the two oxidation ditches and a secondary anoxic zone and reaeration zone are placed downstream. The oxidation ditches operate in an alternating, cyclical manner to provide nitrification (aerobic conditions) and denitrification (anoxic conditions). A flow schematic of the BIODENIPHO® Process is presented in Figure 4.4-6.

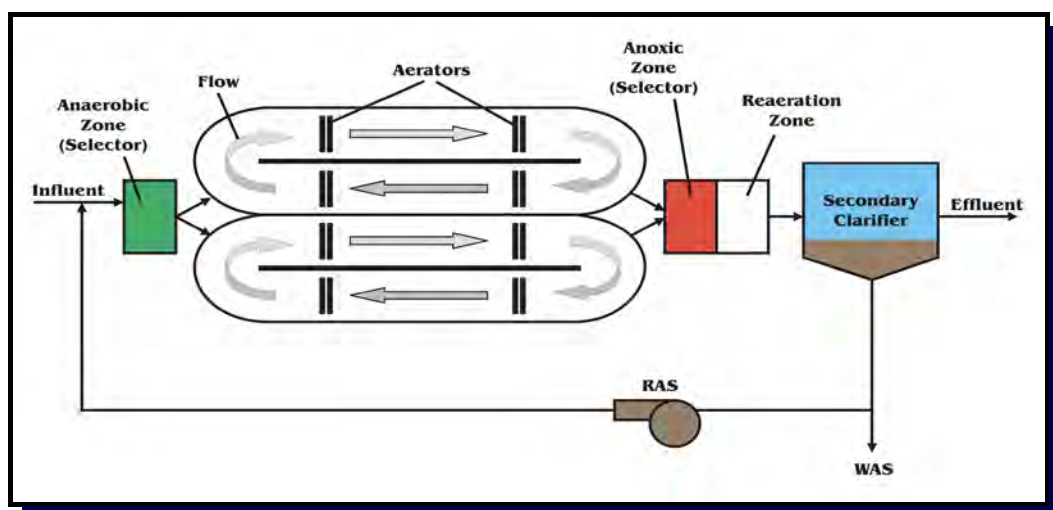


Figure 4.4-6: BIODENIPHO® Process

A mixture of raw wastewater and RAS is fed to the anaerobic zone/selector and then flows to the oxidation ditches where they are alternately aerated (rotors) to produce aerobic, nitrification zones and mixed with submersible mixers only (to keep the mixed liquor moving) to produce anoxic, denitrification zones. The oxidation ditches periodically switch modes, in a patented control methodology known as *Phased Isolation Ditch (PID) control*, and are operated under dissolved oxygen/ORP control. The oxidation ditch system discharges treated effluent to an anoxic zone (selector) and then a reaeration zone to ensure an oxygenated fluid for optimal settling in the secondary clarification system. The ditch phasing results in organic carbon in the wastewater being used for both denitrification and biological phosphorus removal. If sufficient carbon is present, no external source is required.

The BIODENIPHO® system provides process flexibility to better handle wet weather events by reducing the solids loading to the secondary clarifiers. The BIODENIPHO® system ensures that the influent wastewater passes through an anaerobic zone, multiple aerobic and anoxic zones before discharge thereby significantly reducing both effluent TN and TP concentrations.

The BIODENIPHO® Process requires a moderate-to-large footprint due to the need for multiple oxidation ditches and secondary clarifiers. The system requires very little piping, if any, and no pumping requirements as the flow moves by gravity. Since the influent wastewater flow is continually switched between oxidation ditches, the need for additional food or an external carbon source is typically eliminated. The process is also very energy efficient as mechanical rotors and submersible mixers are turned “on” and “off” to promote aeration and mixing of the flow and the generation of aerobic and anoxic zones within the oxidation ditches.

Typical effluent TN and TP concentrations achieved by the BIODENIPHO® Process are in the range of 1.5 - 4 mg/L TN and 0.1 - 2.0 mg/L TP, respectively. To achieve very low effluent TN and TP concentrations, downstream chemical feed facilities, tertiary clarification and tertiary filtration processes may be required.

4.4.7 Virginia Initiative Process (VIP)

The Virginia Initiative Process (VIP) is similar to the modified UCT process and is another variation of the A/O (Phoredox) Process. The anaerobic and anoxic zones are baffled into two or more sections each to increase the rates of reaction in the first section of each zone. This modification allows the second section of each zone to firmly establish the desired anaerobic and anoxic conditions. A flow schematic of the Virginia Initiative Process (VIP) is presented in Figure 4.4-7.

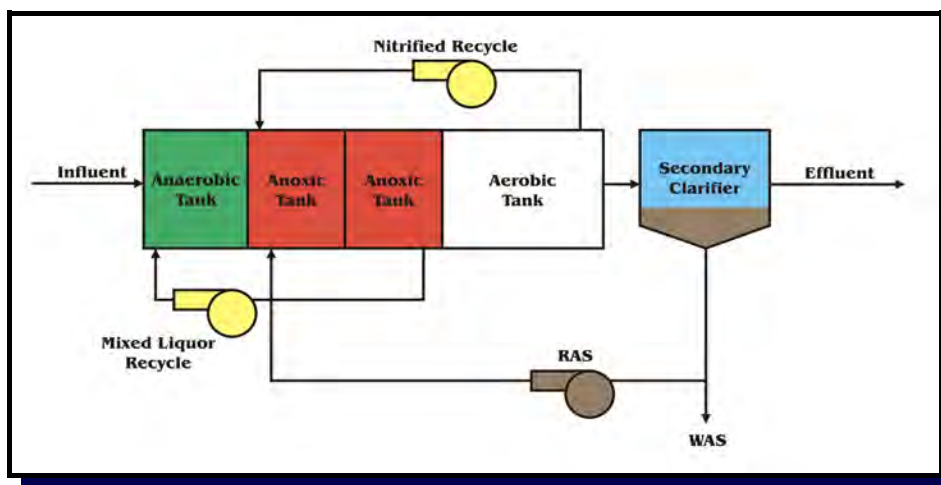


Figure 4.4-7: Virginia Initiative Process (VIP)

The first internal recycle loop returns nitrates from the aerobic zone to the head of the primary anoxic zone, instead of the secondary anoxic zone, as in the Modified

UCT Process. The second internal recycle loop returns flow from the end of the secondary anoxic zone to the head of the anaerobic zone. RAS is conveyed to the head of the primary anoxic zone and mixes with the effluent from the anaerobic zone. The VIP Process provides additional denitrification and minimizes the introduction of nitrates to the anaerobic zone. This step is significant, in that, nitrates in the anaerobic zone:

- Interfere with phosphorus release
- Reduce the opportunity for phosphorus uptake in the aerobic zone

The VIP Process is typically operated in a high-rate mode which minimizes the tank volumes and requires a medium-sized facility footprint. However, the VIP Process requires extensive pumping, piping, and control for the multiple recycle streams. If sufficient VFA's aren't present in the system, the addition of an external carbon source (Micro-C, methanol, etc.) is required to meet the effluent limitations.

Typical effluent TN and TP concentrations achieved by the VIP are in the range of 3 - 10 mg/L TN and 0.2 - 6.0 mg/L TP, respectively. To achieve a very low effluent TP concentration, downstream chemical feed facilities, tertiary clarification and tertiary filtration processes are required.

4.4.8 Upflow Sludge Blanket Filtration (USBF) Process

The Upflow Sludge Blanket Filtration (USBF) consists of anoxic and aerobic zones operating in series. The raw wastewater enters the anoxic zone of the bioreactor where it mixes with activated sludge recycled from the bottom of the sludge blanket filter. Agitated and moved in a plug-flow manner, the MLSS flows into the aerobic compartment. After aeration, the MLSS enters the USBF filter at the bottom. As the fluid rises within the filter, towards the effluent overflow trough at the top, upward velocity decreases and the floc cells become stationary and form a filtering media. The floc becomes larger and heavier and eventually descend to the bottom of the filter and are subsequently recycled back to the anoxic zone. Filtered effluent overflows into an effluent overflow trough and is discharged from the system. A flow schematic of the USBF Process is presented in Figure 4.4-8.

The USBF Process has a medium-sized footprint and requires extensive pumping, piping, and control for the multiple recycle streams required to meet AWT standards. If sufficient VFA's aren't present in the system, the addition of an external carbon source is required. Typical effluent TN and TP concentrations achieved by the USBF Process are in the range of 6 - 10 mg/L TN and 4 - 6 mg/L TP, respectively. To achieve a very low effluent TP concentration, downstream chemical feed facilities, tertiary clarification and tertiary filtration processes are required.

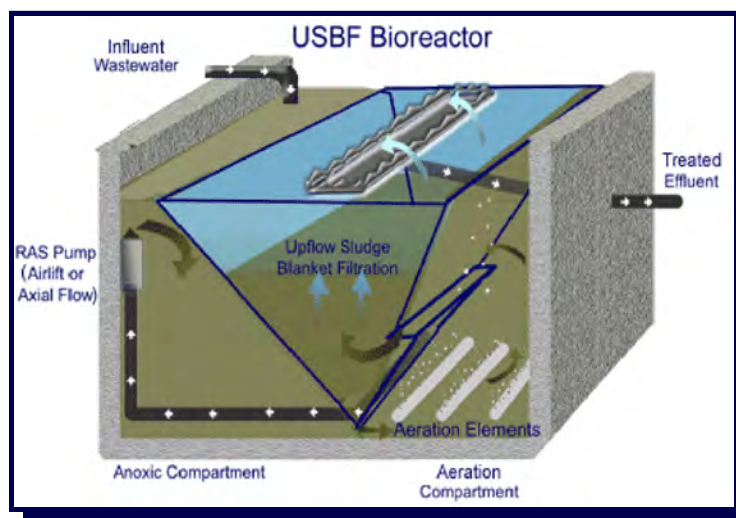


Figure 4.4-8: Upflow Sludge Blanket Filtration (USBF) Process

4.4.9 Westbank Process

The Westbank Process is a modification of the 5-Stage Bardenpho Process and includes a small, pre-anoxic zone followed by an anaerobic zone, a second anoxic zone, and lastly, a large aerobic zone. The process uses a step-feed arrangement for distributing primary effluent and fermenter supernatant, that is VFA rich, to the anaerobic and anoxic zones, as shown in Figure 4.4-9.

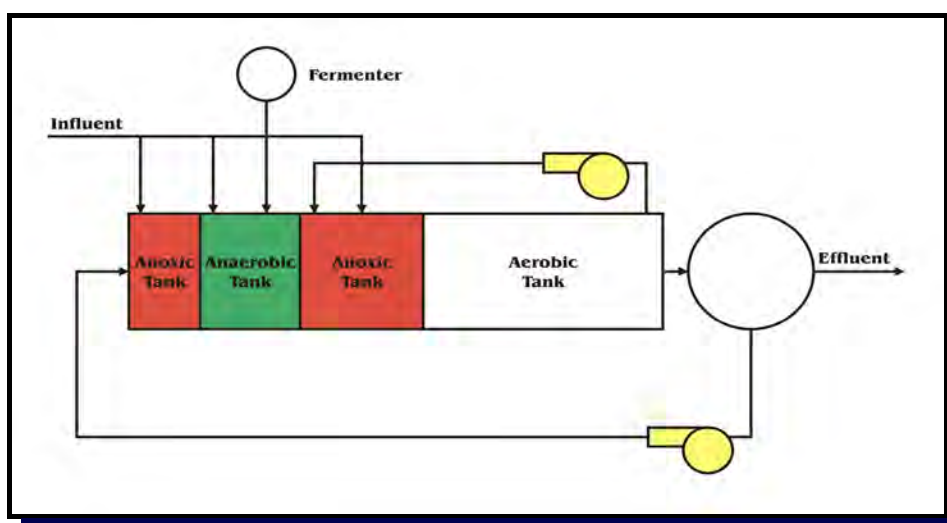


Figure 4.4-9: Westbank Process

The pre-anoxic zone minimizes the amount of dissolved oxygen and nitrates entering the anaerobic zone. Primary effluent is step-fed (divided) among the various zones for the following purposes:

- Pre-anoxic Zone: To denitrify the RAS
- Anaerobic Zone: To provide some VFA's for phosphorus removal
- Aerobic Zone: To stimulate denitrification

Direct feed of primary effluent to the secondary anoxic zone increases the denitrification rate and decreases the size of the anoxic zone. An internal recycle flow, up to 600%, directs the nitrates from the aerobic zone to the secondary anoxic zone for denitrification. Primary sludge from the treatment process is conveyed to a fermentation reactor and the VFA-rich effluent is pumped to the anaerobic zone.

The Westbank Process has a medium-sized footprint and requires extensive pumping, piping, and control for the multiple recycle streams. Typical effluent TN and TP concentrations achieved by the Westbank Process are in the range of 3 - 10 mg/L TN and 0.2 - 4.0 mg/L TP, respectively. To achieve a very low effluent TP concentration, downstream chemical feed facilities, tertiary clarification and tertiary filtration processes are required.

4.4.10 Sequencing Batch Reactor (SBR) - BNR

Sequencing Batch Reactors (SBRs), as previously discussed in Section 4.2.5, are “fill and draw” batch systems in which all treatment steps are performed sequentially for a discrete volume of wastewater in a single or multiple reactor basin configuration. SBRs can be operated to provide both biological nitrogen and phosphorus removal by operating the process through the following sequential phases:

- Anoxic Conditions
- Anaerobic Conditions
- Aerobic Conditions

Due to the *fill and draw* operational nature of the SBR, it is imperative that the nitrates are removed from the anoxic phase before the process is switched over to the anaerobic phase or the phosphorus removal efficiency of the system will be reduced significantly. A schematic diagram of an SBR system for combined biological nutrient removal (BNR) is presented in Figure 4.4-10.

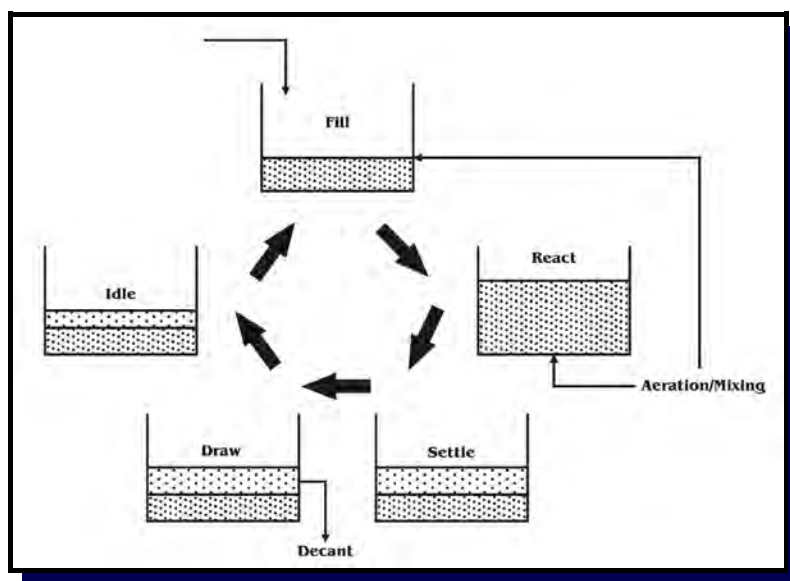


Figure 4.4-10: Sequencing Batch Reactor (SBR) - BNR

The use of multiple SBRs allows for the continuous feeding and batch processing of the raw wastewater and process streams. The control system allows the SBR to operate in a similar fashion as other suspended growth processes. The key to the SBR process is the control system, which consists of a combination of level sensors, timers, and microprocessors which can be configured to meet system needs for nitrogen and phosphorus removal.

A large footprint is typical for SBRs since system designs require multiple SBRs operated in parallel and the use of a flow equalization basin to attenuate diurnal flow variations. Typical effluent TN and TP concentrations achieved by an SBR System for BNR removal are in the range of 4 - 10 mg/L and 1 - 6 mg/L, respectively. To achieve a very low effluent TP concentration, downstream chemical feed facilities, tertiary clarification and tertiary filtration processes are required.

4.4.11 Blue Plains Process

The Blue Plains Process is a biological nutrient removal system that was implemented as a retrofit to the existing nitrification activated-sludge process at the Blue Plains WWTP in Washington, DC (DCWASA). A new anoxic zone was created inside the existing second-stage aeration basin and was created with an hydraulic retention time of 0.8 hours (nominal HRT of 3.3 hours in the total basin).

The Return Activated Sludge (RAS) system is mixed with the effluent from the first-stage, high-rate activated sludge process to provide enhanced biological nutrient. Methanol is required to assist in the denitrification process. Phosphorus is removed, to low levels, by the addition of ferric chloride, clarification and tertiary filtration. The Blue Plains Process is presented in Figure 4.4-11.

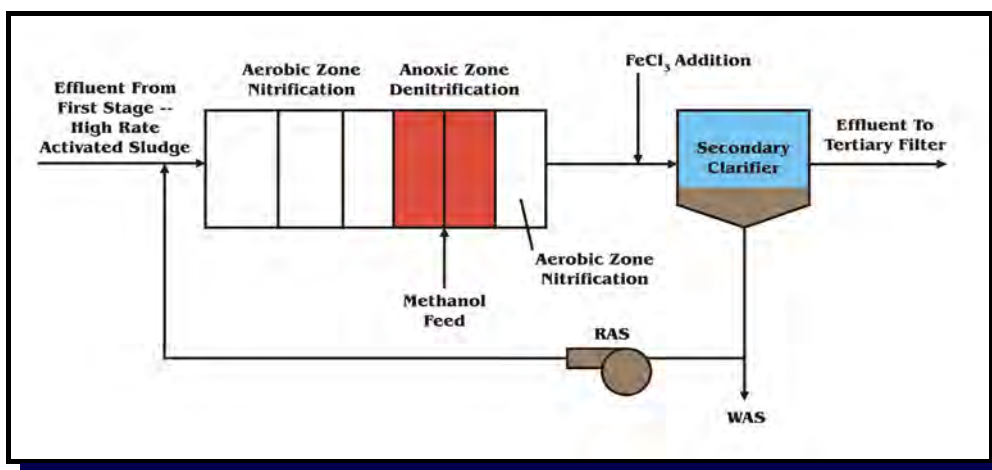


Figure 4.4-11: Blue Plains Process

Typical effluent TN and TP concentrations achieved by the Blue Plains Process are in the range of 4 - 10 mg/L and 0.5 - 2 mg/L, respectively, with chemical addition, sedimentation, and tertiary filtration.

4.4.12 Biological-Chemical Phosphorus and Nitrogen Removal (BCFS) Process

The Biological-Chemical Phosphorus and Nitrogen Removal (BCFS) Process was developed for a wastewater treatment facility in Holton, the Netherlands to meet low TN and TP effluent concentrations at a relatively low BOD:TP and BOD:TN ratio. The design is similar to the Modified UCT Process.

Sludge is removed from the anaerobic zone for thickening and ferric chloride is added to the sludge thickener to remove phosphorus. Therefore, chemical precipitation, sedimentation and chemical sludge recycling is avoided.

The Modified BCFS Process has a medium-sized footprint and requires extensive pumping, piping, and control for the multiple recycle streams. Typical effluent TN and TP concentrations achieved by the BCFS Process are in the range of 5 - 6 mg/L TN and 0.5 - 3.0 mg/L TP, respectively.

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SECTION 5

EVALUATION OF NUTRIENT REMOVAL TECHNOLOGIES

5.1 INTRODUCTION

This Section of the Conceptual Design Report (PDR) describes the decision-making methodology used to compare, evaluate, short-list and select the appropriate nutrient removal technology(ies) to be implemented at the new 6.0 MGD AADF Wildwood WRF in response to aging infrastructure, hydraulic and treatment facility issues, regulatory nutrient limitations, the need to generate an advanced wastewater treatment quality effluent, and maintain stewardship of the local environment within the greater Wildwood regional area.

5.2 GENERAL DECISION-MAKING METHODOLOGY

5.2.1 General

The Biological Nutrient Removal (BNR) Improvements Project decision-making methodology includes a three (3) step evaluation process to narrow (*short-list*) the range of product and technology alternatives and then select the nutrient removal technology(ies) that is best suited to the goals and objectives of the City for implementation at the new 6.0 MGD AADF Wildwood WRF. The timing and cost of the selected nutrient removal technology(ies) must meet the following objectives:

- An established technology
- Ability to be constructed within the property to the west of the existing WRF (build-out of the 6.0 MGD AADF facility)
- An energy-efficient technology
- Ability to be designed, permitted, bid, constructed and the first two phases functionally operational by January 2026 to meet treatment capacity requirements and confirmed/future wastewater commitments

Technical workshop meetings were held with key management, utilities, engineering, and WRF operations staff and CPH, LLC to discuss the various nutrient removal technologies available, decision-making methodology and final nutrient removal technology selection. The following critical selection criterion were developed and utilized in the evaluation of biological nutrient removal (BNR) technology(ies) to be implemented at the new 6.0 MGD AADF Wildwood WRF:

- *Energy-efficient Technologies:* Nutrient removal technologies that are energy-efficient and have low energy requirements were determined to be preferable as electrical/power costs: (1) represent significant expenditures at the Wildwood WRF; (2) are out of the control of the City of Wildwood; and (3) are a major factor in determining the City's Utility Rate Structure and User Charge System; thereby, affecting utility customers on a monthly basis. Therefore, selection of a nutrient control technology(ies) that ***minimizes operational power demand*** was determined to be critical and essential to the sustainability of the Utility.
- *Minimization of the Amount of Sludge Generated by the BNR Process:* Phosphorus removal can be accomplished by one of three methods: (1) biological phosphorus removal only; (2) chemical phosphorus removal (precipitation) only; or (3) a combination of both biological and chemical phosphorus removal. With the cost of sludge treatment and disposal increasing at a progressive rate throughout Florida, ***technologies that minimize the generation of sludge, and thus cost*** to the City, were determined to be preferable.
- *Technology Maturity and a History of Successful Operation:* Nutrient Removal technologies had to be ***mature and have been implemented***, in full-scale operation, in various locations within the United States for a minimum of five (5) years and in at least five (5) locations to be considered as viable options for implementation at the new Wildwood WRF.
- *Capital and Operating Costs:* BNR treatment technologies must be ***cost-effective and affordable*** to the City and their customer base. Thus, capital and operating costs are critical factors in the evaluation.
- *Reliability and Functionality:* BNR treatment ***technologies that are proven and reliable*** with a history of minimal down-time were determined to be preferable.
- *Operation and Maintenance Complexity:* BNR treatment technologies that are ***simple to operate and maintain***, using the current knowledge base of the City's O&M personnel, were determined to be preferable.

- ***AWT Effluent Production:*** BNR treatment technologies that **generate an AWT quality effluent** were determined to be preferable due to the high quality of the product, the need to be environmental stewards of the local environment, and the desire by the City to meet both current and future effluent quality limitations.

5.2.2 Screening Process

A preliminary screening process (first-level), one criteria weighting (pair-wise) analysis and a final screening process (second-level) were implemented, with respect to the nutrient removal technologies, in the evaluation process and are identified as follows:

Screening Level	Description
First-Level	<i>Fatal Flaw Analysis</i> and short-listing of the nutrient removal technologies
Pair-Wise Analysis	<i>Criteria-Weighting</i> , i.e., establishing the relative importance of the selection criteria for the Second-Level Screening
Second-Level	<i>Ranking</i> of short-listed nutrient removal technologies, based on individual selection criteria, that meet the goals and objectives of the City and the AWT effluent limitations required for this BNR project

5.3 FIRST-LEVEL SCREENING EVALUATION - FATAL FLAW ANALYSIS

Viable nutrient removal technologies must initially pass the First-Level Screening Process. The First Level Screening Process eliminates alternatives that have a *fatal flaw* and don't meet the following criteria:

- Ability of the technology to efficiently and effectively remove both TN and TP
- Ability of the technology to meet the AWT TN and TP effluent limits on a consistent basis
- Ability of the technology to remove TP without chemical addition being the sole method for removal
- Energy efficiency process that minimizes electrical energy input and costs
- Level of technology maturity

- Track record (reliability) of technology implementation
- Ability of the technology to be constructed within the property limits to the west of the existing WRF (build-out of the 6.0 MGD AADF facility)

With respect to technology maturity, the nutrient removal technologies were divided into three (3) categories of maturity: embryonic, emerging and established, based on the following US EPA definitions (September 2006):

Maturity Category	Description
Embryonic Technology	Technologies in the developmental stage and/or tested at a laboratory or bench-scale.
	New technologies that have reached the demonstration stage overseas, but cannot be considered to be established there, are also considered to be embryonic with respect to North American applications.
	A high-risk of not operating successfully at the treatment facility because the technology has not been proven beyond bench scale.
Emerging (Innovative) Technology	Technologies meeting one of the following qualifications: (1) have been tested at a full-scale demonstration site in the U.S.; (2) have been available and implemented in the U.S. for less than 5 years; (3) have some degree of initial use (i.e., implemented in less than twenty-five utilities in the U.S.; and (4) are established technologies overseas with some degree of initial use in the United States.
	A moderate-risk of not operating successfully at the treatment facility because of limited experience from full-scale installations.
Established Technology	Technologies widely used (i.e., generally more than twenty-five (25) facilities throughout the United States) and are considered well established.
	A low-risk of not operating successfully at the facility because the technology has a proven track record at facilities.

Nutrient removal technologies were eliminated from further consideration and evaluation in the First-Level Screening (Fatal Flaw Analysis) for the following reasons:

- Technologies were either embryonic or emerging (alternative)
- Technologies that did not have a proven track record or did not meet the criteria for a sufficient number of operating facilities in the United State
- Technologies that had significant power demands or were not energy efficient
- Technologies used the addition of chemicals as the sole method to remove TP

- Technologies that could not meet the AWT TN and TP effluent limits on a consistent and reliable basis

The results of the detailed First-Level Screening of the twenty-nine (29) nutrient removal technologies are presented in Table 5.3-1. Process technologies that passed the First-Level Screening and moved forward to the final screening or evaluation (Second-Level Screening) are highlighted in the last column of the aforementioned table, and presented below:

- Integrated Fixed-Film Activated Sludge (IFAS) Process
- 4-Stage Bardenpho Process
- 5-Stage Bardenpho Process
- Oxidation Ditch with Anoxic and Anaerobic Zones
- BIODENIPHO® Process

5.4 PAIR-WISE (CRITERIA-WEIGHTING) ANALYSIS

5.4.1 Pair-Wise Analysis Description

The Pair-Wise Analysis is a process used to establish the relative importance of selection criteria. Each criterion is assigned a weight through an exercise comparing the significance of each criterion relative to another. The horizontal criteria (project goal criteria) is rated first and entered into the upper right cell of the criteria comparison box. Each criterion being compared is given a ranking score as identified below in Table 5.4-1.

Table 5.4-1: Pair-Wise Analysis: Criterion Scoring and Significance	
Ranking Score	Criterion Significance
0	Insignificant
1	Equally Significant
2	Slightly More Significant
3	Significantly More Important

Nutrient Removal Technology	Can Remove Both TN and TP	Can Meet Both AWT Standards*	Chem addition is the only method for TP Removal	Energy Requirements	Technology Maturity	Technology Track Record	Further Evaluation Warranted?
Cyclically Aerated Activated Sludge (CAAS) Process	No	No	Yes	Low	Established	Proven	No
Modified Ludzack-Ettinger (MLE) Process	No	No	Yes	Moderate	Established	Proven	No
4-Stage Bardenpho Process	No	No	Yes	Moderate	Established	Proven	Yes
MLE or 4-Stage Bardenpho w/Membrane Bioreactor	No	No	Yes	High	Established	Proven	No
Sequencing Batch Reactor	No	No	Yes	Moderate	Established	Proven	No
Oxidation Ditch with an Internal Anoxic Zone	No	No	Yes	Low	Established	Proven	No
BIODENITRO Process	No	No	Yes	Low	Established	Proven	No
Step Feed Act. Sludge Process	No	No	Yes	Moderate	Established	Proven	No
Integrated Fixed Film Activated Sludge (IFAS)	No	No	Yes	Moderate	Established	Proven	Yes
Denitrification Filters	No	No	Yes	Low	Established	Proven	No
Moving Bed Biofilm Reactor	No	No	Yes	Moderate	Established	Proven	No
Schreiber Process	No	No	Yes	Moderate	Established	Proven	No
Nitrification - Sidestream Treatment	No	No	Yes	Moderate	Embryonic	Unproven	No
Chem. Phosphorus Removal	No	No	Yes	Moderate	Established	Proven	No
Fermentation Process	No	No	No	Moderate	Established	Proven	No

TABLE 5.3-1

FIRST-LEVEL SCREENING OF NUTRIENT REMOVAL TECHNOLOGIES



Nutrient Removal Technology	Can Remove Both TN and TP	Can Meet Both AWT Standards*	Chem addition is the only method for TP Removal	Energy Requirements	Technology Maturity	Technology Track Record	Further Evaluation Warranted?
A/O (Anaerobic/Oxic) Process	No	No	Yes	Moderate	Established	Proven	No
Oxidation Ditch with Anaerobic Selector	Yes	Yes	No	Low	Established	Proven	No
A2/O Process (Anaerobic/Anoxic/Oxic)	Yes	No	No	Moderate	Established	Proven	No
5-Stage Bardenpho Process	Yes	Yes	No	Moderate	Established	Proven	Yes
University of Capetown (UCT) Process	Yes	No	No	High	Established	Proven	No
Modified University of Capetown (UCT) Process	Yes	No	No	High	Established	Proven	No
Oxidation Ditch with Anoxic and Anaerobic Zones	Yes	Yes	No	Low	Established	Proven	Yes
BIODENIPHOPROCESS	Yes	Yes	No	Low	Established	Proven	Yes
Virginia Initiative Process (VIP)	Yes	No	Yes	High	Established	Proven	No
USBF Process	Yes	No	Yes	Moderate	Established	Proven	No
Westbank Process	No	No	Yes	Moderate	Established	Proven	No
SBR - BNR	Yes	No	Yes	Moderate	Established	Proven	No
Blue Plains Process	Yes	No	Yes	Moderate	Emerging	Unproven	No
BCFS Process	Yes	No	Yes	Moderate	Emerging	Unproven	No

* TN < 3 mg/L and TP < 1 mg/L (without additional treatment for TN removal or chemical treatment/polishing for TP removal)

TABLE 5.3-1

FIRST-LEVEL SCREENING OF NUTRIENT REMOVAL TECHNOLOGIES

Each criterion being compared is given a score of "1" if they are equally significant. If the one criterion is believed to have a greater significance (relative to the project goals/objectives) than the other, that criteria would receive higher points relative to the other. The total of the scores received by the two criteria being compared should equal "3", or "2" in the case of a tie. Scores for a pair of criteria with unequal significance can be either "1 - 2" or "0 - 3", depending on their relative significance.

After each criterion is individually compared to all other criteria and scored, the scores are summed for each criterion. The points assigned to each criterion are summed both horizontally and vertically to determine its overall score. Then the total points for each criterion are:

- Divided by the total points for all the criteria (summed) to determine the Equivalent Overall Percentage (%).
- Divided by the total points for the lowest rated/scored criteria to determine the Weighted Evaluation Scaling Factor to be used in the Second-Level Screening.

5.4.2 Nutrient Removal Technology Evaluation Criteria

To effectively evaluate the short-listed nutrient removal technologies, specific evaluation criteria are required. The evaluation criteria are specific to the City's Wastewater Management System goals and objectives and the infrastructure required at the new Wildwood WRF to meet all AWT standards and improve the reclaimed water/effluent quality.

The relevant evaluation criteria for the removal of nutrients and to meet AWT standards at the new 6.0 MGD AADF Wildwood WRF are as follows:

Nutrient Removal Technology Evaluation Criteria	
Facility Area Requirements	Nutrient Loading Rates
Technology Reliability	Oxygen Transfer Efficiency
Operation and Maintenance Complexity and Requirements	Energy Requirements
Level of Staff required for operation of the BNR processes	Effluent Quality
Flexibility of Design	External Carbon Source Required
Ability to operate efficiently during wet weather conditions	Technical Maturity
Biosolids Generation Rates	Capital and O&M Costs

A review of the short-listed nutrient removal technologies and the evaluation parameters and criteria to be used in the Second-Level Screening are presented in Table 5.4-2. However, the relative significance of each criteria is different. To determine the importance of each of the evaluation criteria, and develop a weighted ranking and scaling factor, a pair-wise analysis was performed in accordance with the procedure previously outlined. The results of the analysis yielded weighted evaluation scaling factors for each criteria based on their relevance with respect to the goals and objectives of the City's Wastewater Management System and environmental regulations.

5.4.3 Pair-Wise (Criteria-Weighting) Analysis

A pair-wise analysis of the nutrient removal evaluation criteria was conducted, in accordance with the procedure outlined in Article 5.4.1. The results of the analysis yielded *weighted evaluation scaling factors* for each criteria based on their relevance with respect to the goals and objectives of the City's Wastewater Management System, the need to improve the reclaimed water/effluent quality with respect to nutrients, and the need to meet AWT Standards.

The results of the Pair-Wise Analysis are presented in Table 5.4-3. The five (5) most-significant evaluation criteria are as follows:

Pair-Wise Analysis - Top 5 Criterion and Scaling Factors		
Rank	Criteria	Weighted Scaling Factor
1	Capital and O&M Costs	1.769
2	Technology Reliability	1.615
2	Technology Maturity	1.615
4	Energy Requirements	1.538
4	Effluent Quality	1.538

5.5 SECOND-LEVEL SCREENING ANALYSIS

The Second Level Screening ranked each short-listed nutrient removal technology, those that passed the First-Level Screening, based on the individual evaluation criteria. Each of the nutrient removal technologies was given a rating, based on a scale of 50 to 100, with respect to each of the evaluation criteria.

Technology Evaluation Criteria	Nutrient Removal Technology Review				
	Integrated Fixed Film Activated Sludge (IFAS)	4-Stage Bardenpho Process	5-Stage Bardenpho Process	Oxidation Ditch with Anoxic and Anaerobic Zone	BIODENIPHO® Process
Facility Area Requirements	High	High	High	High	High
Technology Reliability	High	High	High	High	High
O&M Complexity and Requirements	Moderate	Low - Moderate	Low - Moderate	Low	Low
Level of Staffing Required for Operations	Low - Moderate	Low	Low - Moderate	Low	Low
Flexibility of Design	Moderate	High	High	Moderate	High
Efficient Operation during Wet Weather	Moderate	High	High	High	High
Biosolids Generation Rate	Moderate	Low - Moderate	Low - Moderate	Low - Moderate	Low - Moderate
Nutrient Loading Rate	Moderate	Moderate	Moderate	Moderate	Moderate
Oxygen Transfer Efficiency	High	High	High	High	High

TABLE 5.4-2

NUTRIENT REMOVAL TECHNOLOGY AND EVALUATION CRITERIA REVIEW



Technology Evaluation Parameters		Nutrient Removal Technology Review				
		Integrated Fixed Film Activated Sludge (IFAS)	4-Stage Bardenpho Process	5-Stage Bardenpho Process	Oxidation Ditch with Anoxic and Anaerobic Zone	BIODENIPHO® Process
Energy Requirements		Moderate	Moderate	Moderate	Low - Moderate	Low
Effluent Quality	TN (mg/L)	2 - 4	2 - 4	0.9 - 3	2 - 5	1 - 3
	TP (mg/L)	1 - 4	0.5 - 3	0.1 - 1.1	0.3 - 2.5	0.1 - 2.0
	Chemical Polishing Req'd for TP	No*	No*	No*	No*	No*
External Carbon Source Required?		No**	No**	No**	No**	No**
Technology Maturity		Moderate	High	High	High	High
Capital and O&M Costs		Moderate	Moderate	Moderate	Moderate	Moderate

* Alum storage and feed facilities are still required, by FDEP, at the facility and may be required from time-to-time based on flow, loadings and operational conditions.

** External carbon source still required at the facility and may be required from time-to-time based on flow, loadings and operational conditions.

TABLE 5.4-2

NUTRIENT REMOVAL TECHNOLOGY AND EVALUATION CRITERIA REVIEW

Item	Wildwood WRF Nutrient Removal Pairwise Evaluation Criteria	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Criteria	Score	Equivalent Overall Percentage (%)	Weighted Evaluation Scaling Factor
1	Area Requirements		2	1	2	1	2	1	1	1	2	1	2	1	2	1	13	5.3%	1.000
2	Technology Reliability			1	2	1	2	1	1	2	1	1	1	2	1	1	21	8.6%	1.615
3	O&M Complexity and Requirements				1	2	1	1	2	1	2	1	1	2	1	3	19	7.8%	1.462
4	Level of Staffing Required for Operation					2	1	1	1	2	1	2	1	2	1	4	15	6.2%	1.154
5	Flexibility of Design						2	1	1	2	1	2	1	1	2	5	16	6.6%	1.231
6	Efficient Operation during Wet Weather							2	1	1	1	2	1	1	2	6	16	6.6%	1.231
7	Biosolids Generation Rate								2	1	2	1	1	2	1	7	13	5.3%	1.000
8	Nutrient Loading Rate									2	1	1	2	1	1	8	15	6.2%	1.154
9	Oxygen Transfer Efficiency										2	1	1	2	1	9	17	7.0%	1.308
10	Energy Requirements											2	1	1	2	10	20	8.2%	1.538
11	Effluent Quality												2	1	1	11	20	8.2%	1.538
12	External Carbon Source													2	1	12	14	5.8%	1.077
13	Technology Maturity														2	13	21	8.6%	1.615
14	Capital and O&M Costs															14	23	9.5%	1.769

Note: Ratings for horizontal lines of Criteria are on the top line of each box. Ratings for vertical columns of Criteria are on the bottom line of each box.

Ranking Number	Criterion Significance	Pair-Wise Rater Information		Pair-Wise Instructions
0	Insignificant	Name:	Benjamin M. Fries	1. In each box, compare the horizontal criteria to the vertical criteria.
1	Equally Significant	Project No.:	W12810	2. The total for both numbers in each box should equal 3, except in the case of a tie (both are equally significant) when the total in the box should equal 2.
2	Slightly More Important	Date:	September 12, 2022	
3	Significantly More Important			

243	100.0%
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TABLE 5.4-3

PAIR-WISE (CRITERIA-WEIGHTING) ANALYSIS - NUTRIENT REMOVAL TECHNOLOGIES

Next, the individual ratings for each nutrient removal technology were multiplied by the *weighted scaling factor* for each of the evaluation criteria, obtained from the Pair-Wise analysis, to obtain a weighted score. The weighted scores for each of the criteria, for each nutrient removal technology, were then summed and the technologies were then ranked. The results of the Second-Level Screening Analysis are presented in Table 5.5-1 and synopsized below:

Second-Level Screening - Nutrient Removal Technologies		
Rank	Nutrient Removal Technology	Evaluation Score
1	BIODENIPHO® Process	1,706
2	5-Stage Bardenpho Process	1,696
3	4-Stage Bardenpho Process	1,677
4	Oxidation Ditch with Anoxic and Anaerobic Zone	1,651
5	Integrated Fixed Film Activated Sludge (IFAS)	1,615

Based on the Second-Level Screening, the **BIODENIPHO Process and 5-Stage Bardenpho Process** are statistically equivalent and either one of them is a preferred nutrient removal technology for implementation into the new 6.0 MGD AADF Wildwood WRF. The two alternative nutrient removal alternatives will allow the facility to reduce TN and TP concentrations in the reclaimed water/effluent to AWT standards, reduce TN and TP mass loadings in the local area and are biological treatment technologies that:

- Are simple and highly reliable treatment operations
- Produce a high quality effluent capable of meeting the stringent TN and TP limitations required
- Can be constructed and implemented within the space constraints available at the Wildwood WRF
- Are energy efficient nutrient removal processes
- Minimize the amount of sludge generated in the BNR process
- Are mature nutrient removal technologies that have a history of successful operation
- Require a limited staff to operate efficiently

Evaluation Criteria	Pairwise Analysis: Weighted Evaluation Scaling Factor	Short-Listed Nutrient Removal Technologies									
		Integrated Fixed Film Activated Sludge (IFAS)		4-Stage Bardenpho Process		5-Stage Bardenpho Process		Oxidation Ditch with Anoxic & Anaerobic Zone		BIODENIPHO® Process	
		Rating	Score	Rating	Score	Rating	Score	Rating	Score	Rating	Score
Area Requirements	1.000	80	80	85	85	84	84	80	80	84	84
Technology Reliability	1.615	90	145	95	153	95	153	90	145	94	152
O&M Complexity and Requirements	1.462	84	123	88	129	87	127	89	130	91	133
Level of Staffing Required for Operations	1.154	85	98	92	106	92	106	90	104	94	108
Flexibility of Design	1.231	85	105	90	111	90	111	85	105	92	113
Efficient Operation during Wet Weather Cond's	1.231	85	105	91	112	91	112	91	112	92	113
Biosolids Generation Rate	1.000	86	86	90	90	91	91	90	90	90	90
Nutrient Loading Rate	1.154	88	102	88	102	89	103	88	102	88	102

TABLE 5.5-1

SECOND-LEVEL SCREENING - EVALUATION OF "SHORT-LISTED" NUTRIENT REMOVAL TECHNOLOGIES



Evaluation Criteria	Pairwise Analysis: Weighted Evaluation Scaling Factor	Short-Listed Nutrient Removal Technologies									
		Integrated Fixed Film Activated Sludge (IFAS)		4-Stage Bardenpho Process		5-Stage Bardenpho Process		Oxidation Ditch with Anoxic & Anaerobic Zone		BIODENIPHO® Process	
		Rating	Score	Rating	Score	Rating	Score	Rating	Score	Rating	Score
Oxygen Transfer Efficiency	1.308	90	118	90	118	90	118	90	118	90	118
Energy Requirements	1.538	84	129	90	138	87	134	89	137	90	138
Effluent Quality	1.538	88	135	90	138	93	143	85	131	92	141
External Carbon Source Required	1.077	90	97	90	97	90	97	90	97	90	97
Technology Maturity	1.615	88	142	94	152	94	152	90	145	91	147
Capital and O&M Costs	1.769	85	150	91	161	92	163	88	156	89	157
Total Score:		1,615		1,692		1,693		1,651		1,694	
Technology Ranking		5		3		2		4		1	

TABLE 5.5-1

SECOND-LEVEL SCREENING - EVALUATION OF "SHORT-LISTED" NUTRIENT REMOVAL TECHNOLOGIES



5.6 SELECTED NUTRIENT REMOVAL TECHNOLOGY

Based on the preliminary screening process (first-level), criteria weighting (pair-wise) analysis and the final screening process (second-level), there are two (2) BNR Treatment Processes (BIODENIPHO® Process or 5-Stage Bardenpho Process) that could be implemented into the new Wildwood WRF to meet the project goals and objectives.

The proposed Biological Treatment System improvements (phased construction), for the new 6.0 MGD Wildwood WRF, are synopsized below in Table 5.6-1. A complete discussion of all primary, secondary, tertiary, and biosolids management system improvements required are discussed in Section 6 of this Conceptual Design Report.

Table 5.6-1: Proposed Biological Treatment System Improvements	
Item	Proposed Biological Treatment System Improvements*
1	Flow Equalization Basin and Pumping System
2	BNR Treatment Process (BIODENIPHO® Process or 5-Stage Bardenpho Process)
	■ 4 Treatment Trains, each with a capacity of 1.50 MGD AADF, and the following treatment basins:
	- Anaerobic Basin
	- Primary Anoxic Basin
	- Aerobic Basin
	- Secondary Anoxic Basin
	- Reaeration Basin
3	Anoxic Basin Mixing Systems
4	Aerobic Basin Aeration Systems
5	Internal Mixed Liquor Recycle (IMLR) Pumping Systems, as necessary
6	Flow metering and modulating valve systems
7	Chemical Feed Building, Storage, and Feed Systems
8	Electrical, Controls, Instrumentation, and SCADA Improvements

* Not a complete list. See Section 6 - Proposed Facility Improvements for more detail as well as the improvements required to the existing Wildwood WRF.

Selection of the BNR Process alternative to be implemented will be finalized, with the input of City Staff, during the preliminary design process. Facility improvements proposed for the new 6.0 MGD AADF Wildwood WRF are discussed in Section 6 of this Conceptual Design Report.

SECTION 6

PROPOSED FACILITY IMPROVEMENTS PROGRAM

6.1 GENERAL

Nutrient removal technologies and their evaluation, with respect to implementation at the Wildwood WRF to meet AWT Standards, were previously discussed in Sections 4 and 5 of this Conceptual Design Report (CDR). This section of the CDR discusses the following:

- The *proposed* Biological Nutrient Removal Process (BIODENIPHO® or 5-Stage Bardenpho) for implementation at the new Wildwood AWT WRF
- The proposed phased-modifications to the existing Wildwood WRF during the interim period when the initial phases of the new Wildwood AWT WRF (6.0 MGD AADF) are being designed, permitted and constructed
- The proposed primary, secondary, tertiary and biosolids management system improvements for a phased-implementation at the new Wildwood AWT WRF (6.0 MGD AADF)

6.2 THE PROPOSED BIOLOGICAL NUTRIENT REMOVAL (BNR) PROCESSES: BIODENIPHO® OR 5-STAGE BARDENPHO

Forty-two (42) nutrient removal technologies were analyzed and evaluated with respect to reducing the TN and TP concentrations in the reclaimed water/effluent produced at the new 6.0 MGD AADF Wildwood AWT WRF in the following classifications:

- Nitrogen Removal
- Phosphorus Removal
- Combined Nitrogen and Phosphorus Removal
- Sidestream Treatment

The BIODENIPHO® Process and 5-Stage Bardenpho Process were the *highest* rated alternatives in the technical evaluation of the treatment methodologies previously presented in Section 5 this CDR. Either one of these BNR Processes will allow the new 6.0 MGD AADF Wildwood WRF to reduce TN and TP concentrations in the facility reclaimed water/effluent to Advanced Wastewater Treatment (AWT) standards, reduce TN and TP mass loadings to the local environment, and are BNR treatment technologies that:

- Are simple and highly reliable treatment operations
- Produce a high quality effluent capable of meeting the stringent TN and TP limitations required
- Can be constructed and implemented within the space constraints available at the Wildwood WRF (property to the west of the existing treatment facility)
- Are energy efficient nutrient removal processes
- Minimize the amount of sludge generated
- Are mature nutrient removal technologies that have a history of successful operation in the United States
- Require a limited staff to operate efficiently

The BIODENIPHO® and 5-Stage Bardenpho Processes are similar BNR systems with differences in the internal mechanics of the various stages. They are both:

- Suspended growth activated sludge process technologies that have been used successfully throughout the United States, and the world, to improve ammonia, nitrogen and phosphorus removal in wastewater treatment facilities
- Advanced modifications of the activated sludge process consisting of *multi-stage* biological reactors (anaerobic, primary anoxic, aerobic, secondary anoxic and reaeration). High levels of BOD₅, TSS, TN and TP removal are consistently achieved without the use of chemicals, in most instances.



6.2.1 5-Stage Bardenpho Process

Raw wastewater is mixed with the return activated sludge (RAS) returned from the secondary clarification system, and enters the anaerobic (fermentation) basin. After contact and the creation of a stressed condition, the mixed liquor suspended solids are transported to the primary anoxic zone where they are mixed with nitrates from the aerobic basin. Oxygen, which is added in the aerobic basin, converts organic matter to carbon dioxide, and ammonia to nitrate through the process of nitrification. In the secondary anoxic basin, the nitrate is reduced to nitrogen gas. The final stage of the process is a reaeration basin where the dissolved oxygen in the mixed liquor is increased to prevent phosphorus from being released in the secondary clarification system. A more detail description of the 5-Stage Bardenpho Process is provided below in Table 6.2-1.

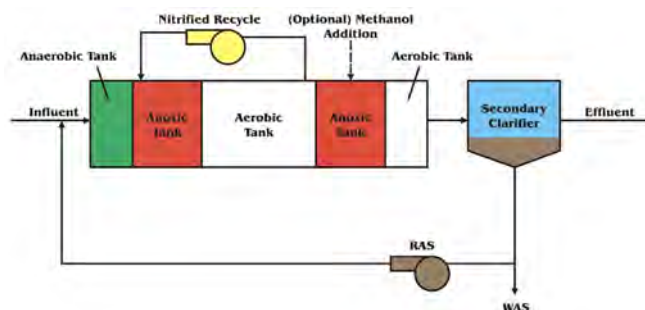


Table 6.2-1: 5-Stage Bardenpho Process

Stage	Treatment	Stage Description
1	Anaerobic (Fermentation)	Return activated sludge (RAS), consisting of a broad spectrum of microbial organisms, is returned from the secondary clarification system to the anaerobic (fermentation) basin (Stage 1). The activated sludge is contacted with raw wastewater to produce the appropriate stress condition that allows large quantities of phosphorus to be removed from the wastewater, biologically, in the subsequent aerobic stage (Stage 3). Organic stress occurs in the absence of dissolved oxygen (DO) and nitrates (NO_3^-). The liquid in the anaerobic basin is mixed through the use of platform-mounted submersible mixers; no oxygen is added in this stage as it would inhibit the anaerobic process.
2	Primary Anoxic (Denitrification)	Mixed liquor containing nitrates from the end of the aerobic basin (Stage 3) is recycled back to the head of the primary anoxic basin and mixed with the anaerobic basin effluent. Bacteria utilize the organic matter (BOD_5) in the influent, reducing nitrates to nitrogen gas. Approximately two-thirds of the nitrogen is removed in the primary anoxic zone. The liquid in this basin is mixed through the use of platform-mounted submersible mixers; no oxygen is added in this stage as it would inhibit the anoxic process.
3	Aerobic (Nitrification)	Oxygen is introduced into the aerobic zone to oxidize BOD_5 and ammonia, through the use of either: (1) external blowers and a system of fine bubble diffusers located at the bottom of the basin; or (2) a system of rotors. The BOD_5 is converted to new cellular mass and carbon dioxide (CO_2). Ammonia (NH_3) in the wastewater is converted to nitrate (NO_3^-). Mixed liquor, containing the nitrates, is recycled back to the primary anoxic basin (Stage 2) and luxury uptake of phosphorus occurs in this aerobic stage.

Table 6.2-1: 5-Stage Bardenpho Process		
Stage	Treatment	Stage Description
4	Secondary Anoxic (Denitrification)	Nitrate (NO_3^-), not recycled to the primary anoxic basin, is conveyed into the secondary anoxic basin where it is reduced, in the absence of a significant oxygen concentration, to nitrogen gas. This produces a liquid with a low nitrate (NO_3^-) concentration. The liquid in this basin is mixed through the use of platform-mounted submersible mixers; no oxygen is added in this stage as it would inhibit the anoxic process.
5	Reaeration	When maintained in an aerobic environment, the mixed liquor from the Bardenpho Process contains 5 - 6% phosphorus. If the mixed liquor becomes anaerobic, phosphorus could be released in the secondary clarification system. Therefore, to prevent an anaerobic condition, the mixed liquor is reaerated through the use of an external blower system and coarse bubble diffusers, prior to the secondary clarification system. The reaeration process ensures that the MLSS remains aerobic, thus retaining phosphorus and assists in removing small nitrogen bubbles generated during the denitrification process (secondary anoxic process).

The MLSS moves through the 5-Stage Bardenpho Process by gravity through slots and holes in the internal wall systems. Internal Mixed Liquor Recycle (IMLR) and RAS pumping systems are employed to provide highly-efficient treatment of the raw wastewater (organic matter, BOD_5 , TKN and TP).

6.2.2 BIODENIPHO® Process

The BIODENIPHO® Process utilizes the same five (5) treatment stages as the 5-Stage Bardenpho Process to treat the incoming raw wastewater with different internal mechanic. The system is highly efficient and has the following process advantages:

- Accomplishes both nitrification and denitrification, within a pair of oxidation ditches or rectangular tanks with a central flow channel, though a repeating cycle of alternating anoxic and aerobic conditions
- The process does not require Internal Mixed Liquor Recycle (IMLR) pumping systems or separate anoxic reactors; thereby resulting in simpler process control and reduced operating costs
- Utilizes an automated and simple process control system with pre-programmed operational modes to ensure energy-efficient treatment
- Separation of the mixing and aeration processes, combined with automatic dissolved oxygen (DO) and/or ORP control, ensures an energy-efficient and stable process operation

- Automatic DO and/or ORP control enhances the denitrification capability of the system, thereby saving energy and operating costs (OPEX)
- Process flexibility is afforded by the capability to vary the effective process volumes allocated for aerobic and anoxic treatment, thereby providing a process that can adapt to either load variations, seasonal variations or storm flow (infiltration/inflow) conditions that could impact other treatment systems
- The anaerobic zone is designed to stagger the wastewater and RAS flows to enhance biological phosphorus removal by minimizing nitrate recycle issues and inhibiting the potential for growth of filamentous bacteria

The BIODENIPHO® Process utilizes Phased Isolation Ditch (PID) technology which allows an alternating flow pattern and process conditions (aerobic and anoxic) occurring within the treatment trains. This operating strategy allows nitrogen and CBOD₅ removal to occur within the active process volume, eliminating the need for IMLR pumping. The PID operation is executed by a PLC-based control system that coordinates the operation of the mechanical process equipment and controls the phase lengths within each treatment train. The PLC control system can allow both manual and automatic control of the treatment process and includes pre-programmed operational modes including a stormwater mode to address infiltration/inflow issues and reduce the impact on the treatment process.

6.2.3 Biological Treatment Process - Final Selection

The final selection of the BNR treatment process to be implemented at the new 6.0 MGD Wildwood WRF will be made during preliminary engineering design of the proposed facility improvements. Two workshops will be held with City staff to discuss the following topics relative to the BNR treatment process selection:

- Evaluation of each BNR treatment process/technology
- Operation and maintenance requirements
- Flexibility of design and the effects of variations in loads and wet weather/stormwater (I/I) impacts on the operation of BNR process
- Oxygen transfer efficiency of the aeration systems
- Energy efficiency of the treatment processes
- Effluent quality considerations
- Capital and operating costs

6.3 WILDWOOD WRF - PROPOSED IMPROVEMENTS PROGRAM

6.3.1 Framework for the Proposed Improvements Program

In developing the proposed improvements program for the Wildwood WRF, and to overcome the existing hydraulic and operational issues at the existing facility, the following project drivers were identified and used to develop the program:

Project Driver	Description
Reduce Nutrient Concentrations	Reduce nutrient (nitrogen and phosphorus) loadings to the environment
	Provide a long-term, flexible and reliable treatment system
State and Federal Regulations	Provide an AWT/BNR treatment system that will meet current and potential future FDEP/EPA regulations
Facility Operating Costs	Provide cost-effective, energy-efficient systems
	Reduce operation and maintenance costs
	Reduce potential chemical demands
Treatment Facility Processes	Provide highly reliable and established treatment processes and equipment that can be easily operated and maintained by City staff
	Provide sustainable and energy-efficient infrastructure
Phased Construction of New WRF Improvements	Construct the new WRF infrastructure, in a phased manner, to match the growth requirements within the City of Wildwood Wastewater Management System Service Area
	Minimization of Maintenance of Plant Operations (MOPO) with the majority of the infrastructure to be built "off-line" while the existing treatment facility continues to operate

Currently, minimum state standards require secondary treatment of wastewater (removal of solid and particulate matter and disinfection) before final disposal. However, they do not effectively reduce effluent nitrogen and phosphorus concentrations. Advanced Wastewater Treatment (AWT) provides a tertiary level of treatment to substantially lower nitrogen and phosphorus concentrations. AWT facilities are required to produce an effluent meeting the following standards:

- CBOD₅ < 5 mg/L
- TN < 3 mg/L
- TSS < 5 mg/L
- TP < 1 mg/L

Upgrading secondary treatment of wastewater to advanced standards is an important and cost-effective strategy for reducing nutrient loads to land application

and groundwater systems and to meet nutrient limitations that are on the permitting horizon. Thus, it is imperative that the proper wastewater treatment technologies and AWT effluent standards be implemented at the new Wildwood WRF and is a cornerstone of the proposed facility improvements program.

6.3.2 Phased Implementation of the Facility Improvements Program

To more closely follow the current and future growth within the Wildwood Wastewater Management System Service Area, and to continue to use the existing facility infrastructure while constructing the new 6.0 MGD WRF, a construction improvements program has been developed consisting of five (5) phases. This methodology will ensure that construction follows growth trends and that capital resources are not expended when infrastructure is not required.

The construction associated with the new 6.0 MGD AWT WRF will utilize common wall construction as much as possible and minimize the piping network to reduce construction and O&M costs, minimize system headloss, and more evenly distribute flows throughout the facility. The phased facility improvements program is synopsized below and discussed in detail in the following subsections of this CDR:

Phase	Capacity (MGD)	Description
1	2.80	<u>Existing WRF Improvements:</u> EQ pumping station improvements; instrumentation improvements to the oxidation ditch systems; site piping improvements; conversion of the Kruger and Lakeside oxidation ditches to a "parallel" configuration/operation; dedicate the Kruger ditch effluent flow to the 50-foot diameter clarifiers and the Lakeside oxidation ditch flow to the 40-foot diameter clarifiers; RAS pumping system improvements; addition of a new skid-mounted biosolids dewatering screw press; RAS Bleed system for odor control and MLSS conditioning; demolition of the existing belt filter press system; and electrical, controls, instrumentation and SCADA modifications. <u>New 6.0 MGD WRF Improvements:</u> Construction of a new screening system (at grade); Master Lift Station No. 1; site work; process piping system; and electrical, controls, instrumentation and SCADA modifications.
2	4.30	<u>New 6.0 MGD WRF Improvements:</u> EQ Basin No. 1 and EQ Pumping Station No. 1; Treatment Train No. 1 of the 5-Stage BNR AWT System (1.50 MGD capacity); Reaeration Basin/Clarifier Flow Splitter Box; two 70-foot diameter secondary clarifiers; RAS/WAS Pumping Station No. 1; two tertiary disc filters and filter influent channel; two chlorine contact chambers, influent and effluent channels and chemical feed and storage systems; Transfer Pump Station with two submersible pumps; aerobic-facultative digestion system (2 reactors) and sludge thickening system; move the biosolids dewatering screw press (Phase I) into the new Biosolids Dewatering Building (open-air structure); and electrical, controls, instrumentation and SCADA modifications.

Phase	Capacity (MGD)	Description
3	4.50	<u>New 6.0 MGD WRF Improvements:</u> Master Lift Station No. 2; Treatment Train No. 2 of the 5-Stage BNR AWT System (1.50 MGD capacity); third secondary clarifier and RAS/WAS Pumping Station No. 2; third disc filter and filter influent channel expansion; third chlorine contact chamber and influent/effluent channel expansion; installation of a third submersible pump into the Transfer Pump Station; and electrical, controls, instrumentation and SCADA modifications. <u>Existing WRF Improvements:</u> Decommissioning of the Lakeside Oxidation Ditch system and 40-foot diameter clarifiers.
4	4.50	<u>New 6.0 MGD WRF Improvements:</u> EQ Basin No. 2 and EQ Pumping System No. 2; Treatment Train No. 3 of the 5-Stage BNR AWT System (1.50 MGD capacity); fourth disc filter and filter influent channel expansion; fourth chlorine contact chamber and influent/effluent channel expansion; installation of a fourth submersible pump into the Transfer Pump Station; addition of two aerobic-facultative digestion reactors (install equipment in one of them) and sludge thickener; second biosolids dewatering screw press; chemical feed and storage system expansion; and electrical, controls, instrumentation and SCADA modifications. <u>Existing WRF Improvements:</u> Decommissioning of the old wastewater treatment facility with FDEP (no longer in use). Begin demolition of the infrastructure (amount of demolition based on funding availability).
5	6.00	<u>New 6.0 MGD WRF Improvements:</u> Treatment Train No. 4 of the 5-Stage BNR AWT System (1.50 MGD capacity); fourth secondary clarifier and addition of pumps to RAS/WAS Pumping Station No. 2; installation of equipment into the fourth reactor of the aerobic-facultative digestion system and 5th PD blower; and electrical, controls, instrumentation and SCADA modifications. <u>Existing WRF Improvements:</u> Finish demolition of the remaining old treatment facility infrastructure and return the area to a greenfield site.

The new 6.0 MGD WRF has been master planned on the City-owned property immediately west of the existing treatment facility as shown in the figure to the right. All unit operations and processes, buildings, structures, roadways, and infrastructure fit very easily and efficiently within it. A detailed layout of the new WRF is presented in the following sections of this CDR.



6.3.3 Environmental Impacts of the Proposed Improvements Program

Preliminary discussions with the jurisdictional regulatory agencies regarding environmental impacts associated with the proposed facility improvements program indicate no initial concerns and a classification of “*minimal impact*” as most of the City-owned property is being used for treatment facility operations and lies within an industrial park off of State Road 44.

During the preliminary and final engineering design of the proposed facility improvements program, FDEP requires the generation and submission of a Preliminary Design Report (PDR). The report requires an assessment of environmental effects of the project, including odor and noise control, public accessibility, proximity to residential areas, flood protection, lighting, and aerosol drift. A brief assessment of each, at this conceptual stage, is addressed below.

Potential Environmental Effect	Conceptual Assessment
Odor and Noise Control	With respect to odor control, the new WRF will include the implementation of a RAS Bleed system where 10 - 15% of the RAS will be added upstream of the screening system thereby allowing the microbial culture to consume and oxidize odor generating constituents in the raw wastewater, master lift station and EQ basin. The process also pre-conditions the microbial culture prior to the BNR treatment process. With respect to noise control, the majority of the equipment will be housed in sound attenuating/environmental enclosures, is submerged in the basin fluid, or is installed in a building. This will ensure the reduction of sound levels to a minimum level, in accordance with local, state and design regulations, at the property line.
Public Accessibility	The treatment facility is currently fenced to keep the public out. Fixed and pan-tilt-zoom cameras and other systems are proposed for the security and safety of the facility operations staff and to keep the general public from unauthorized entry into the facility.
Proximity to Residential Areas	Although the Wildwood WRF is located in an industrial park, the nearest residential area is over ¼-mile away. Nonetheless, the new WRF will be designed to take into account any potential impact of facility operations on local neighborhoods and commercial/industrial establishments. The potential to add covers and odor control systems will be integrated into the design of the new treatment facility's infrastructure.
Flood Protection	All structures, buildings, and equipment will be installed above the 100-year floodplain to ensure that they remain operational during extreme weather events.
Lighting	All facility lighting shall be of the LED type, directing the majority of the light downward, and shall be designed and installed to minimize dispersion of light outwards towards the neighboring properties.
Aerosol Drift	Treatment systems and unit operations and processes to be employed at the new facility shall be designed to minimize aerosol drift.

6.3.4 Permitting, Zoning, Environmental and other Miscellaneous Considerations

Other permitting and miscellaneous project elements that will need to be addressed, during the preliminary design process, and prior to construction of any of the proposed improvements, are synopsized in the table below.

Project Element	Description
FDEP Permitting	The proposed improvements will have to be permitted through the Florida Department of Environmental Protection (FDEP) as they are major modifications to the current facility and treatment system. The permitting process will include the generation of a Preliminary Design Report (PDR) identifying the details of the proposed improvements and associated processes/equipment.
Water Management District (WMD) Permitting	The proposed facility site improvements will require the City to obtain an Environmental Resource Permit (ERP) from the Southwest Florida Water Management District (SWFWMD). Permitting will occur during preliminary design.
Phase I Environmental Evaluation	Assessment of the flora and fauna in the southwest and western areas of the treatment facility property where the new 6.0 MGD treatment facility is proposed. The evaluation will include environmental monitoring, reporting, and permitting with the regulatory agencies, as necessary.
Geotechnical Subsurface Evaluation	A geotechnical evaluation will be conducted in the southwest and western areas of the treatment facility property where the new 6.0 MGD treatment facility is proposed. The geotechnical subsurface evaluation shall consist of obtaining soil borings and recommendations for the proposed improvements for foundation stability and compaction requirements. In addition, general classifications of soils and recommendations regarding drainage and stormwater detention pond percolation rates and recovery periods will be determined.
Zoning Modifications	No zoning changes are anticipated as the wastewater treatment facility property is zoned under the "public facilities" classification and is located within an industrial park. The public facilities zoning designation includes utilities based on the definition for the public facilities land use category (Future Land Use Element).

All of these project elements will be addressed during the preliminary and final engineering design of the proposed facility improvements program.

6.3.5 Proposed Phase I Improvements

The proposed Phase I improvements include modifications to the existing Wildwood WRF and the initial construction of infrastructure for the new 6.0 MGD AWT WRF. The improvements will address the poor hydraulic distribution of wastewater flow between the Kruger oxidation ditches and the Lakeside oxidation ditches and the poor hydraulic distribution of flow from the Lakeside oxidation ditches to the four secondary clarifiers. The proposed improvements also include the following:

- Conversion of the Kruger and Lakeside oxidation ditch systems to a "parallel" configuration/operation

- Dedicating the Kruger oxidation ditch effluent flow to the 50-foot diameter secondary clarifiers and the Lakeside oxidation ditch effluent flow to the 40-foot diameter secondary clarifiers
- Wastewater screening system, Master Lift Station No. 1 and a biosolids dewatering screw press system
- Site piping improvements, sitework, demolition activities, RAS system improvements and electrical/controls/instrumentation/SCADA modifications

A detailed synopsis of the proposed Phase I facility improvements is presented in Table 6.3-1 and graphically in Figure 6.3-1.

Table 6.3-1: Proposed Phase I Improvements			
Facility Treatment Capacity	Proposed Facility Improvements	Improvements To:	
		Existing WRF	New WRF
2.80 MGD AADF	New EQ pumps, piping and valving systems, modulating valves and flow meters to each oxidation ditch (conversion of the current treatment system to a "parallel" configuration/operation)	X	
	Instrumentation improvements to the oxidation ditch system to improve treatment efficiency and operation	X	
	Installation of new piping (PVC or HDPE; at or just below grade) and fittings to collect the effluent from the Kruger oxidation ditches and convey it to the existing influent pipeline feeding the 50-foot diameter secondary clarifiers	X	
	Wastewater screening system (2 redundant units), screenings structure and a dewatering screw compactor		X
	Master Lift Station No. 1, to include wetwell, plastic wetwell liner, three (3) submersible pumps, discharge piping and valving systems		X
	RAS Bleed System (conveyance of 10 - 15% of the RAS to the screening system) for odor control and MLSS conditioning		X
	RAS pumping system improvements to include the installation of one small RAS pump to each of the existing RAS pump stations	X	
	Demolition of the existing belt filter press infrastructure and installation of a new biosolids dewatering screw press and associated equipment	X	
	Process piping system (piping, valves, fitting, meters, etc.)		X
	Sitework (site grading, new sidewalk and roadway or repairs, etc.)	X	X
	Electrical, controls, instrumentation and SCADA improvements	X	X

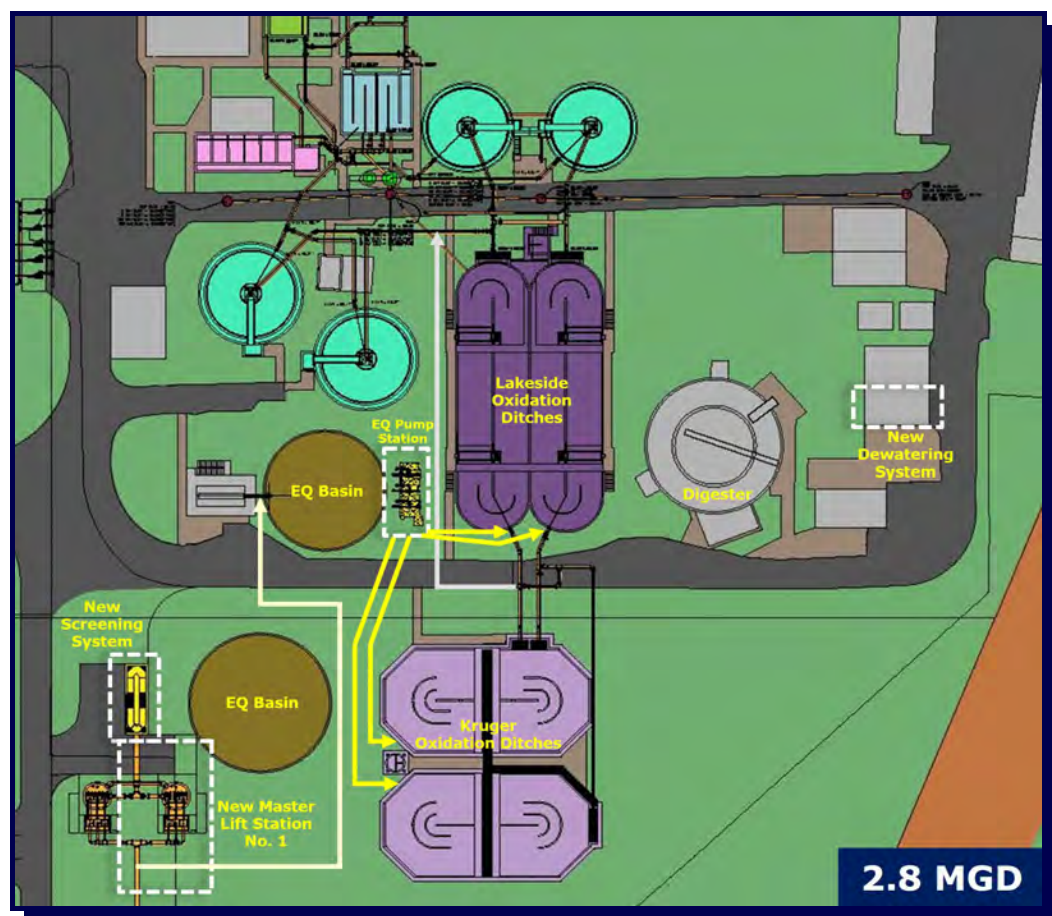


Figure 6.3-1: Proposed Phase I Improvements

A new screening system will be installed to replace the existing, less efficient and corroded system and will be designed to accommodate the proposed facility design capacity of 6.0 MGD AADF and meet Class I Reliability criteria. Initially, the screening system will be utilized for both the existing facility and the new 6.0 MGD AWT WRF. By constructing the screening system "off-line", the impact to the operation of the existing Wildwood WRF will be minimal. The new screening system will be of either the drum screen or perforated-plate climber type and will be constructed in either a parallel in-ground configuration (concrete structure with flow channels) or at grade. Either version will include a fully redundant screen and incorporate a manual bypass system for maintenance purposes. The installation will alleviate some of the hydraulic issues experienced in the wastewater collection system as it will be installed at or below grade; thereby reducing the static head that the City lift stations are pumping against. The reduction in static head will be approximately 13 - 18 feet. Thus, the lift station pumps will operate more efficiently, along a different portion of their pump curve, and at a lower effective horsepower.

Master Lift Stations No. 1 and No. 2 will be sized to accommodate the variation in flow anticipated for the build-out condition of the facility (AADF, MDF and PHF). Design features include two 12-foot diameter wet-wells with three (3) submersible pumps in each wetwell. This approach will enable the construction of the Master Lift Stations in phases to accommodate future growth. The raw wastewater discharge piping will be configured to enable feeding both the existing treatment facility and the new 6.0 MGD AWT WRF. By constructing the Master Lift Stations “off-line”, the impact to the operation of the existing Wildwood WRF will be minimal.

The existing biosolids dewatering system (belt filter press) is beyond its service life, and while usable, is not effective at dewatering the biosolids. The Phase I improvements propose the installation of a biosolids dewatering screw press (volute unit) capable of dewatering digested biosolids to 16% - 20% dry solids, by weight. The volute dewatering screw press is small and modular in size with the screw press, control panel, flash mixing tank and ancillary items mounted on a skid that will fit within the limits of the exiting belt press facility. It is anticipated that a single 3-drum screw press be installed to accommodate the dewatering requirements of the existing WRF and that the screw press be configured in such a manner that it will be relocated to the new Biosolids Dewatering Building during the Phase II construction improvements.

The proposed Phase I improvements will bridge the time-line required to design, permit and construct the new 6.0 MGD AWT WRF. Upon completion of the proposed Phase I improvements the rated treatment capacity of the facility will be 2.80 MGD AADF.

6.3.6 Proposed Phase II Improvements

The proposed overall design for the new 6.0 MGD WRF will include the following major infrastructure components:

- Space for a future Headcell® Grit Removal System, if necessary
- Two (2) EQ Basins (each with dual compartments and integral sluice gate) with mixing systems and independent EQ Pumping Stations
- Four (4) BNR Treatment Trains (anaerobic, primary anoxic, aerobic, deoxygenation, and secondary anoxic basins), each with a treatment capacity of 1.5 MGD AADF
- A centralized reaeration basin with an integral secondary clarifier flow splitter box to equally distribute flow to all four secondary clarifiers

- Four 70-foot diameter secondary clarifiers with RAS/WAS pumping stations
- A combined Tertiary Filtration/Chlorine Contact Chamber Structure to include expandable influent and effluent channels, four (4) disc filters installed at grade in stainless steel enclosures, and four (4) Chlorine Contact Chambers
- A centralized Transfer Pump Station with four (4) submersible pumps
- A Chemical Storage and Feed System Building for storage of sodium hypochlorite (high-level disinfection) and the integral chemical feed skids
- A biosolids management system consisting of four (4) aerobic-facultative digestion reactors, sludge thickening system, blowers and air diffusion system, Biosolids Dewatering Building (open-air structure), two (2) biosolids dewatering screw presses (3-drum), chemical feed and storage systems, and associated infrastructure
- Electrical Building No. 1 with an emergency, diesel-driven generator
- Electrical, controls, instrumentation, and SCADA systems
- Maintenance/Storage Building and a future Operations Building

The Phase II Improvements begin the initial steps of construction associated with the new 6.0 MGD AWT WRF. A detailed synopsis of the proposed Phase II facility improvements is presented in Table 6.3-2 and graphically in Figure 6.3-2.

Table 6.3-2: Proposed Phase II Improvements			
Facility Treatment Capacity	Proposed Facility Improvements	Improvements To:	
		Existing WRF	New WRF
4.30 MGD AADF	EQ Basin No. 1 (dual compartment with sluice gate), basin mixing system and EQ Pumping Station No. 1		✗
	Treatment Train No. 1 of the 5-Stage BNR AWT System (1.50 MGD capacity) and associated aeration and mixing systems		✗
	Secondary Clarifiers No. 1 and No. 2 (70-foot diameter; 14-foot sidewater depth) and associated infrastructure		✗
	RAS/WAS Pumping Station No. 1		✗
	Reaeration Basin/Clarifier Flow Splitter Box		✗
	Tertiary Disc Filters No. 1 and No. 2 and Filter Influent Channel		✗

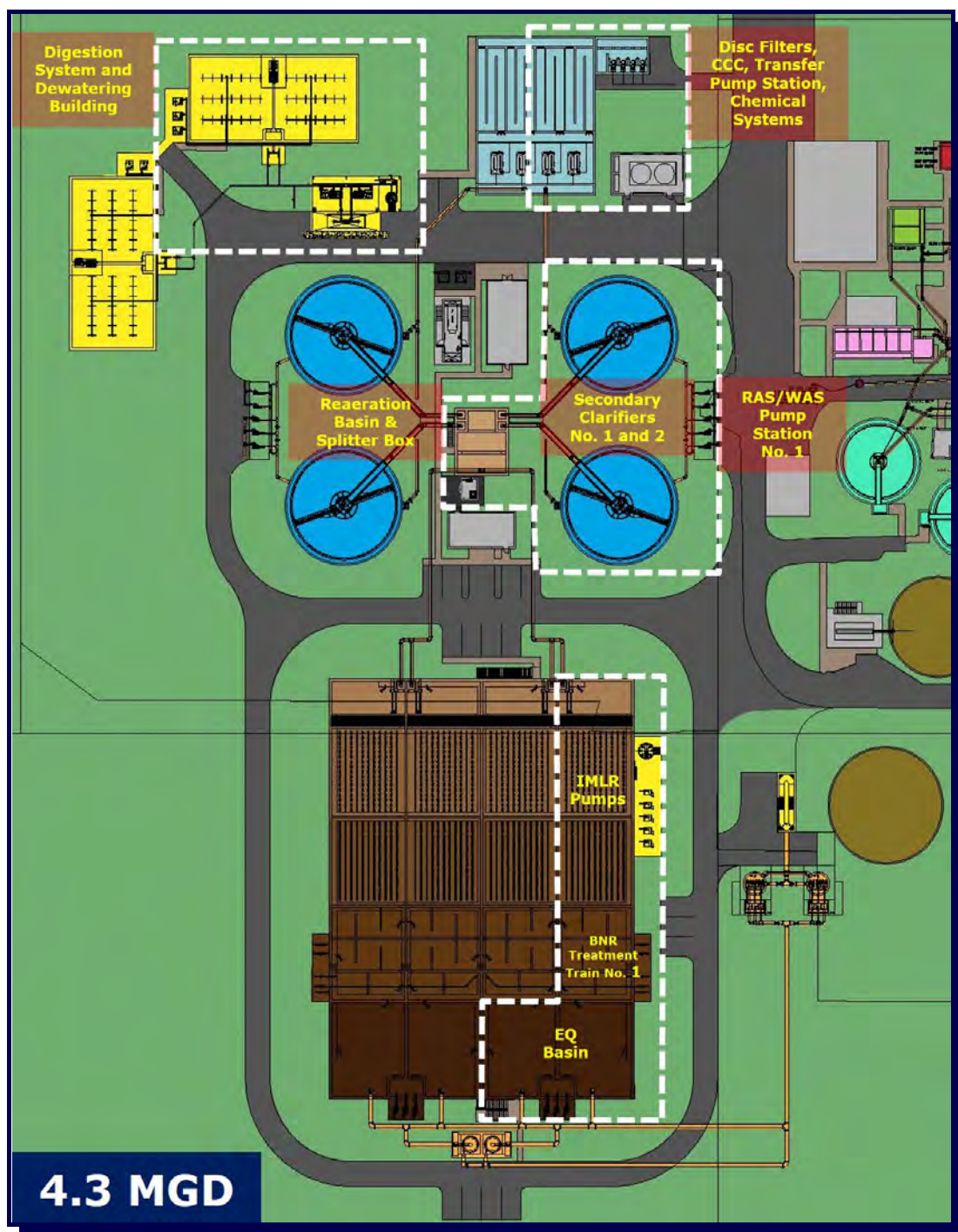


Figure 6.3-2: Proposed Phase II Improvements

Table 6.3-2: Proposed Phase II Improvements			
Facility Treatment Capacity	Proposed Facility Improvements	Improvements To:	
		Existing WRF	New WRF
4.30 MGD AADF	Chlorine Contact Chambers No. 1 and No. 2, influent and effluent channels, chemical storage/feed building, and chemical feed systems		X
	Transfer Pump Station and two submersible pumps		X
	Aerobic-Facultative Digestion System Reactors No. 1 and No. 2, Sludge Thickening System No. 1, aeration and mixing systems, chemical feed and storage systems, and biosolids dewatering bldg		X
	Move the biosolids dewatering screw press (Phase I installation) from the existing WRF into the new Dewatering Building (Phase II)	X	X
	Electrical, controls, instrumentation and SCADA improvements		X
	Construction of the proposed internal loop road system		X

Upon completion of the proposed Phase II improvements the rated treatment capacity of the facility will be 4.30 MGD AADF.

6.3.7 Proposed Phase III Improvements

The Phase III Improvements continue the phased-construction associated with the new 6.0 MGD AWT WRF. A detailed synopsis of the proposed Phase III facility improvements is presented in Table 6.3-3 and graphically in Figure 6.3-3.

Table 6.3-3: Proposed Phase III Improvements			
Facility Treatment Capacity	Proposed Facility Improvements	Improvements To:	
		Existing WRF	New WRF
4.50 MGD AADF	Master Lift Station No. 2 to include wetwell, plastic wetwell liner, three (3) submersible pumps, discharge piping and valving systems and interconnection to Master Lift Station No. 1		X
	Treatment Train No. 2 of the 5-Stage BNR AWT System (1.50 MGD treatment capacity) and associated aeration and mixing systems		X
	Secondary Clarifier No. 3 (70-foot diameter; 14-foot sidewater depth) and associated infrastructure		X

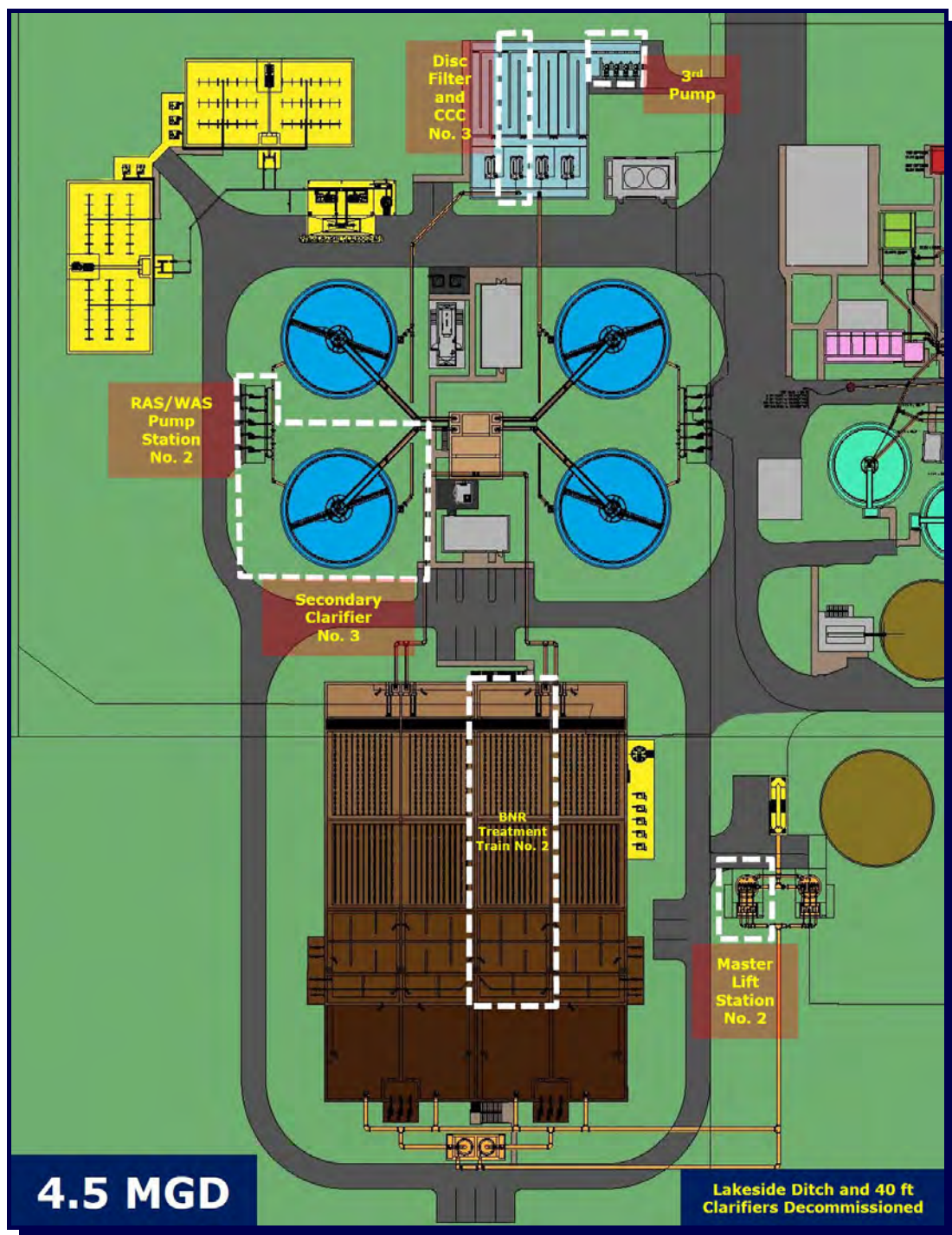


Figure 6.3-3: Proposed Phase III Improvements

Table 6.3-3: Proposed Phase III Improvements			
Facility Treatment Capacity	Proposed Facility Improvements	Improvements To:	
		Existing WRF	New WRF
4.50 MGD AADF	RAS/WAS Pump Station No. 2 (4 pumps total)		X
	Tertiary Disc Filter No. 3 and filter influent channel expansion		X
	Chlorine Contact Chamber No. 3 and influent/effluent channel expansion		X
	Third submersible pump added into the Transfer Pump Station		X
	Electrical/controls/instrumentation/SCADA system improvements		X
	Decommissioning of the Lakeside Oxidation Ditch System and 40-foot diameter secondary clarifiers	X	

Upon completion of the proposed Phase III improvements the rated treatment capacity of the facility will be 4.50 MGD AADF consisting of the operation of BNR Treatment Trains No. 1 and No. 2, the Kruger oxidation ditches and the two 50-foot diameter secondary clarifiers and the new AWT WRF infrastructure constructed in Phases I, II and III. The Lakeside oxidation ditches and the two 40-foot diameter secondary clarifiers will be decommissioned in this phase and no longer utilized.

6.3.8 Proposed Phase IV Improvements

The Phase IV Improvements continue the phased-construction associated with the new 6.0 MGD AWT WRF. A detailed synopsis of the proposed Phase IV facility improvements is presented in Table 6.3-4 and graphically in Figure 6.3-4.

Table 6.3-4: Proposed Phase IV Improvements			
Facility Treatment Capacity	Proposed Facility Improvements	Improvements To:	
		Existing WRF	New WRF
4.50 MGD AADF	EQ Basin No. 2 (dual compartment with sluice gate), mixing system and EQ Pumping Station No. 2		X
	Treatment Train No. 3 of the 5-Stage BNR AWT System (1.50 MGD capacity), and associated aeration and mixing systems		X
	Tertiary Disc Filter No. 4 and filter influent channel expansion		X

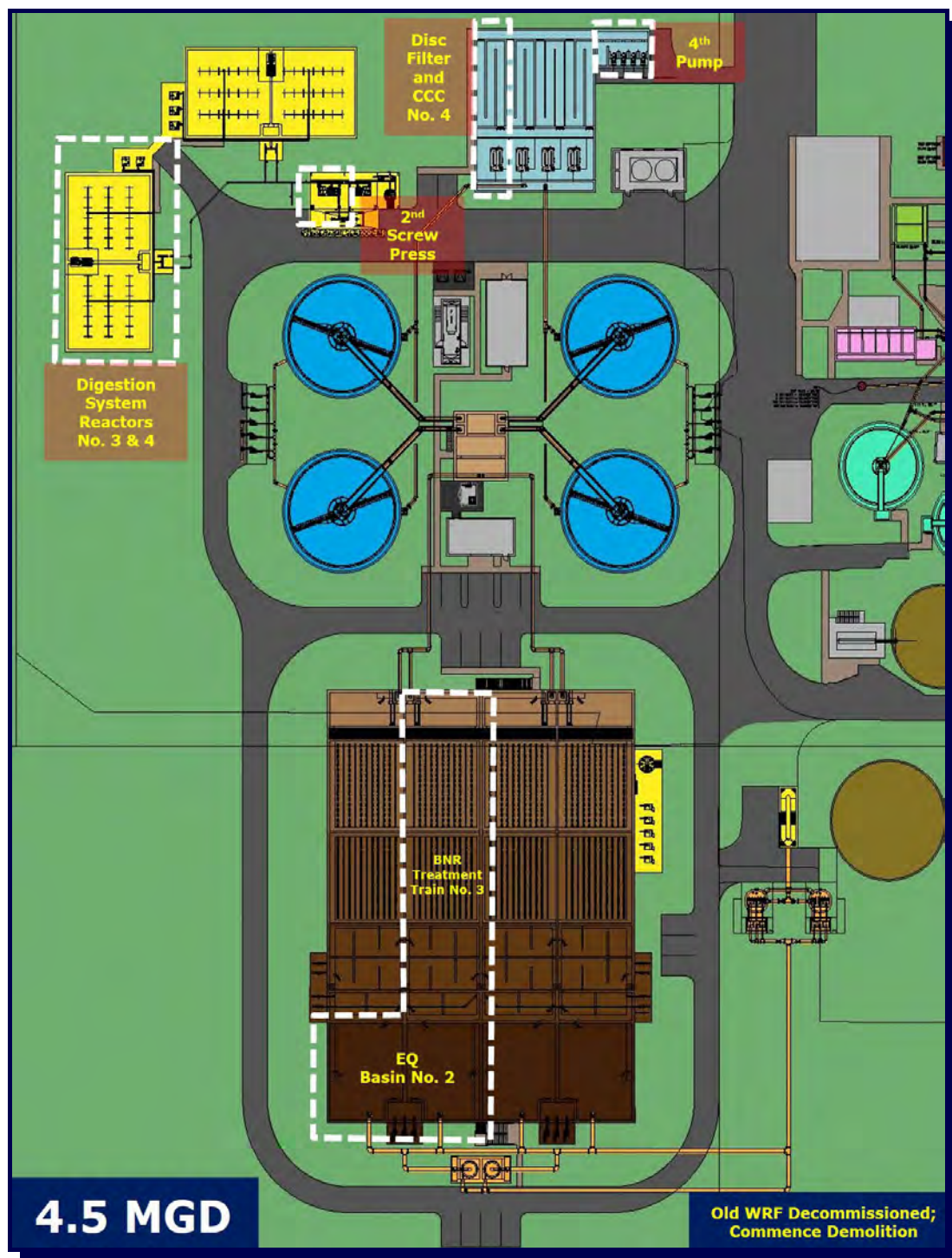


Figure 6.3-4: Proposed Phase IV Improvements

Table 6.3-4: Proposed Phase IV Improvements			
Facility Treatment Capacity	Proposed Facility Improvements	Improvements To:	
		Existing WRF	New WRF
4.50 MGD AADF	Chlorine Contact Chamber No. 4 and influent/effluent channel expansion		X
	Fourth submersible pump added into the Transfer Pump Station		X
	Aerobic-Facultative Digestion System Reactors No. 3 and No. 4, Sludge Thickening System No. 2, aeration and mixing systems installed in Reactor No. 3 only, chemical feed and storage system expansion		X
	Biosolids Dewatering Screw Press No. 2 and associated infrastructure installed in the Biosolids Dewatering Building		X
	Electrical, controls, instrumentation, and SCADA system improvements		X
	Decommissioning of the old treatment facility, in its entirety, with FDEP (no longer in use). Begin demolition of the infrastructure (amount based on funding availability)	X	

Upon completion of the proposed Phase IV improvements the rated treatment capacity of the facility will be 4.50 MGD AADF consisting of the operation of the new AWT facility infrastructure only.

The old wastewater treatment facility will be decommissioned in accordance with FDEP requirements (formal permitting action required) and demolition of a portion of the old treatment facility infrastructure will commence and be accomplished in accordance with FDEP criteria. The amount of infrastructure demolition, in the Phase IV improvements project, will be a function of the funding available at the time.

6.3.9 Proposed Phase V Improvements

The Phase V Improvements will conclude the phased-construction associated with the new 6.0 MGD AWT WRF with the exception of the proposed Operations Building and HeadCell® grit removal system. This infrastructure components could be added in the future or in any previous phase of construction based on the needs of the City, condition of the existing Operations Building, and the amount of grit that is entering the AWT facility from the wastewater collection system.

A detailed synopsis of the proposed Phase V facility improvements is presented in Table 6.3-5 and graphically in Figure 6.3-5.

Table 6.3-5: Proposed Phase V Improvements			
Facility Treatment Capacity	Proposed Facility Improvements	Improvements To:	
		Existing WRF	New WRF
6.0 MGD AADF	Treatment Train No. 4 of the 5-Stage BNR AWT System (1.50 MGD capacity), and associated aeration and mixing systems		X
	Secondary Clarifier No. 4 (70-foot diameter; 14-foot sidewater depth) and associated infrastructure		X
	Addition of two pumps to RAS/WAS Pump Station No. 2		X
	Installation of equipment into Aerobic-Facultative Digestion System Reactor No. 4 and addition of the fifth PD blower		X
	Electrical, controls, instrumentation, and SCADA system improvements		X
	Finish demolition of the remaining old WRF infrastructure and return the area to a greenfield site	X	

Upon completion of the proposed Phase V improvements the rated treatment capacity of the facility will be 6.00 MGD AADF consisting of the operation of the new AWT facility infrastructure only.

Completion of demolition operations with respect to the remaining old wastewater treatment facility infrastructure, not demolished in the Phase IV improvements, will occur and must be accomplished in accordance with FDEP criteria. At the completion of this phase of construction, the old wastewater treatment facility site will have been converted into a greenfield area for future utility development.

The phased-construction of the facility improvements program for the new Wildwood 6.0 MGD AWT WRF:

- Meets the goals and objectives set forth by the City of Wildwood
- Allows construction of the improvements to follow the actual growth patterns within the City of Wildwood wastewater management system service area; thereby providing better utilization of City capital infrastructure funds
- Yields a stream-lined treatment facility that utilizes common wall construction and minimizes the facility piping network system; thereby saving capital and operating costs
- Allows the operation of an energy-efficient, state-of-the-art facility that produces an AWT effluent and meets all Class I Reliability criteria

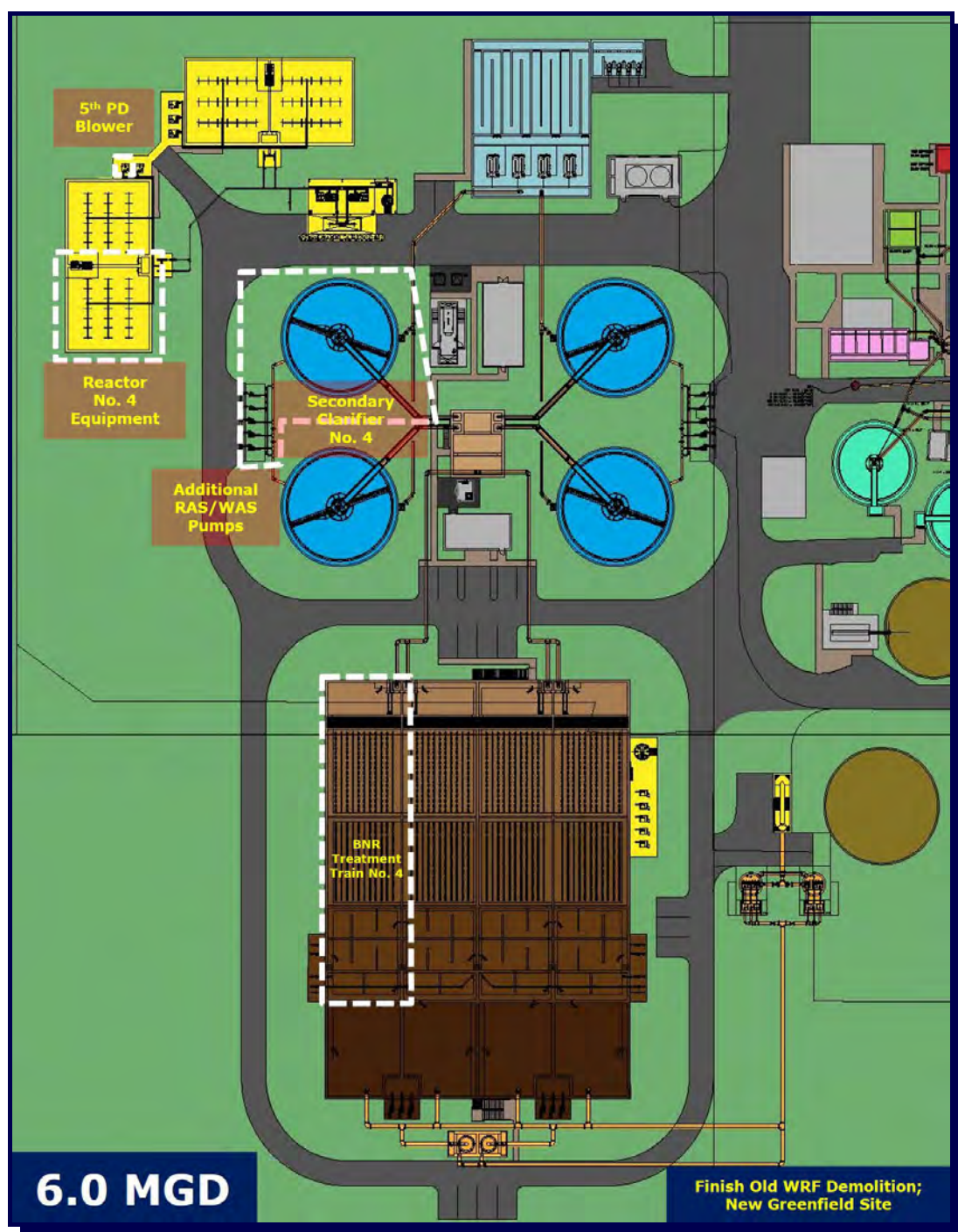


Figure 6.3-5: Proposed Phase V Improvements

APPENDIX A

WILDWOOD WRF - FDEP OPERATIONS PERMIT

CONCEPTUAL DESIGN REPORT (CDR)



SEPTEMBER 2022



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Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Ryan E. Matthews
Interim Secretary

March 22, 2017

Bill Ed Cannon, City Manager
City of Wildwood
100 North Main Street
Wildwood, FL 34785
bcannon@wildwood-fl.gov

Sumter County - DW
Wildwood WRF
Permit Number: FLA013497-013
Correction Letter – Reduce nutrient sampling and staffing

Dear Mr. Cannon:

It has come to our attention that there is a minor error in the Discharge Monitoring Report (DMR) for the referenced permit. At the City's request we have revised the recently issued permit to reflect the reduced nutrient sampling and staffing that were in the previous operating permit.

Please replace the previously issued permit and DMR with the ones enclosed. We regret any inconvenience this may have caused.

Should you have any questions please feel free to contact Dennise Judy at (407)897-4154.

Sincerely,

A handwritten signature in cursive script that reads "Wanda Parker-Garvin".

Wanda Parker-Garvin
Environmental Manager
Permitting and Waste Cleanup Program - Wastewater

WPG/dj

Enclosure: Corrected Permit and DMR

cc: Malcolm Bryant, Kimley-Horn, Lewis.Bryant@kimley-horn.com
Matt Tebow, Kimley-Horn, Matt.Tebow@kimley-horn.com
Reggie Phillips, DEP, reggie.phillips@dep.state.fl.us
David Smicherko, DEP, david.smicherko@dep.state.fl.us
Dennise Judy, DEP, dennise.judy@dep.state.fl.us
Shabbir Rizvi, DEP, shabbir.rizvi@dep.state.fl.us



Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Jonathan P. Steverson
Secretary

STATE OF FLORIDA DOMESTIC WASTEWATER FACILITY PERMIT

PERMITTEE:
Wildwood, City of

RESPONSIBLE OFFICIAL:
Bill Ed Cannon
100 N Main St
Wildwood, Florida 34785-4047
(352) 330-1330

PERMIT NUMBER: FLA013497
FILE NUMBER: FLA013497-013-DW1P/NRL
EFFECTIVE DATE: January 23, 2017
EXPIRATION DATE: January 22, 2027

FACILITY:

Wildwood WRF
1290 Industrial Drive
Wildwood, FL 34785-5201
(NW edge of city near SR #44)
Sumter County
Latitude: 28°51' 4.3381" N Longitude: 82°2' 55.7617" W

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and applicable rules of the Florida Administrative Code (F.A.C.). This permit does not constitute authorization to discharge wastewater other than as expressly stated in this permit. The above named permittee is hereby authorized to operate the facilities in accordance with the documents attached hereto and specifically described as follows:

WASTEWATER TREATMENT:

An existing 3.55 Million Gallon per Day (MGD) annual average daily flow permitted capacity domestic water reclamation facility (WRF) consisting of: a rotary drum screen, flow equalization, oxidation ditches, cloth-media disc filters, chlorine contact basins, an aerobic biosolids digester and a belt press for biosolids de-watering, and two lined reject holding ponds. This plant is operated to provide secondary treatment with high-level disinfection (using sodium hypochlorite) and meets Class I reliability.

REUSE OR DISPOSAL:

Land Application R-001: An existing 3.30 MGD annual average daily flow permitted capacity slow-rate public access system. R-001 is a reuse system which consists of approximately 1.3 MGD of reclaimed water used for irrigation within the approved local Reuse Service Area, to the major users identified in the permit, and 2.0 MGD AADF to the North Sumter Utility (NSU) Reuse Service area through an approved interconnection. Reject flow may be sent to one of the on-site holding ponds (1 MG and 2.5 MG) or to the RIBs, R-002. Reject flows sent to the holding ponds are returned to the oxidation ditch for re-treatment. Wet-weather storage is provided in a 2.65 MG lined pond at the RIB site.

Land Application R-002: An existing 1.25 MGD annual average daily flow permitted capacity rapid infiltration basin (RIB) reuse system. R-002 consists of eleven (11) RIBs with a total wetted area of 13.8 acres located approximately at latitude 28°53' 44.7366" N, longitude 82°1' 32.4203" W. The RIBs serve as back-up for the public access reuse system during periods of wet-weather and for reject flow.

IN ACCORDANCE WITH: The limitations, monitoring requirements, and other conditions set forth in this cover sheet and Part I through Part IX on pages 1 through 23 of this permit.

PERMITTEE: City of Wildwood
 FACILITY: Wildwood, City of WRF

PERMIT NUMBER: FLA013497
 EXPIRATION DATE: January 22, 2027

I. RECLAIMED WATER AND EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Reuse and Land Application Systems

- During the period beginning on the effective date and lasting through the expiration date of this permit, the permittee is authorized to direct reclaimed water to Reuse System R-001. Such reclaimed water shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.B.8.:

			Reclaimed Water Limitations		Monitoring Requirements			
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Flow	MGD	Max Max	3.30 Report	Annual Average Monthly Average	Continuous	Recording Flow Meter with Totalizer	FLW-01	See I.A.4
BOD, Carbonaceous 5 day, 20C	mg/L	Max Max Max Max	20.0 30.0 45.0 60.0	Annual Average Monthly Average Weekly Average Single Sample	Weekly	16-hr FPC	EFA-01	
Solids, Total Suspended	mg/L	Max	5.0	Single Sample	4 Days/Week	Grab	EFA-01	
Coliform, Fecal	#/100mL	Max	25	Single Sample	4 Days/Week	Grab	EFA-01	
Coliform, Fecal, % less than detection	percent	Min	75	Monthly Total	4 Days/Week	Calculated	EFA-01	See I.A.5
pH	s.u.	Min Max	6.0 8.5	Single Sample Single Sample	Continuous	Meter	EFA-01	See I.A.3
Chlorine, Total Residual (For Disinfection)	mg/L	Min	1.0	Single Sample	Continuous	Meter	EFA-01	See I.A.6 and I.A.9
Turbidity	NTU	Max	Report	Single Sample	Continuous	Meter	EFA-01	See I.A.7 and I.A.9
Giardia	cysts/100L	Max	Report	Single Sample	Bi-annually; every 2 years	Grab	EFA-01	See I.A.10
Cryptosporidium	oocysts/100L	Max	Report	Single Sample	Bi-annually; every 2 years	Grab	EFA-01	See I.A.10
Nitrogen, Total (as N)	mg/L	Max Max	Report Report	Annual Average Monthly Average	Weekly	16-hr FPC	EFA-01	See I.A.11
Phosphorus, Total (as P)	mg/L	Max Max	Report Report	Annual Average Monthly Average	Weekly	16-hr FPC	EFA-01	See I.A.11

PERMITTEE: City of Wildwood
FACILITY: Wildwood, City of WRF

PERMIT NUMBER: FLA013497
EXPIRATION DATE: January 22, 2027

2. Reclaimed water samples shall be taken at the monitoring site locations listed in Permit Condition I.A.1. and as described below:

Monitoring Site Number	Description of Monitoring Site
FLW-01	Total Flow to Public Access Reuse (FLW-02 + FLW-03 + FLW-04)
FLW-02	Flow meter to Lake Miona GC
FLW-03	Flow meter to local Reuse Service Area
FLW-04	Flow meter to North Sumter Utility Reuse Service Area
EFA-01	After disinfection and prior to land application.
EFB-01	After filtration prior to chlorination

3. Hourly measurement of pH during the period of required operator attendance may be substituted for continuous measurement. [62-600.660(1)]
4. A recording flow meter with totalizer shall be utilized to measure flow and calibrated at least once every 12 months. [62-600.200(25)]
5. To report the "% less than detection," count the number of fecal coliform observations that were less than detection, divide by the total number of fecal coliform observations in the month, and multiply by 100% (round to the nearest integer). [62-600.440(6)(a)]
6. The minimum total chlorine residual shall be limited as described in the approved operating protocol, such that the permit limitation for fecal coliform bacteria will be achieved. In no case shall the total chlorine residual be less than 1.0 mg/L. [62-600.440(6)(b)][62-610.460(2)][62-610.463(2)]
7. The maximum turbidity shall be limited as described in the approved operating protocol, such that the permit limitations for total suspended solids and fecal coliforms will be achieved. [62-610.463(2)]
8. The treatment facilities shall be operated in accordance with all approved operating protocols. Only reclaimed water that meets the criteria established in the approved operating protocol(s) may be released to system storage or to the reuse system. Reclaimed water that fails to meet the criteria in the approved operating protocol(s) shall be directed to reject storage for subsequent additional treatment or disinfection or to the following permitted alternate discharge system: R-002, RIBs. [62-610.320(6) and 62-610.463(2)]
9. Instruments for continuous on-line monitoring of total residual chlorine and turbidity shall be equipped with an automated data logging or recording device. [62-610.463(2)]
10. Intervals between sampling for Giardia and Cryptosporidium shall not exceed two years. [62-610.463(4)]
11. Monitoring for total nitrogen (TN) and total phosphorus (TP) are required as allowed by Rule 62-600.650(3), FAC, to evaluate impacts of reclaimed water to ground and surface waters in an impaired water basin. [62-600.650(3)]

PERMITTEE: City of Wildwood
 FACILITY: Wildwood, City of WRF

PERMIT NUMBER: FLA013497
 EXPIRATION DATE: January 22, 2027

12. During the period beginning on the effective date and lasting through the expiration date of this permit, the permittee is authorized to direct reclaimed water to Reuse System R-002. Such reclaimed water shall be limited and monitored by the permittee as specified below and reported in accordance with Permit Condition I.B.8.:

			Reclaimed Water Limitations		Monitoring Requirements			
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Monitoring	Sample Type	Monitoring Site Number	Notes
Flow	MGD	Max Max	1.25 Report	Annual Average Monthly Average	Continuous	Recording Flow Meter with Totalizer	FLW-05	See I.A.15
BOD, Carbonaceous 5 day, 20C	mg/L	Max Max Max Max	20.0 30.0 45.0 60.0	Annual Average Monthly Average Weekly Average Single Sample	Weekly	16-hr FPC	EFA-01	
Solids, Total Suspended	mg/L	Max Max Max Max	20.0 30.0 45.0 60.0	Annual Average Monthly Average Weekly Average Single Sample	Weekly	16-hr FPC	EFA-01	
Coliform, Fecal	#/100mL	Max Max Max	200 200 800	Monthly Geometric Mean Annual Average Single Sample	Weekly	Grab	EFA-01	See I.A.16
pH	s.u.	Min Max	6.0 8.5	Single Sample Single Sample	Continuous	Meter	EFA-01	See I.A.14
Chlorine, Total Residual (For Disinfection)	mg/L	Min	0.5	Single Sample	Continuous	Meter	EFA-01	See I.A.17 and I.A.14
Nitrogen, Nitrate, Total (as N)	mg/L	Max	12.0	Single Sample	Weekly	16-hr FPC	EFA-01	See I.A.18

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13. Reclaimed water samples shall be taken at the monitoring site locations listed in Permit Condition I.A.1. and as described below:

Monitoring Site Number	Description of Monitoring Site
FLW-05	Recording flow meters with totalizer on transmission main to RIBs at RIB site.
EFA-01	After disinfection and prior to land application.

14. Hourly measurement of pH and total residual chlorine for disinfection during the period of required operator attendance may be substituted for continuous measurement. [62-600.660(1)]
15. A recording flow meter with totalizer shall be utilized to measure flow and calibrated at least once every 12 months. [62-600.200(25)]
16. The effluent limitation for the monthly geometric mean for fecal coliform is only applicable if 10 or more values are reported. If fewer than 10 values are reported, the monthly geometric mean shall be calculated and reported on the Discharge Monitoring Report to be used to calculate the annual average. [62-600.440(5)(b)]
17. Total residual chlorine must be maintained for a minimum contact time of 15 minutes based on peak hourly flow. [62-610.510][62-600.440(5)(c) and (6)(b)]
18. Nitrate nitrogen (NO₃) concentration in the water discharged to the land application system shall not exceed 12.0 mg/L or as required to comply with Rule 62-610.510, F.A.C. [62-610.510]

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B. Other Limitations and Monitoring and Reporting Requirements

- During the period beginning on the effective date and lasting through the expiration date of this permit, the treatment facility shall be limited and monitored by the permittee as specified below and reported in accordance with condition I.D.8.:

			Limitations		Monitoring Requirements			
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Flow	MGD	Max Max Max	3.55 Report Report	Annual Average 3-Month Rolling Average Monthly Average	Continuous	Recording Flow Meter with Totalizer	FLW-06	See I.B.4
Percent Capacity, (TMADF/Permitted Capacity) x 100	percent	Max	Report	Monthly Average	Monthly	Calculated	FLW-06	
BOD, Carbonaceous 5 day, 20C (Influent)	mg/L	Max	Report	Single Sample	Weekly	16-hr FPC	INF-01	See I.B.3
Solids, Total Suspended (Influent)	mg/L	Max	Report	Single Sample	Weekly	16-hr FPC	INF-01	See I.B.3

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2. Samples shall be taken at the monitoring site locations listed in Permit Condition I.D.1. and as described below:

Monitoring Site Number	Description of Monitoring Site
FLW-06	Recording flow meters with totalizers prior to headworks.
INF-01	At headworks, prior to treatment and ahead of RAS line.

3. Influent samples shall be collected so that they do not contain digester supernatant or return activated sludge, or any other plant process recycled waters. [62-600.660(4)(a)]
4. A recording flow meter with totalizer shall be utilized to measure flow and calibrated at least once every 12 months. [62-600.200(25)]
5. Sampling results for giardia and cryptosporidium shall be reported on DEP Form 62-610.300(4)(a)4, Pathogen Monitoring, which is attached to this permit. This form shall be submitted to the Department's Central District Office and to DEP's Reuse Coordinator in Tallahassee. [62-610.300(4)(a)]
6. The sample collection, analytical test methods, and method detection limits (MDLs) applicable to this permit shall be conducted using a sufficiently sensitive method to ensure compliance with applicable water quality standards and effluent limitations and shall be in accordance with Rule 62-4.246, Chapters 62-160 and 62-600, F.A.C., and 40 CFR 136, as appropriate. The list of Department established analytical methods, and corresponding MDLs (method detection limits) and PQLs (practical quantitation limits), which is titled "FAC 62-4 MDL/PQL Table (April 26, 2006)" is available at <http://www.dep.state.fl.us/labs/library/index.htm>. The MDLs and PQLs as described in this list shall constitute the minimum acceptable MDL/PQL values and the Department shall not accept results for which the laboratory's MDLs or PQLs are greater than those described above unless alternate MDLs and/or PQLs have been specifically approved by the Department for this permit. Any method included in the list may be used for reporting as long as it meets the following requirements:
- The laboratory's reported MDL and PQL values for the particular method must be equal or less than the corresponding method values specified in the Department's approved MDL and PQL list;
 - The laboratory reported MDL for the specific parameter is less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Parameters that are listed as "report only" in the permit shall use methods that provide an MDL, which is equal to or less than the applicable water quality criteria stated in 62-302, F.A.C.; and
 - If the MDLs for all methods available in the approved list are above the stated permit limit or applicable water quality criteria for that parameter, then the method with the lowest stated MDL shall be used.

When the analytical results are below method detection or practical quantitation limits, the permittee shall report the actual laboratory MDL and/or PQL values for the analyses that were performed following the instructions on the applicable discharge monitoring report.

Where necessary, the permittee may request approval of alternate methods or for alternative MDLs or PQLs for any approved analytical method. Approval of alternate laboratory MDLs or PQLs are not necessary if the laboratory reported MDLs and PQLs are less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Approval of an analytical method not included in the above-referenced list is not necessary if the analytical method is approved in accordance with 40 CFR 136 or deemed acceptable by the Department. [62-4.246, 62-160]

7. The permittee shall provide safe access points for obtaining representative samples which are required by this permit. [62-600.650(2)]
8. **Monitoring requirements under this permit are effective on March 1, 2017.** Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements. During the period of operation authorized by this permit, the permittee shall complete and submit to the Department Discharge Monitoring Reports (DMRs) in accordance with the frequencies specified by the REPORT type (i.e. monthly, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to this permit. Unless specified otherwise in this permit, monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below. DMRs shall be submitted for each required monitoring period including periods of no discharge.

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REPORT Type on DMR	Monitoring Period	Mail or Electronically Submit by
Monthly	first day of month - last day of month	28 th day of following month
Quarterly	January 1 - March 31 April 1 - June 30 July 1 - September 30 October 1 - December 31	April 28 July 28 October 28 January 28
Semiannual	January 1 - June 30 July 1 - December 31	July 28 January 28
Annual	January 1 - December 31	January 28

The permittee may submit either paper or electronic DMR forms. If submitting paper DMR forms, the permittee shall make copies of the attached DMR forms, without altering the original format or content unless approved by the Department, and shall mail the completed DMR forms to the Department's Central District Office at the address specified in Permit Condition I.B.13. by the twenty-eighth (28th) of the month following the month of operation.

When submitting electronic DMR forms (**preferred**), the permittee shall use the Department's electronic DMR system (EzDMR) and shall electronically submit the completed DMR forms to the Department by the twenty-eighth (28th) of the month following the month of operation. Data submitted in electronic format is equivalent to data submitted on signed and certified paper DMR forms. **The EzDMR system shall be used in accordance with Condition VI. 1. of this permit, unless alternative arrangements are approved by the Central District's Wastewater Permitting Section.** Register for the new system by visiting the DEP Business Portal at <http://www.fldepportal.com/go/>. For more information, contact at EzDMRAdmin@dep.state.fl.us.

[62-620.610(18)][62-600.680(1)]

9. During the period of operation authorized by this permit, reclaimed water or effluent shall be monitored annually for the primary and secondary drinking water standards contained in Chapter 62-550, F.A.C., (except for asbestos, color, odor, and corrosivity). These monitoring results shall be reported to the Department annually on the DMR. During years when a permit is not renewed, a certification stating that no new non-domestic wastewater dischargers have been added to the collection system since the last reclaimed water or effluent analysis was conducted may be submitted in lieu of the report. The annual reclaimed water or effluent analysis report or the certification shall be completed and submitted in a timely manner so as to be received by the Department at the address identified on the DMR by January 28 of each year. Approved analytical methods identified in Rule 62-620.100(3)(j), F.A.C., shall be used for the analysis. If no method is included for a parameter, methods specified in Chapter 62-550, F.A.C., shall be used. [62-600.660(2) and (3)(d)][62-600.680(2)][62-610.300(4)]
10. The permittee shall submit an Annual Reuse Report using DEP Form 62-610.300(4)(a)2. on or before January 1 of each year. [62-610.870(3)]
11. Operating protocol(s) shall be reviewed and updated periodically to ensure continuous compliance with the minimum treatment and disinfection requirements. Updated operating protocols shall be submitted to the Department's Central District Office for review and approval upon revision of the operating protocol(s) and with each permit application. [62-610.320(6)][62-610.463(2)]
12. The permittee shall maintain an inventory of storage systems. The inventory shall be submitted to the Department's Central District Office at least 30 days before reclaimed water will be introduced into any new storage system. The inventory of storage systems shall be attached to the annual submittal of the Annual Reuse Report. [62-610.464(5)]
13. Unless specified otherwise in this permit, all reports and other information required by this permit, including 24-hour notifications, shall be submitted to or reported to, as appropriate, the Department's Central District Office at one of the addresses specified below:

Electronic submittal is preferred, by sending to DEP_CD@dep.state.fl.us.

Florida Department of Environmental Protection
Central District Office
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767
Phone Number - (407)897-4100

[62-620.305]

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14. All reports and other information shall be signed in accordance with the requirements of Rule 62-620.305, F.A.C. [62-620.305]

II. BIOSOLIDS MANAGEMENT REQUIREMENTS

- Biosolids generated by this facility may be transferred to Southeast Soils BTF or disposed of in a Class I solid waste landfill. Transferring biosolids to an alternative biosolids treatment facility does not require a permit modification. However, use of an alternative biosolids treatment facility requires submittal of a copy of the agreement pursuant to Rule 62-640.880(1)(c), F.A.C., along with a written notification to the Department at least 30 days before transport of the biosolids. [62-620.320(6), 62-640.880(1)]
- The permittee shall monitor and keep records of the quantities of biosolids generated, received from source facilities, treated, distributed and marketed, land applied, used as a biofuel or for bioenergy, transferred to another facility, or landfilled. These records shall be kept for a minimum of five years. [62-640.650(4)(a)]
- Biosolids quantities shall be monitored by the permittee as specified below. Results shall be reported on the permittee's Discharge Monitoring Report for Monitoring Group RMP-Q in accordance with Condition I.D.8.

			Biosolids Limitations		Monitoring Requirements		
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number
Biosolids Quantity (Landfilled)	dry tons	Max	Report	Monthly Total	Monthly	Calculated	RMP-1
Biosolids Quantity (Transferred)	dry tons	Max	Report	Monthly Total	Monthly	Calculated	RMP-2

[62-640.650(5)(a)1]

4. Biosolids quantities shall be calculated as listed in Permit Condition II.3 and as described below:

Monitoring Site Number	Description of Monitoring Site Calculations
RMP-1	Biosolids Quantity (Transferred to BTF)
RMP-2	Biosolids Quantity (Landfilled)

- The treatment, management, transportation, use, land application, or disposal of biosolids shall not cause a violation of the odor prohibition in subsection 62-296.320(2), F.A.C. [62-640.400(6)]
- Storage of biosolids or other solids at this facility shall be in accordance with the Facility Biosolids Storage Plan. [62-640.300(4)]
- Biosolids shall not be spilled from or tracked off the treatment facility site by the hauling vehicle. [62-640.400(9)]
- Disposal of biosolids, septage, and "other solids" in a solid waste disposal facility, or disposal by placement on land for purposes other than soil conditioning or fertilization, such as at a monofill, surface impoundment, waste pile, or dedicated site, shall be in accordance with Chapter 62-701, F.A.C. [62-640.100(6)(b) & (c)]
- The permittee shall not be held responsible for treatment and management violations that occur after its biosolids have been accepted by a permitted biosolids treatment facility with which the source facility has an agreement in accordance with subsection 62-640.880(1)(c), F.A.C., for further treatment, management, or disposal. [62-640.880(1)(b)]
- The permittee shall keep hauling records to track the transport of biosolids between the facilities. The hauling records shall contain the following information:

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Source Facility

1. Date and time shipped
2. Amount of biosolids shipped
3. Degree of treatment (if applicable)
4. Name and ID Number of treatment facility
5. Signature of responsible party at source facility
6. Signature of hauler and name of hauling firm

Biosolids Treatment Facility or Treatment Facility

1. Date and time received
2. Amount of biosolids received
3. Name and ID number of source facility
4. Signature of hauler
5. Signature of responsible party at treatment facility

A copy of the source facility hauling records for each shipment shall be provided upon delivery of the biosolids to the biosolids treatment facility or treatment facility. The treatment facility permittee shall report to the Department within 24 hours of discovery any discrepancy in the quantity of biosolids leaving the source facility and arriving at the biosolids treatment facility or treatment facility.

[62-640.880(4)]

11. If the permittee intends to accept biosolids from other facilities, a permit revision is required pursuant to paragraph 62-640.880(2)(d), F.A.C. [62-640.880(2)(d)]

III. GROUND WATER REQUIREMENTS

1. The permittee shall give at least 72-hour notice to the Department's Central District Office, prior to the installation of any monitoring wells. [62-520.600(6)(h)]
2. Before construction of new ground water monitoring wells, a soil boring shall be made at each new monitoring well location to properly determine monitoring well specifications such as well depth, screen interval, screen slot, and filter pack. [62-520.600(6)(g)]
3. Within 30 days after installation of a monitoring well, the permittee shall submit to the Department's Central District Office well completion reports and soil boring/lithologic logs on the attached DEP Form(s) 62-520.900(3), Monitoring Well Completion Report. [62-520.600(6)(j) and .900(3)]
4. All piezometers and monitoring wells not part of the approved ground water monitoring plan shall be plugged and abandoned in accordance with Rule 62-532.500(5), F.A.C., unless future use is intended. [62-532.500(5)]
5. For the Part IV land application system(s), all ground water quality criteria specified in Chapter 62-520, F.A.C., shall be met at the edge of the zone of discharge. The zone of discharge for Land Application Site R-002 shall extend horizontally 100 feet from the application site and vertically to the base of the surficial aquifer. [62-520.200(27)] [62-520.465]
6. For the Part III Public Access system, all ground water quality criteria specified in Chapter 62-520, F.A.C., shall be met at the edge of the zone of discharge. The zone of discharge shall extend horizontally 100 feet from the application site(s) or to the property boundaries, whichever is less, and vertically to the base of the surficial aquifer. [62-520.200(27)] [62-520.465]
7. The ground water minimum criteria specified in Rule 62-520.400 F.A.C., shall be met within the zone of discharge. [62-520.400 and 62-520.420(4)]
8. If the concentration for any constituent listed in Permit Condition III.1. and III.1. in the natural background quality of the ground water is greater than the stated maximum, or in the case of pH is also less than the minimum, the representative background quality shall be the prevailing standard. [62-520.420(2)]
9. During the period of operation authorized by this permit, the permittee shall continue to sample ground water at the monitoring wells identified in Permit Conditions III.1. and III.1., below in accordance with this permit and the approved ground water monitoring plan prepared in accordance with Rule 62-520.600, F.A.C. [62-520.600] [62-610.463] [62-610.510]

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10. The following monitoring wells shall be sampled for Reuse System R-001.

Monitoring Well ID	Alternate Well Name and/or Description of Monitoring Location	Latitude	Longitude	Aquifer Monitored	New or Existing
MWB-01	MW-1 Lake Miona, MWB-24612	28°53' 53.6543"	82°0' 44.5452"	Floridan	Existing
MWC-01	MW-4 Lake Miona, MWC-24615	28°53' 40.4464"	82°0' 34.5061"	Floridan	Existing
MWC-03	MW-6 Lake Miona, MWC-24617	28°53' 40.3416"	82°0' 56.9214"	Floridan	Existing
MWI-02	MW-3 Lake Miona, MWI-24614	28°53' 44.4024"	82°0' 46.0099"	Floridan	Existing

MWC = Compliance; MWB = Background; MWI = Intermediate; MWP = Piezometer

[62-520.600] [62-610.463]

11. The following parameters shall be analyzed for each monitoring well identified in Permit Condition III.10.:

Parameter	Compliance Well Limit	Units	Sample Type	Monitoring Frequency
Water Level Relative to NGVD	Report	ft	In Situ	Quarterly
Nitrogen, Nitrate, Total (as N)	10	mg/L	Grab	Quarterly
Solids, Total Dissolved (TDS)	500	mg/L	Grab	Quarterly
Chloride (as Cl)	250	mg/L	Grab	Quarterly
Coliform, Fecal	4	#/100mL	Grab	Quarterly
pH	6.5-8.5	s.u.	In Situ	Quarterly
Turbidity	Report	NTU	Grab	Quarterly

[62-520.600(11)(b)] [62-600.670] [62-600.650(3)] [62-520.310(5)]

12. The following monitoring wells shall be sampled for Reuse System R-002 located at Land Application Site RIB-002.

Monitoring Well ID	Alternate Well Name and/or Description of Monitoring Location	Latitude	Longitude	Depth (Feet)	Aquifer Monitored	New or Existing
MWC-07	MW-7 RIB, MWC-24624	28°53' 46.5212"	82°1' 14.4135"	35	Floridan	Existing
MWC-09	MW-9 RIB, MWC-24626	28°53' 40.8018"	82°1' 27.3153"	40	Floridan	Existing
MWI-04	MW-6 RIB, MWI-24623	28°53' 44.7792"	82°1' 21.9536"	43	Floridan	Existing

MWC = Compliance; MWB = Background; MWI = Intermediate; MWP = Piezometer

[62-520.600] [62-610.510]

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13. The following parameters shall be analyzed for each monitoring well identified in Permit Condition III.12.:

Parameter	Compliance Well Limit	Units	Sample Type	Monitoring Frequency
Water Level Relative to NGVD	Report	ft	In Situ	Quarterly
Nitrogen, Nitrate, Total (as N)	10	mg/L	Grab	Quarterly
Solids, Total Dissolved (TDS)	500	mg/L	Grab	Quarterly
Chloride (as Cl)	250	mg/L	Grab	Quarterly
Coliform, Fecal	4	#/100mL	Grab	Quarterly
pH	6.5-8.5	s.u.	In Situ	Quarterly
Turbidity	Report	NTU	Grab	Quarterly

[62-520.600(11)(b)] [62-600.670] [62-600.650(3)] [62-520.310(5)]

14. Water levels shall be recorded before evacuating each well for sample collection. Elevation references shall include the top of the well casing and land surface at each well site (NAVD allowable) at a precision of plus or minus 0.01 foot. [62-520.600(11)(c)] [62-610.463(3)(a)] [62-610.510(3)(b)]
15. Ground water monitoring wells shall be purged prior to sampling to obtain representative samples. [62-160.210] [62-600.670(3)]
16. Analyses shall be conducted on unfiltered samples, unless filtered samples have been approved by the Department's Central District Office as being more representative of ground water conditions. [62-520.310(5)]
17. Ground water monitoring test results shall be submitted on Part D of Form 62-620.910(10) in accordance with Permit Condition I.D.1. [62-520.600(11)(b)] [62-600.670] [62-600.680(1)] [62-620.610(18)]
18. If any monitoring well becomes inoperable or damaged to the extent that sampling or well integrity may be affected, the permittee shall notify the Department's Central District Office within two business days from discovery, and a detailed written report shall follow within ten days after notification to the Department. The written report shall detail what problem has occurred and remedial measures that have been taken to prevent recurrence or request approval for replacement of the monitoring well. All monitoring well design and replacement shall be approved by the Department's Central District Office before installation. [62-520.600(6)(l)]

IV. ADDITIONAL REUSE AND LAND APPLICATION REQUIREMENTS

A. Part III Public Access System(s)

1. Use of reclaimed water is authorized within the general service area identified in the attached map. The following uses of reclaimed water are authorized within this general service area:

Athletic Complexes and Parks; Golf Courses; Other Landscape Irrigation

[62-620.630(10)(a)]

2. This reuse system includes the following user(s) of reclaimed water and the general service area(s):

Site Number	User Name	User Type	Capacity(MGD)	Acreage
PAA-001B	Wildwood Community Cemetery	Other Landscape Irrigation	NA	NA
PAA-001D	MLK Park	Athletic Complexes and Parks	NA	NA
PAA-001E	Millennium Park	Athletic Complexes and Parks	0.267	34.4
PAA-001A	Miona Lake Golf Course	Golf Courses	1.0	95
PAA-001C	Greenwood Cemetery	Other Landscape Irrigation	NA	NA
PAA-002	North Sumter Reuse Service Area	General Service Area	2.0	NA
Total			3.3	NA

[62-610.800(5)] [62-620.630(10)(b)]

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3. New major users of reclaimed water (i.e., using 0.1 MGD or more) may be added to the reuse system using the general permit described in Rule 62-610.890, F.A.C., if the requirements in this rule are complied with. Application for use of this general permit shall be made using Form 62-610.300(4)(a)1. [62-610.890]
 4. Cross-connections to the potable water system are prohibited. [62-610.469(7)]
 5. A cross-connection control program shall be implemented and/or remain in effect within the areas where reclaimed water will be provided for use and shall be in compliance with the Rule 62-555.360, F.A.C. [62-610.469(7)]
 6. The permittee shall conduct inspections within the reclaimed water service area to verify proper connections, to minimize illegal cross-connections, and to verify both the proper use of reclaimed water and that the proper backflow prevention assemblies or devices have been installed and tested. Inspections are required when a customer first connects to the reuse distribution system. Subsequent inspections are required as specified in the cross-connection control and inspection program. [62-610.469(7)(h)]
 7. If an actual or potential (e.g. no dual check device on residential connections served by a reuse system) cross-connection between the potable and reclaimed water systems is discovered, the permittee shall:
 - a. Immediately discontinue potable water and/or reclaimed water service to the affected area if an actual cross-connection is discovered.
 - b. If the potable water system is contaminated, clear the potable water lines.
 - c. Eliminate the cross-connection and install a backflow prevention device as required by the Rule 62-555.360.F.A.C.
 - d. Test the affected area for other possible cross-connections.
 - e. Within 24 hours, notify the Department's Central District Office's domestic wastewater and drinking water programs.
 - f. Within 5 days of discovery of an actual or potential cross-connection, submit a written report to the Department's Central District Office detailing: a description of the cross-connection, how the cross-connection was discovered, the exact date and time of discovery, approximate time that the cross-connection existed, the location, the cause, steps taken to eliminate the cross-connection, whether reclaimed water was consumed, and reports of possible illness, whether the drinking water system was contaminated and the steps taken to clear the drinking water system, when the cross-connection was eliminated, plan of action for testing for other possible cross-connections in the area, and an evaluation of the cross-connection control and inspection program to ensure that future cross-connections do not occur.
- [62-555.350(3) and 62-555.360][62-620.610(20)]
8. Maximum obtainable separation of reclaimed water lines and potable water lines shall be provided and the minimum separation distances specified in Rule 62-610.469(7), F.A.C., shall be provided. Reuse facilities shall be color coded or marked. Underground piping which is not manufactured of metal or concrete shall be color coded using Pantone Purple 522C using light stable colorants. Underground metal and concrete pipe shall be color coded or marked using purple as the predominant color. [62-610.469(7)]
 9. In constructing reclaimed water distribution piping, the permittee shall maintain a 75-foot setback distance from a reclaimed water transmission facility to public water supply wells. No setback distances are required to other potable water supply wells or to any nonpotable water supply wells. [62-610.471(3)]
 10. A setback distance of 75 feet shall be maintained between the edge of the wetted area and potable water supply wells, unless the utility adopts and enforces an ordinance prohibiting potable water supply wells within the reuse service area. No setback distances are required to any nonpotable water supply well, to any surface water, to any developed areas, or to any private swimming pools, hot tubs, spas, saunas, picnic tables, barbecue pits, or barbecue grills. [62-610.471(1), (2), (5), and (7)]

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11. Reclaimed water shall not be used to fill swimming pools, hot tubs, or wading pools. [62-610.469(4)]
12. Low trajectory nozzles, or other means to minimize aerosol formation shall be used within 100 feet from outdoor public eating, drinking, or bathing facilities. [62-610.471(6)]
13. A setback distance of 100 feet shall be maintained from indoor aesthetic features using reclaimed water to adjacent indoor public eating and drinking facilities. [62-610.471(8)]
14. The public shall be notified of the use of reclaimed water. This shall be accomplished by posting of advisory signs in areas where reuse is practiced, notes on scorecards, or other methods. [62-610.468(2)]
15. All new advisory signs and labels on vaults, service boxes, or compartments that house hose bibbs along with all labels on hose bibbs, valves, and outlets shall bear the words "do not drink" and "no beber" along with the equivalent standard international symbol. In addition to the words "do not drink" and "no beber," advisory signs posted at storage ponds and decorative water features shall also bear the words "do not swim" and "no nadar" along with the equivalent standard international symbols. Existing advisory signs and labels shall be retrofitted, modified, or replaced in order to comply with the revised wording requirements. For existing advisory signs and labels this retrofit, modification, or replacement shall occur within 365 days after the date of this permit. For labels on existing vaults, service boxes, or compartments housing hose bibbs this retrofit, modification, or replacement shall occur within 730 days after the date of this permit. [62-610.468, 62-610.469]
16. The permittee shall ensure that users of reclaimed water are informed about the origin, nature, and characteristics of reclaimed water; the manner in which reclaimed water can be safely used; and limitations on the use of reclaimed water. Notification is required at the time of initial connection to the reclaimed water distribution system and annually after the reuse system is placed into operation. A description of on-going public notification activities shall be included in the Annual Reuse Report. [62-610.468(6)]
17. Routine aquatic weed control and regular maintenance of storage pond embankments and access areas are required. [62-610.414(8)]
18. Overflows from emergency discharge facilities on storage ponds shall be reported as abnormal events in accordance with Permit Condition IX.20. [62-610.800(9)]

B. Part IV Rapid Infiltration Basins

1. Advisory signs shall be posted around the site boundaries to designate the nature of the project area. [62-610.518]
2. The maximum annual average loading rate to the 11 RIBS with a total wetted area of 13.8 acres shall be limited to 3 inches per day (as applied to the entire bottom area). [62-610.523(3)]
3. The 11 RIBS with a total wetted area of 13.8 acres normally shall be loaded for 7 days and shall be rested for 7 days. Infiltration ponds, basins, or trenches shall be allowed to dry during the resting portion of the cycle. [62-610.523(4)]
4. Rapid infiltration basins shall be routinely maintained to control vegetation growth and to maintain percolation capability by scarification or removal of deposited solids. Basin bottoms shall be maintained to be level. [62-610.523(6) and (7)]
5. Routine aquatic weed control and regular maintenance of storage pond embankments and access areas are required. [62-610.514 and 62-610.414]
6. Overflows from emergency discharge facilities on storage ponds or on infiltration ponds, basins, or trenches shall be reported as abnormal events in accordance with Permit Condition IX.20. [62-610.800(9)]

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V. OPERATION AND MAINTENANCE REQUIREMENTS

A. Staffing Requirements

1. During the period of operation authorized by this permit, the wastewater facilities shall be operated under the supervision of one or more operators certified in accordance with Chapter 62-602, F.A.C. In accordance with Chapter 62-699, F.A.C., this facility is a Category III, Class B facility and, at a minimum, operators with appropriate certification must be on the site as follows:

From the time of permit issuance until flows reach 2.0 MGD Three Month Average Daily Flow, staffing will be as follows:

A Class C or higher operator for 8 hours/day for 7 days/week and one visit on each weekend day. The lead operator must be a Class B operator, or higher.

Beginning when flows equal or exceed 2.0 MGD Three Month Average Daily Flow, staffing will be as follows for the remainder of the permitting period:

A Class C or higher operator 16 hours/day for 7 days/week. The lead operator must be a Class B, or higher.

[62-620.630(3)][62-699.310] [62-610.462]

2. The lead/chief operator shall be employed at the plant full time. "Full time" shall mean at least 4 days per week, working a minimum of 35 hours per week, including leave time. A licensed operator shall be on-site and in charge of each required shift for periods of required staffing time when the lead/chief operator is not on-site. An operator meeting the lead/chief operator class for the treatment plant shall be available during all periods of plant operation. "Available" means able to be contacted as needed to initiate the appropriate action in a timely manner. *[62-699.311(10), (6) and (1)]*
3. An operator meeting the lead/chief operator class for the plant shall be available during all periods of plant operation. "Available" means able to be contacted as needed to initiate the appropriate action in a timely manner. *[62-699.311(1)]*

B. Capacity Analysis Report and Operation and Maintenance Performance Report Requirements

1. Submit an updated capacity analysis report prepared in accordance with Rule 62-600.405, F.A.C., five years from the date of issuance of this permit. *[62-600.405(5)]*
2. The application to renew this permit shall include an updated capacity analysis report prepared in accordance with Rule 62-600.405, F.A.C. *[62-600.405(5)]*
3. The application to renew this permit shall include a detailed operation and maintenance performance report prepared in accordance with Rule 62-600.735, F.A.C. *[62-600.735(1)]*

C. Recordkeeping Requirements

1. The permittee shall maintain the following records and make them available for inspection on the site of the permitted facility.
 - a. Records of all compliance monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, including, if applicable, a copy of the laboratory certification showing the certification number of the laboratory, for at least three years from the date the sample or measurement was taken;
 - b. Copies of all reports required by the permit for at least three years from the date the report was prepared;
 - c. Records of all data, including reports and documents, used to complete the application for the permit for at least three years from the date the application was filed;

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- d. Monitoring information, including a copy of the laboratory certification showing the laboratory certification number, related to the residuals use and disposal activities for the time period set forth in Chapter 62-640, F.A.C., for at least three years from the date of sampling or measurement;
- e. A copy of the current permit;
- f. A copy of the current operation and maintenance manual as required by Chapter 62-600, F.A.C.;
- g. A copy of any required record drawings;
- h. Copies of the licenses of the current certified operators;
- i. Copies of the logs and schedules showing plant operations and equipment maintenance for three years from the date of the logs or schedules. The logs shall, at a minimum, include identification of the plant; the signature and license number of the operator(s) and the signature of the person(s) making any entries; date and time in and out; specific operation and maintenance activities, including any preventive maintenance or repairs made or requested; results of tests performed and samples taken, unless documented on a laboratory sheet; and notation of any notification or reporting completed in accordance with Rule 62-602.650(3), F.A.C. The logs shall be maintained on-site in a location accessible to 24-hour inspection, protected from weather damage, and current to the last operation and maintenance performed; and
- j. Records of biosolids quantities, treatment, monitoring, and hauling for at least five years.

[62-620.350, 62-602.650, 62-640.650(4)]

VI. SCHEDULES

1. The following improvement actions shall be completed according to the following schedule:

Improvement Action	Completion Date
1. Submit an updated capacity analysis report in accordance with permit condition V.B.1.	January 15, 2022

[62-620.320(6)]

2. The permittee is not authorized to discharge to waters of the state after the expiration date of this permit, unless:
 - a. The permittee has applied for renewal of this permit at least 180 days before the expiration date of this permit using the appropriate forms listed in Rule 62-620.910, F.A.C., and in the manner established in the Department of Environmental Protection Guide to Permitting Wastewater Facilities or Activities Under Chapter 62-620, F.A.C., including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C.; or
 - b. The permittee has made complete the application for renewal of this permit before the permit expiration date.

[62-620.335(1) - (4)]

VII. INDUSTRIAL PRETREATMENT PROGRAM REQUIREMENTS

A. Implementation Requirements

1. The permittee shall function as the Control Authority and shall be responsible for the performance of all pretreatment program requirements contained in Chapter 62-625, F.A.C. The permittee shall be subject to enforcement actions, penalties, and other remedies by the Department or other appropriate parties. The permittee shall implement and enforce its Approved Pretreatment Program. The permittee's Approved Pretreatment Program is hereby made an enforceable condition of this permit. The Department may initiate enforcement action against an industrial user for noncompliance with applicable standards and requirements.
[62-625.500]

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2. The permittee shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d), and 402(b) of the Act. The permittee shall cause industrial users subject to Federal Categorical Standards to achieve compliance no later than the date specified in those requirements or, in the case of new industrial users, upon commencement of the discharge. [62-625.410]
 3. The permittee shall perform the pretreatment functions as required in Chapter 62-625, F.A.C., including, but not limited to, the following:
 - a. Implementing the necessary legal authorities as provided in Rule 62-625.500(2)(a), F.A.C. This includes, among other things, the authority to require compliance with applicable pretreatment standards, which includes general prohibitions listed in Rule 62-625.400(1), F.A.C., specific prohibitions in Rule 62-625.400(2), F.A.C., locally developed limits as required by Rules 62-625.400(3) and (4), F.A.C., and national categorical limits in accordance with Rule 62-625.410, F.A.C.;
 - b. Implementing the programmatic functions as required under Rule 62-625.500(2)(b), F.A.C.;
 - c. Providing the required funding, equipment, and personnel to implement the pretreatment program as provided in Rules 62-625.500(2), (3), and (4), F.A.C.; and
 - d. Providing a written technical evaluation that local limits have been developed in accordance with Rule 62-625.400(3)(a), F.A.C. The evaluation shall verify whether existing local limits protect the wastewater facilities, and if not, the permittee shall develop new local limits as part of the evaluation in accordance with Rule 62-625.600(16), F.A.C. For new local limits, a plan of study shall be submitted to the Department prior to initiating sampling required to develop the new local limits. This evaluation shall be submitted to the Department at the address in the condition below within 180 days after permit renewal.
- [62-625.400 and .500]
4. As required by Rules 62-625.600(8) and (12), F.A.C., the permittee shall submit a signed copy of the annual report for pretreatment activities, including DMRs for Monitoring Site Numbers PRT-I, PRT-E, and PRT-R for this facility, to the Department at the following address:

Florida Department of Environmental Protection
Domestic Wastewater Section, Mail Station 3540
Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

The annual report shall contain the information required in accordance with Rule 62-625.600(8), F.A.C., except section (8)(f) as noted below, and shall describe the permittee's pretreatment activities for the reporting year. In the event that the permittee is not in compliance with any conditions or requirements of the pretreatment program, then the permittee shall also include the reasons for noncompliance and state how and when the permittee shall comply with such conditions and requirements.

In order to comply with Rule 62-625.600(8)(f), F.A.C., the permittee shall submit annual DMRs with the analytical results of influent, effluent, and residuals for those pollutants listed on the DMRs. For any other nonpriority pollutants which the permittee believes may be causing or contributing to interference, pass through, or adversely impacting residuals quality, the annual report shall provide a summary of all analytical results of influent, effluent, and residuals. The annual report and DMRs are due on May 1 of each year, to cover a period between January 1 to December 31. [62-625.600(8) and (12)]

5. No additional facilities are covered by the Wildwood, City of WWTF (FLA013497) pretreatment program.
6. Samples for Monitoring Site Numbers PRT-I, PRT-E, and PRT-R shall be taken at the monitoring site locations described below:

Monitoring Location Site Number	Description of Monitoring Location
PRT-I	Influent Pretreatment
PRT-E	Effluent Pretreatment
PRT-R	Residuals Pretreatment

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VIII. OTHER SPECIFIC CONDITIONS

1. In the event that the treatment facilities or equipment no longer function as intended, are no longer safe in terms of public health and safety, or odor, noise, aerosol drift, or lighting adversely affects neighboring developed areas at the levels prohibited by Rule 62-600.400(2)(a), F.A.C., corrective action (which may include additional maintenance or modifications of the permitted facilities) shall be taken by the permittee. Other corrective action may be required to ensure compliance with rules of the Department. Additionally, the treatment, management, use or land application of residuals shall not cause a violation of the odor prohibition in Rule 62-296.320(2), F.A.C. [62-600.410(5) and 62-640.400(6)]
2. The deliberate introduction of stormwater in any amount into collection/transmission systems designed solely for the introduction (and conveyance) of domestic/industrial wastewater; or the deliberate introduction of stormwater into collection/transmission systems designed for the introduction or conveyance of combinations of storm and domestic/industrial wastewater in amounts which may reduce the efficiency of pollutant removal by the treatment plant is prohibited, except as provided by Rule 62-610.472, F.A.C. [62-604.130(3)]
3. Collection/transmission system overflows shall be reported to the Department in accordance with Permit Condition IX. 20. [62-604.550] [62-620.610(20)]
4. The operating authority of a collection/transmission system and the permittee of a treatment plant are prohibited from accepting connections of wastewater discharges which have not received necessary pretreatment or which contain materials or pollutants (other than normal domestic wastewater constituents):
 - a. Which may cause fire or explosion hazards; or
 - b. Which may cause excessive corrosion or other deterioration of wastewater facilities due to chemical action or pH levels; or
 - c. Which are solid or viscous and obstruct flow or otherwise interfere with wastewater facility operations or treatment; or
 - d. Which result in the wastewater temperature at the introduction of the treatment plant exceeding 40°C or otherwise inhibiting treatment; or
 - e. Which result in the presence of toxic gases, vapors, or fumes that may cause worker health and safety problems.[62-604.130(5)]
5. The treatment facility, storage ponds for Part II systems, rapid infiltration basins, and/or infiltration trenches shall be enclosed with a fence or otherwise provided with features to discourage the entry of animals and unauthorized persons. [62-610.518(1) and 62-600.400(2)(b)]
6. Screenings and grit removed from the wastewater facilities shall be collected in suitable containers and hauled to a Department approved Class I landfill or to a landfill approved by the Department for receipt/disposal of screenings and grit. [62-701.300(1)(a)]
7. Where required by Chapter 471 or Chapter 492, F.S., applicable portions of reports that must be submitted under this permit shall be signed and sealed by a professional engineer or a professional geologist, as appropriate. [62-620.310(4)]
8. The permittee shall provide verbal notice to the Department's Central District Office as soon as practical after discovery of a sinkhole or other karst feature within an area for the management or application of wastewater, wastewater residuals (sludges), or reclaimed water. The permittee shall immediately implement measures appropriate to control the entry of contaminants, and shall detail these measures to the Department's Central District Office in a written report within 7 days of the sinkhole discovery. [62-620.320(6)]

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IX. GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to Chapter 403, Florida Statutes. Any permit noncompliance constitutes a violation of Chapter 403, Florida Statutes, and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. [62-620.610(1)]
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviations from the approved drawings, exhibits, specifications, or conditions of this permit constitutes grounds for revocation and enforcement action by the Department. [62-620.610(2)]
3. As provided in subsection 403.087(7), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor authorize any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit. [62-620.610(3)]
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [62-620.610(4)]
5. This permit does not relieve the permittee from liability and penalties for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The permittee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [62-620.610(5)]
6. If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee shall apply for and obtain a new permit. [62-620.610(6)]
7. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of this permit. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to maintain or achieve compliance with the conditions of the permit. [62-620.610(7)]
8. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [62-620.610(8)]
9. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to:
 - a. Enter upon the permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under the conditions of this permit;
 - b. Have access to and copy any records that shall be kept under the conditions of this permit;
 - c. Inspect the facilities, equipment, practices, or operations regulated or required under this permit; and
 - d. Sample or monitor any substances or parameters at any location necessary to assure compliance with this permit or Department rules.

[62-620.610(9)]

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10. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except as such use is proscribed by Section 403.111, F.S., or Rule 62-620.302, F.A.C. Such evidence shall only be used to the extent that it is consistent with the Florida Rules of Civil Procedure and applicable evidentiary rules. [62-620.610(10)]
11. When requested by the Department, the permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also provide to the Department upon request copies of records required by this permit to be kept. If the permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department. [62-620.610(11)]
12. Unless specifically stated otherwise in Department rules, the permittee, in accepting this permit, agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard. [62-620.610(12)]
13. The permittee, in accepting this permit, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C. [62-620.610(13)]
14. This permit is transferable only upon Department approval in accordance with Rule 62-620.340, F.A.C. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department. [62-620.610(14)]
15. The permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility or activity and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment. [62-620.610(15)]
16. The permittee shall apply for a revision to the Department permit in accordance with Rules 62-620.300, F.A.C., and the Department of Environmental Protection Guide to Permitting Wastewater Facilities or Activities Under Chapter 62-620, F.A.C., at least 90 days before construction of any planned substantial modifications to the permitted facility is to commence or with Rule 62-620.325(2), F.A.C., for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in Rule 62-620.300, F.A.C. [62-620.610(16)]
17. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of this permit. The notice shall include the following information:
 - a. A description of the anticipated noncompliance;
 - b. The period of the anticipated noncompliance, including dates and times; and
 - c. Steps being taken to prevent future occurrence of the noncompliance.[62-620.610(17)]
18. Sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246 and Chapters 62-160, 62-600, and 62-610, F.A.C., and 40 CFR 136, as appropriate.
 - a. Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10), or as specified elsewhere in the permit.

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- b. If the permittee monitors any contaminant more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
- c. Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in this permit.
- d. Except as specifically provided in Rule 62-160.300, F.A.C., any laboratory test required by this permit shall be performed by a laboratory that has been certified by the Department of Health Environmental Laboratory Certification Program (DOH ELCP). Such certification shall be for the matrix, test method and analyte(s) being measured to comply with this permit. For domestic wastewater facilities, testing for parameters listed in Rule 62-160.300(4), F.A.C., shall be conducted under the direction of a certified operator.
- e. Field activities including on-site tests and sample collection shall follow the applicable standard operating procedures described in DEP-SOP-001/01 adopted by reference in Chapter 62-160, F.A.C.
- f. Alternate field procedures and laboratory methods may be used where they have been approved in accordance with Rules 62-160.220, and 62-160.330, F.A.C.

[62-620.610(18)]

- 19. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in this permit shall be submitted no later than 14 days following each schedule date. [62-620.610(19)]
- 20. The permittee shall report to the Department's Central District Office any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
 - a. The following shall be included as information which must be reported within 24 hours under this condition:
 - (1) Any unanticipated bypass which causes any reclaimed water or effluent to exceed any permit limitation or results in an unpermitted discharge,
 - (2) Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice, and
 - (4) Any unauthorized discharge to surface or ground waters.
 - b. Oral reports as required by this subsection shall be provided as follows:
 - (1) For unauthorized releases or spills of treated or untreated wastewater reported pursuant to subparagraph (a)4. that are in excess of 1,000 gallons per incident, or where information indicates that public health or the environment will be endangered, oral reports shall be provided to the STATE WATCH OFFICE TOLL FREE NUMBER (800) 320-0519, as soon as practical, but no later than 24 hours from the time the permittee becomes aware of the discharge. The permittee, to the extent known, shall provide the following information to the State Watch Office:
 - (a) Name, address, and telephone number of person reporting;
 - (b) Name, address, and telephone number of permittee or responsible person for the discharge;
 - (c) Date and time of the discharge and status of discharge (ongoing or ceased);
 - (d) Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater);
 - (e) Estimated amount of the discharge;
 - (f) Location or address of the discharge;
 - (g) Source and cause of the discharge;
 - (h) Whether the discharge was contained on-site, and cleanup actions taken to date;
 - (i) Description of area affected by the discharge, including name of water body affected, if any; and

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- (j) Other persons or agencies contacted.
- (2) Oral reports, not otherwise required to be provided pursuant to subparagraph b.1 above, shall be provided to the Department's Central District Office within 24 hours from the time the permittee becomes aware of the circumstances.
- c. If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department's Central District Office shall waive the written report.

[62-620.610(20)]

21. The permittee shall report all instances of noncompliance not reported under Permit Conditions IX.17., IX.18., or IX.19. of this permit at the time monitoring reports are submitted. This report shall contain the same information required by Permit Condition IX.20. of this permit. [62-620.610(21)]

22. Bypass Provisions.

- a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment works.
- b. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless the permittee affirmatively demonstrates that:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Permit Condition IX.22.c. of this permit.
- c. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Permit Condition IX.20. of this permit. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.
- d. The Department shall approve an anticipated bypass, after considering its adverse effect, if the permittee demonstrates that it will meet the three conditions listed in Permit Condition IX.22.b.(1) through (3) of this permit.
- e. A permittee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Permit Condition IX.22.b. through d. of this permit.

[62-620.610(22)]

23. Upset Provisions.

- a. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee.
 - (1) An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, careless or improper operation.
 - (2) An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of upset provisions of Rule 62-620.610, F.A.C., are met.
- b. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;

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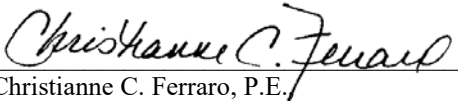
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- (3) The permittee submitted notice of the upset as required in Permit Condition IX.20. of this permit; and
- (4) The permittee complied with any remedial measures required under Permit Condition IX.5. of this permit.
- c. In any enforcement proceeding, the burden of proof for establishing the occurrence of an upset rests with the permittee.
- d. Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review.

[62-620.610(23)]

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION


Christianne C. Ferraro, P.E.
Administrator
Permitting and Waste Cleanup - Wastewater

PERMIT ISSUANCE DATE:

JANUARY 23, 2017

Attachment(s):
Discharge Monitoring Report
"Pathogen Monitoring" Form
Monitor Well Completion Report
Map of the General Reuse Service Area

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, 3319 Maguire Blvd, Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME:	Wildwood, City of	PERMIT NUMBER:	FLA013497-013-DW1P/NRL	Effective Date of DMR	March 1, 2017
MAILING ADDRESS:	100 N Main St Wildwood, Florida 34785-4047	LIMIT:	Final	REPORT FREQUENCY:	Monthly
		CLASS SIZE:	N/A	PROGRAM:	Domestic
FACILITY:	Wildwood, City of WRF	MONITORING GROUP NUMBER:	R-001		
LOCATION:	1290 Industrial Dr NW EDGE OF CITY, NEAR SR #44 Wildwood, FL 34785-5201	MONITORING GROUP DESCRIPTION:	Public Access Reuse, with Influent		
		RE-SUBMITTED DMR:	☐		
COUNTY:	Sumter	NO DISCHARGE FROM SITE:	☐		
OFFICE:	Central District	MONITORING PERIOD	From: _____ To: _____		

Parameter		Quantity or Loading	Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement									
PARM Code 50050 Y Mon. Site No. FLW-01	Permit Requirement	3.30 (An.Avg.)	MGD						Continuous	Flow Totalizer
Flow	Sample Measurement									
PARM Code 50050 1 Mon. Site No. FLW-01	Permit Requirement	Report (Mo.Avg.)	MGD						Continuous	Flow Totalizer
BOD, Carbonaceous 5 day, 20C	Sample Measurement									
PARM Code 80082 Y Mon. Site No. EFA-01	Permit Requirement			20.0 (An.Avg.)			mg/L		Weekly	16-hr FPC
BOD, Carbonaceous 5 day, 20C	Sample Measurement									
PARM Code 80082 A Mon. Site No. EFA-01	Permit Requirement			60.0 (Max.)	45.0 (Max.Wk.Avg.)	30.0 (Mo.Avg.)	mg/L		Weekly	16-hr FPC
Solids, Total Suspended	Sample Measurement									
PARM Code 00530 B Mon. Site No. EFB-01	Permit Requirement					5.0 (Max.)	mg/L		4 Days/Week	Grab
Coliform, Fecal	Sample Measurement									
PARM Code 74055 A Mon. Site No. EFA-01	Permit Requirement					25 (Max.)	#/100mL		4 Days/Week	Grab

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Wildwood, City of WWTP

MONITORING GROUP
NUMBER:
MONITORING PERIOD

R-001

PERMIT NUMBER: FLA013497-013-DW1P/NRL

From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Coliform, Fecal, % less than detection	Sample Measurement										
PARM Code 51005 A Mon. Site No. EFA-01	Permit Requirement				75 (Min.Mo.Total)			percent		4 Days/Week	Calculated
pH	Sample Measurement										
PARM Code 00400 A Mon. Site No. EFA-01	Permit Requirement				6.0 (Min.)		8.5 (Max.)	s.u.		Continuous	Meter
Chlorine, Total Residual (For Disinfection)	Sample Measurement										
PARM Code 50060 A Mon. Site No. EFA-01	Permit Requirement				1.0 (Min.)			mg/L		Continuous	Meter
Turbidity	Sample Measurement										
PARM Code 00070 B Mon. Site No. EFB-01	Permit Requirement						Report (Max.)	NTU		Continuous	Meter
Nitrogen, Total	Sample Measurement										
PARM Code 00600 Y Mon. Site No. EFA-01	Permit Requirement					Report (An.Avg.)		mg/L		Monthly	16-hr FPC
Nitrogen, Total	Sample Measurement										
PARM Code 00600 A Mon. Site No. EFA-01	Permit Requirement						Report (Mo.Avg.)	mg/L		Monthly	16-hr FPC
Phosphorus, Total (as P)	Sample Measurement										
PARM Code 00665 Y Mon. Site No. EFA-01	Permit Requirement					Report (An.Avg.)		mg/L		Monthly	16-hr FPC
Phosphorus, Total (as P)	Sample Measurement										
PARM Code 00665 A Mon. Site No. EFA-01	Permit Requirement						Report (Mo.Avg.)	mg/L		Monthly	16-hr FPC
Flow	Sample Measurement										
PARM Code 50050 P Mon. Site No. FLW-06	Permit Requirement		3.55 (An.Avg.)	MGD						Continuous	Flow Totalizer
Flow	Sample Measurement										
PARM Code 50050 Q Mon. Site No. FLW-06	Permit Requirement	Report (Mo.Avg.)	Report (3Mo.Avg.)	MGD						Continuous	Flow Totalizer

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Wildwood, City of WWTP

MONITORING GROUP

R-001

PERMIT NUMBER: FLA013497-013-DW1P/NRL

NUMBER:

MONITORING PERIOD

From: _____ To: _____

[illegible]

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, 3319 Maguire Blvd, Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME:	Wildwood, City of	PERMIT NUMBER:	FLA013497-013-DW1P/NRL	
MAILING ADDRESS:	100 N Main St Wildwood, Florida 34785-4047	LIMIT:	Final	REPORT FREQUENCY:
		CLASS SIZE:	N/A	Monthly
FACILITY:	Wildwood, City of WWTP	MONITORING GROUP NUMBER:	R-002	PROGRAM:
LOCATION:	1290 Industrial Dr NW EDGE OF CITY, NEAR SR #44 Wildwood, FL 34785-5201	MONITORING GROUP DESCRIPTION:	RIBs.	Domestic
		RE-SUBMITTED DMR:	☐	
COUNTY:	Sumter	NO DISCHARGE FROM SITE:	☐	
OFFICE:	Central District	MONITORING PERIOD	From: _____ To: _____	

Parameter		Quantity or Loading	Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Flow	Sample Measurement									
PARM Code 50050 Y Mon. Site No. FLW-05	Permit Requirement		1.25 (An.Avg.)	MGD					Continuous	Flow Totalizer
Flow	Sample Measurement									
PARM Code 50050 1 Mon. Site No. FLW-05	Permit Requirement		Report (Mo.Avg.)	MGD					Continuous	Flow Totalizer
BOD, Carbonaceous 5 day, 20C	Sample Measurement									
PARM Code 80082 Y Mon. Site No. EFA-01	Permit Requirement				20.0 (An.Avg.)		mg/L		Weekly	16-hr FPC
BOD, Carbonaceous 5 day, 20C	Sample Measurement									
PARM Code 80082 A Mon. Site No. EFA-01	Permit Requirement			60.0 (Max.)	45.0 (Max.Wk.Avg.)	30.0 (Mo.Avg.)	mg/L		Weekly	16-hr FPC
Solids, Total Suspended	Sample Measurement									
PARM Code 00530 Y Mon. Site No. EFA-01	Permit Requirement				20.0 (An.Avg.)		mg/L		Weekly	16-hr FPC
Solids, Total Suspended	Sample Measurement									
PARM Code 00530 A Mon. Site No. EFA-01	Permit Requirement			60.0 (Max.)	45.0 (Max.Wk.Avg.)	30.0 (Mo.Avg.)	mg/L		Weekly	16-hr FPC

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Wildwood, City of WWTP

MONITORING GROUP
NUMBER:
MONITORING PERIOD

R-002

PERMIT NUMBER: FLA013497-013-DW1P/NRL

From: _____ To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Coliform, Fecal	Sample Measurement										
PARM Code 74055 Y Mon. Site No. EFA-01	Permit Requirement					200 (An.Avg.)		#/100mL		Weekly	Grab
Coliform, Fecal	Sample Measurement										
PARM Code 74055 A Mon. Site No. EFA-01	Permit Requirement					200 (Mo.Geo.Mn.)	800 (Max.)	#/100mL		Weekly	Grab
pH	Sample Measurement										
PARM Code 00400 A Mon. Site No. EFA-01	Permit Requirement				6.0 (Min.)		8.5 (Max.)	s.u.		Continuous	Meter
Chlorine, Total Residual (For Disinfection)	Sample Measurement										
PARM Code 50060 A Mon. Site No. EFA-01	Permit Requirement				0.5 (Min.)			mg/L		Continuous	Meter
Nitrogen, Nitrate, Total (as N)	Sample Measurement										
PARM Code 00620 A Mon. Site No. EFA-01	Permit Requirement						12.0 (Max.)	mg/L		Weekly	16-hr FPC

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, 3319 Maguire Blvd, Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME:	Wildwood, City of	PERMIT NUMBER:	FLA013497-013-DW1P/NRL	
MAILING ADDRESS:	100 N Main St Wildwood, Florida 34785-4047	LIMIT:	Final	REPORT FREQUENCY:
		CLASS SIZE:	N/A	Monthly
FACILITY:	Wildwood, City of WWTP	MONITORING GROUP NUMBER:	RMP-Q	PROGRAM:
LOCATION:	1290 Industrial Dr NW EDGE OF CITY, NEAR SR #44 Wildwood, FL 34785-5201	MONITORING GROUP DESCRIPTION:	Biosolids Quantity	Domestic
COUNTY:	Sumter	RE-SUBMITTED DMR:	☐	
OFFICE:	Central District	NO DISCHARGE FROM SITE:	☐	
		MONITORING PERIOD	From: _____ To: _____	

Parameter		Quantity or Loading	Units	Quality or Concentration	Units	No. Ex.	Frequency of Analysis	Sample Type
Biosolids Quantity (Landfilled)	Sample Measurement							
PARM Code B0008 + Mon. Site No. RMP-1	Permit Requirement	Report (Mo.Total)	dry tons				Monthly	Calculated
Biosolids Quantity (Transferred)	Sample Measurement							
PARM Code B0007 + Mon. Site No. RMP-2	Permit Requirement	Report (Mo.Total)	dry tons				Monthly	Calculated

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DAILY SAMPLE RESULTS - PART B

Permit Number:
Monitoring Period

FLA013497-013-DW1P/NRL

From: _____ To: _____

Facility: Wildwood, City of WWTP

	BOD, Carbonaceous 5 day, 20C mg/L	Chlorine, Total Residual (For Disinfection) mg/L	Coliform, Fecal #/100mL	Nitrogen, Nitrate, Total (as N) mg/L	Nitrogen, Total mg/L	Phosphorus, Total (as P) mg/L	Solids, Total Suspended mg/L	pH s.u.	Solids, Total Suspended mg/L	Turbidity NTU
Code	80082	50060	74055	00620	00600	00665	00530	00400	00530	00070
Mon. Site	EFA-01	EFA-01	EFA-01	EFA-01	EFA-01	EFA-01	EFA-01	EFA-01	EFA-01	EFA-01
1										
2										
3										
4										
5										
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25										
26										
27										
28										
29										
30										
31										
Total										
Mo. Avg.										

PLANT STAFFING:

Day Shift Operator	Class: _____	Certificate No: _____	Name: _____
Evening Shift Operator	Class: _____	Certificate No: _____	Name: _____
Night Shift Operator	Class: _____	Certificate No: _____	Name: _____
Lead Operator	Class: _____	Certificate No: _____	Name: _____

DAILY SAMPLE RESULTS - PART B

Permit Number:
Monitoring Period

FLA013497-013-DW1P
From: _____ To: _____

Facility: Wildwood, City of WWTP

	Flow, Total to R-001 MGD	Flow, To Lake Miona Golf Course MGD	Flow, To Local Reuse Service Area MGD	Flow, to NSU Service Area MGD	Flow, To RIBs MGD	Flow, Total Through Plant MGD	BOD, Carbonaceous 5 day, 20C (Influent) mg/L	Solids, Total Suspended (Influent) mg/L	
Code	50050	50050	50050	50050	50050	50050	80082	00530	
Mon. Site	FLW-01	FLW-02	FLW-03	FLW-04	FLW-05	FLW-06	INF-01	INF-01	
1									
2									
3									
4									
5									
6									
7									
8									
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28									
29									
30									
31									
Total									
Mo. Avg.									

PLANT STAFFING:

Day Shift Operator	Class: _____	Certificate No: _____	Name: _____
Evening Shift Operator	Class: _____	Certificate No: _____	Name: _____
Night Shift Operator	Class: _____	Certificate No: _____	Name: _____
Lead Operator	Class: _____	Certificate No: _____	Name: _____

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Wildwood, City of WWTP
 Permit Number: FLA013497-013-DW1P
 County: Sumter

Monitoring Well ID: MWB-01
 Well Type: Background
 Description: MW-1 Lake Miona,
 MWB-24612

Report Frequency: Quarterly
 Program: Domestic

Office: Central District

Re-submitted DMR: ☐

Monitoring Period

From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___ Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Quarterly				
Nitrogen, Nitrate, Total (as N)	00620		Report	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		Report	mg/L	Grab	Quarterly				
Chloride (as Cl)	00940		Report	mg/L	Grab	Quarterly				
Coliform, Fecal	74055		Report	#/100mL	Grab	Quarterly				
pH	00400		Report	s.u.	In Situ	Quarterly				
Turbidity	00070		Report	NTU	Grab	Quarterly				

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Wildwood, City of WWTP
 Permit Number: FLA013497-013-DW1P
 County: Sumter

Monitoring Well ID: MWC-01
 Well Type: Compliance
 Description: MW-4 Lake Miona,
 MWC-24615
 Re-submitted DMR: ☐

Report Frequency: Quarterly
 Program: Domestic

Office: Central District

Monitoring Period

From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___ Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Quarterly				
Nitrogen, Nitrate, Total (as N)	00620		10	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		500	mg/L	Grab	Quarterly				
Chloride (as Cl)	00940		250	mg/L	Grab	Quarterly				
Coliform, Fecal	74055		4	#/100mL	Grab	Quarterly				
pH	00400		6.5-8.5	s.u.	In Situ	Quarterly				
Turbidity	00070		Report	NTU	Grab	Quarterly				

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Wildwood, City of WWTP
 Permit Number: FLA013497-013-DW1P
 County: Sumter

Monitoring Well ID: MWC-03
 Well Type: Compliance
 Description: MW-6 Lake Miona,
 MWC-24617

Report Frequency: Quarterly
 Program: Domestic

Office: Central District

Re-submitted DMR: ☐

Monitoring Period

From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___ Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Quarterly				
Nitrogen, Nitrate, Total (as N)	00620		10	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		500	mg/L	Grab	Quarterly				
Chloride (as Cl)	00940		250	mg/L	Grab	Quarterly				
Coliform, Fecal	74055		4	#/100mL	Grab	Quarterly				
pH	00400		6.5-8.5	s.u.	In Situ	Quarterly				
Turbidity	00070		Report	NTU	Grab	Quarterly				

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Wildwood, City of WWTP
 Permit Number: FLA013497-013-DW1P
 County: Sumter

Monitoring Well ID: MWI-02
 Well Type: Intermediate
 Description: MW-3 Lake Miona,
 MWI-24614
 Re-submitted DMR: ☐

Report Frequency: Quarterly
 Program: Domestic

Office: Central District

Monitoring Period

From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___ Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Quarterly				
Nitrogen, Nitrate, Total (as N)	00620		Report	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		Report	mg/L	Grab	Quarterly				
Chloride (as Cl)	00940		Report	mg/L	Grab	Quarterly				
Coliform, Fecal	74055		Report	#/100mL	Grab	Quarterly				
pH	00400		Report	s.u.	In Situ	Quarterly				
Turbidity	00070		Report	NTU	Grab	Quarterly				

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Wildwood, City of WWTP
 Permit Number: FLA013497-013-DW1P
 County: Sumter

Monitoring Well ID: MWC-07
 Well Type: Compliance
 Description: MW-7 RIB, MWC-24624
 Re-submitted DMR: ☐

Report Frequency: Quarterly
 Program: Domestic

Office: Central District

Monitoring Period From: _____ To: _____ Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___ Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Quarterly				
Nitrogen, Nitrate, Total (as N)	00620		10	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		500	mg/L	Grab	Quarterly				
Chloride (as Cl)	00940		250	mg/L	Grab	Quarterly				
Coliform, Fecal	74055		4	#/100mL	Grab	Quarterly				
pH	00400		6.5-8.5	s.u.	In Situ	Quarterly				
Turbidity	00070		Report	NTU	Grab	Quarterly				

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Wildwood, City of WWTP
 Permit Number: FLA013497-013-DW1P
 County: Sumter

Monitoring Well ID: MWC-09
 Well Type: Compliance
 Description: MW-9 RIB, MWC-24626
 Re-submitted DMR: ☐

Report Frequency: Quarterly
 Program: Domestic

Office: Central District

Monitoring Period From: _____ To: _____ Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___ Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Quarterly				
Nitrogen, Nitrate, Total (as N)	00620		10	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		500	mg/L	Grab	Quarterly				
Chloride (as Cl)	00940		250	mg/L	Grab	Quarterly				
Coliform, Fecal	74055		4	#/100mL	Grab	Quarterly				
pH	00400		6.5-8.5	s.u.	In Situ	Quarterly				
Turbidity	00070		Report	NTU	Grab	Quarterly				

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Wildwood, City of WWTP
 Permit Number: FLA013497-013-DW1P
 County: Sumter

Monitoring Well ID: MWI-04
 Well Type: Intermediate
 Description: MW-6 RIB, MWI-24623
 Re-submitted DMR: ☐

Report Frequency: Quarterly
 Program: Domestic

Office: Central District

Monitoring Period From: _____ To: _____ Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___ Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Quarterly				
Nitrogen, Nitrate, Total (as N)	00620		Report	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		Report	mg/L	Grab	Quarterly				
Chloride (as Cl)	00940		Report	mg/L	Grab	Quarterly				
Coliform, Fecal	74055		Report	#/100mL	Grab	Quarterly				
pH	00400		Report	s.u.	In Situ	Quarterly				
Turbidity	00070		Report	NTU	Grab	Quarterly				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

INSTRUCTIONS FOR COMPLETING THE WASTEWATER DISCHARGE MONITORING REPORT

Read these instructions before completing the DMR. Hard copies and/or electronic copies of the required parts of the DMR were provided with the permit. All required information shall be completed in full and typed or printed in ink. A signed, original DMR shall be mailed to the address printed on the DMR by the 28th of the month following the monitoring period. Facilities who submit their DMR(s) electronically through eDMR do not need to submit a hardcopy DMR. The DMR shall not be submitted before the end of the monitoring period.

The DMR consists of three parts--A, B, and D--all of which may or may not be applicable to every facility. Facilities may have one or more Part A's for reporting effluent or reclaimed water data. All domestic wastewater facilities will have a Part B for reporting daily sample results. Part D is used for reporting ground water monitoring well data.

When results are not available, the following codes should be used on parts A and D of the DMR and an explanation provided where appropriate. Note: Codes used on Part B for raw data are different.

CODE	DESCRIPTION/INSTRUCTIONS
ANC	Analysis not conducted.
DRY	Dry Well
FLD	Flood disaster.
IFS	Insufficient flow for sampling.
LS	Lost sample.
MNR	Monitoring not required this period.

CODE	DESCRIPTION/INSTRUCTIONS
NOD	No discharge from/to site.
OPS	Operations were shutdown so no sample could be taken.
OTH	Other. Please enter an explanation of why monitoring data were not available.
SEF	Sampling equipment failure.

When reporting analytical results that fall below a laboratory's reported method detection limits or practical quantification limits, the following instructions should be used, unless indicated otherwise in the permit or on the DMR:

1. Results greater than or equal to the PQL shall be reported as the measured quantity.
2. Results less than the PQL and greater than or equal to the MDL shall be reported as the laboratory's MDL value. These values shall be deemed equal to the MDL when necessary to calculate an average for that parameter and when determining compliance with permit limits.
3. Results less than the MDL shall be reported by entering a less than sign ("<") followed by the laboratory's MDL value, e.g. < 0.001. A value of one-half the MDL or one-half the effluent limit, whichever is lower, shall be used for that sample when necessary to calculate an average for that parameter. Values less than the MDL are considered to demonstrate compliance with an effluent limitation.

PART A -DISCHARGE MONITORING REPORT (DMR)

Part A of the DMR is comprised of one or more sections, each having its own header information. Facility information is preprinted in the header as well as the monitoring group number, whether the limits and monitoring requirements are interim or final, and the required submittal frequency (e.g. monthly, annually, quarterly, etc.). Submit Part A based on the required reporting frequency in the header and the instructions shown in the permit. The following should be completed by the permittee or authorized representative:

Resubmitted DMR: Check this box if this DMR is being re-submitted because there was information missing from or information that needed correction on a previously submitted DMR. The information that is being revised should be clearly noted on the re-submitted DMR (e.g. highlight, circle, etc.)

No Discharge From Site: Check this box if no discharge occurs and, as a result, there are no data or codes to be entered for all of the parameters on the DMR for the entire monitoring group number; however, if the monitoring group includes other monitoring locations (e.g., influent sampling), the "NOD" code should be used to individually denote those parameters for which there was no discharge.

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

Sample Measurement: Before filling in sample measurements in the table, check to see that the data collected correspond to the limit indicated on the DMR (i.e. interim or final) and that the data correspond to the monitoring group number in the header. Enter the data or calculated results for each parameter on this row in the non-shaded area above the limit. Be sure the result being entered corresponds to the appropriate statistical base code (e.g. annual average, monthly average, single sample maximum, etc.) and units. Data qualifier codes are not to be reported on Part A.

No. Ex.: Enter the number of sample measurements during the monitoring period that exceeded the permit limit for each parameter in the non-shaded area. If none, enter zero.

Frequency of Analysis: The shaded areas in this column contain the minimum number of times the measurement is required to be made according to the permit. Enter the actual number of times the measurement was made in the space above the shaded area.

Sample Type: The shaded areas in this column contain the type of sample (e.g. grab, composite, continuous) required by the permit. Enter the actual sample type that was taken in the space above the shaded area.

Signature: This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.

Comment and Explanation of Any Violations: Use this area to explain any exceedances, any upset or by-pass events, or other items which require explanation. If more space is needed, reference all attachments in this area.

PART B - DAILY SAMPLE RESULTS

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

Daily Monitoring Results: Transfer all analytical data from your facility's laboratory or a contract laboratory's data sheets for all day(s) that samples were collected. Record the data in the units indicated. Table 1 in Chapter 62-160, F.A.C., contains a complete list of all the data qualifier codes that your laboratory may use when reporting analytical results. However, when transferring numerical results onto Part B of the DMR, only the following data qualifier codes should be used and an explanation provided where appropriate.

CODE	DESCRIPTION/INSTRUCTIONS
<	The compound was analyzed for but not detected.
A	Value reported is the mean (average) of two or more determinations.
J	Estimated value, value not accurate.
Q	Sample held beyond the actual holding time.
Y	Laboratory analysis was from an unpreserved or improperly preserved sample.

To calculate the monthly average, add each reported value to get a total. For flow, divide this total by the number of days in the month. For all other parameters, divide the total by the number of observations.

Plant Staffing: List the name, certificate number, and class of all state certified operators operating the facility during the monitoring period. Use additional sheets as necessary.

PART D - GROUND WATER MONITORING REPORT

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

Date Sample Obtained: Enter the date the sample was taken. Also, check whether or not the well was purged before sampling.

Time Sample Obtained: Enter the time the sample was taken.

Sample Measurement: Record the results of the analysis. If the result was below the minimum detection limit, indicate that. Data qualifier codes are not to be reported on Part D.

Detection Limits: Record the detection limits of the analytical methods used.

Analysis Method: Indicate the analytical method used. Record the method number from Chapter 62-160 or Chapter 62-601, F.A.C., or from other sources.

Sampling Equipment Used: Indicate the procedure used to collect the sample (e.g. airlift, bucket/bailer, centrifugal pump, etc.)

Samples Filtered: Indicate whether the sample obtained was filtered by laboratory (L), filtered in field (F), or unfiltered (N).

Signature: This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.

Comments and Explanation: Use this space to make any comments on or explanations of results that are unexpected. If more space is needed, reference all attachments in this area.

SPECIAL INSTRUCTIONS FOR LIMITED WET WEATHER DISCHARGES

Flow (Limited Wet Weather Discharge): Enter the measured average flow rate during the period of discharge or divide gallons discharged by duration of discharge (converted into days). Record in million gallons per day (MGD).

Flow (Upstream): Enter the average flow rate in the receiving stream upstream from the point of discharge for the period of discharge. The average flow rate can be calculated based on two measurements; one made at the start and one made at the end of the discharge period. Measurements are to be made at the upstream gauging station described in the permit.

Actual Stream Dilution Ratio: To calculate the Actual Stream Dilution Ratio, divide the average upstream flow rate by the average discharge flow rate. Enter the Actual Stream Dilution Ratio accurate to the nearest 0.1.

No. of Days the SDF > Stream Dilution Ratio: For each day of discharge, compare the minimum Stream Dilution Factor (SDF) from the permit to the calculated Stream Dilution Ratio. On Part B of the DMR, enter an asterisk (*) if the SDF is greater than the Stream Dilution Ratio on any day of discharge. On Part A of the DMR, add up the days with an "*" and record the total number of days the Stream Dilution Factor was greater than the Stream Dilution Ratio.

CBOD₅: Enter the average CBOD₅ of the reclaimed water discharged during the period shown in duration of discharge.

TKN: Enter the average TKN of the reclaimed water discharged during the period shown in duration of discharge.

Actual Rainfall: Enter the actual rainfall for each day on Part B. Enter the actual cumulative rainfall to date for this calendar year and the actual total monthly rainfall on Part A. The cumulative rainfall to date for this calendar year is the total amount of rain, in inches, that has been recorded since January 1 of the current year through the month for which this DMR contains data.

Rainfall During Average Rainfall Year: On Part A, enter the total monthly rainfall during the average rainfall year and the cumulative rainfall for the average rainfall year. The cumulative rainfall for the average rainfall year is the amount of rain, in inches, which fell during the average rainfall year from January through the month for which this DMR contains data.

No. of Days LWWD Activated During Calendar Year: Enter the cumulative number of days that the limited wet weather discharge was activated since January 1 of the current year.

Reason for Discharge: Attach to the DMR a brief explanation of the factors contributing to the need to activate the limited wet weather discharge.

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FLORIDA DEPARTMENT OF Environmental Protection

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Mark Odell, Director
City of Wildwood
1290 Industrial Drive
Wildwood, FL 34785
modell@wildwood-fl.gov

Sumter County - DW
Wildwood WWTF
File No. FLA013497-014-DW1/MR
Permit Revision

Dear Mr. Odell:

The Department is in receipt of your request to revise the conditions of the permit referenced above. The conditions are changed as follows:

This revision allows conversion of two existing rapid infiltration basins (RIBs) R-10 and R-11 into a combined lined wet-weather storage pond for the public access reuse system (R-001). The combined single storage pond will have a capacity of 6.93 million gallons (MG). Lining the RIBs will reduce the capacity of the RIBs (R-002) to 1.06 MGD annual average daily flow (AADF).

Descriptions for R-001 and R-002 are revised as follows:

Land Application R-001: An existing 3.30 MGD annual average daily flow permitted capacity slow-rate public access system. R-001 is a reuse system which consists of approximately 1.30 MGD of reclaimed water used for irrigation within the approved local Reuse Service Area to the major users identified in the permit, and 2.0 MGD AADF to the North Sumter Utility (NSU) Reuse Service area through an approved interconnection. Reject flow may be sent to one of the on-site holding ponds (1.0 MG and 2.50 MG) or to the RIBs, R-002. Reject flows sent to the holding ponds are returned to the oxidation ditch for re-treatment. Wet-weather storage is provided by a 2.65 MG and a 6.93 MG lined storage pond at the RIB site (R-002).

Land Application R-002: An existing 1.06 MGD annual average daily flow permitted capacity rapid infiltration basin (RIB) reuse system. R-002 consists of nine (9) RIBs with a total wetted area of 11.68 acres located approximately at latitude 28°53' 44.7366" N, longitude 82°1' 32.4203" W. The RIBs serve as back-up for the public access reuse system during periods of wet-weather and for reject flow.

1. Prior to placing the new facilities into operation or any individual unit processes into operation, for any purpose other than testing for leaks and equipment operation, the permittee shall complete and submit to the Department DEP **Form 62-620.910(12), Notification of Completion of Construction for Domestic Wastewater Facilities.** [62-620.630(2)]
2. Within six months after a facility is placed in operation, the permittee shall provide written certification to the Department on **Form 62-620.910(13)** that record drawings pursuant to Chapter 62-600, F.A.C., and that an operation and maintenance manual pursuant to Chapters 62-600 and 62-610, F.A.C., as applicable, are available at the location specified on the form. [62-620.630(7)]
3. This permit does not cover any of the structural engineering aspects of this project.

This letter must be attached to Wastewater Permit No. FLA013497 and becomes a part of and subject to all conditions of that permit.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the subsequent order may modify or take a different position than this action.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
- (c) A statement of when and how the petitioner received notice of the agency decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within **14** days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within **14** days of publication of the notice or within 14 days of receipt of the written notice, whichever occurs first. You cannot justifiably rely on the finality of this decision unless notice of this decision and the right of substantially affected persons to challenge this decision has been duly published or otherwise provided to all persons substantially affected by the decision. While you are not required to publish notice of this action, you may elect to do so pursuant Rule 62-110.106(10)(a).

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver may not apply to persons who have not received a clear point of entry.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



Reggie Phillips
Environmental Administrator
Permitting and Waste Cleanup Program

RP/crl

Attachment: Revised DMR

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the following listed persons:

Charles LeGros, FDEP, charles.legros@dep.state.fl.us
David Smicherko, FDEP, david.smicherko@dep.state.fl.us
M. Lewis Bryant, PE, Kimley-Horn, lewis.bryant@kimley-horn.com
Lindsey Brewer, FDEP, Lindsey.Brewer@FloridaDEP.gov
Trey Clayton, EI, Kimley-Horn, Trey.Clayton@kimley-horn.com

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.



Clerk

April 3, 2020
Date

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed submit this report to: Department of Environmental Protection, 3319 Maguire Blvd, Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME:	City of Wildwood	PERMIT NUMBER:	FLA013497-014-DW1	
MAILING ADDRESS:	1290 Industrial Dr Wildwood, Florida 34785-	LIMIT:	Final	REPORT FREQUENCY:
		CLASS SIZE:	N/A	PROGRAM:
FACILITY:	Wildwood WWTF	MONITORING GROUP NUMBER:	R-001	Monthly
LOCATION:	1290 Industrial Dr NW EDGE OF CITY, NEAR SR #44 Wildwood, FL 34785-5201	MONITORING GROUP DESCRIPTION:	Public Access Reuse (PAR) with influent	
		RE-SUBMITTED DMR:	☐	
		NO DISCHARGE FROM SITE:	☐	
COUNTY:	Sumter	MONITORING PERIOD	From:	To:
OFFICE:	Central District			

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Flow (To PAR)	Sample Measurement										
PARM Code 50050 Y Mon. Site No. FLW-01	Permit Requirement		3.30 (An.Avg.)	MGD						Continuous	Flow Totalizer
Flow (To PAR)	Sample Measurement										
PARM Code 50050 I Mon. Site No. FLW-01	Permit Requirement		Report (Mo.Avg.)	MGD						Continuous	Flow Totalizer
BOD, Carbonaceous 5 day, 20C	Sample Measurement										
PARM Code 80082 Y Mon. Site No. EFA-01	Permit Requirement					20.0 (An.Avg.)		mg/L		Weekly	16-hr FPC
BOD, Carbonaceous 5 day, 20C	Sample Measurement										
PARM Code 80082 A Mon. Site No. EFA-01	Permit Requirement				60.0 (Max.)	45.0 (Max.Wk.Avg.)	30.0 (Mo.Avg.)	mg/L		Weekly	16-hr FPC
Solids, Total Suspended	Sample Measurement										
PARM Code 00530 B Mon. Site No. EFB-01	Permit Requirement						5.0 (Max.)	mg/L		4 Days/Week	Grab
Coliform, Fecal	Sample Measurement										
PARM Code 74055 A Mon. Site No. EFA-01	Permit Requirement						25 (Max.)	#/100mL		4 Days/Week	Grab

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Wildwood WWTF

MONITORING GROUP

R-001

PERMIT NUMBER: FLA013497-014-DW1

NUMBER:

MONITORING PERIOD

From: _____

To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Coliform, Fecal, % less than detection	Sample Measurement										
PARM Code 51005 A Mon. Site No. EFA-01	Permit Requirement				75 (Min.Mo.Total)			percent		4 Days/Week	Calculated
pH	Sample Measurement										
PARM Code 00400 A Mon. Site No. EFA-01	Permit Requirement				6.0 (Min.)		8.5 (Max.)	s.u.		Continuous	Meter
Chlorine, Total Residual (For Disinfection)	Sample Measurement										
PARM Code 50060 A Mon. Site No. EFA-01	Permit Requirement				1.0 (Min.)			mg/L		Continuous	Meter
Solids, Total Suspended	Sample Measurement										
PARM Code 00530 P Mon. Site No. EFB-01	Permit Requirement						Report (Max.)	mg/L		Continuous	Meter
Nitrogen, Total	Sample Measurement										
PARM Code 00600 Y Mon. Site No. EFA-01	Permit Requirement					Report (An.Avg.)		mg/L		Monthly	16-hr FPC
Nitrogen, Total	Sample Measurement										
PARM Code 00600 A Mon. Site No. EFA-01	Permit Requirement						Report (Mo.Avg.)	mg/L		Monthly	16-hr FPC
Phosphorus, Total (as P)	Sample Measurement										
PARM Code 00665 Y Mon. Site No. EFA-01	Permit Requirement					Report (An.Avg.)		mg/L		Monthly	16-hr FPC
Phosphorus, Total (as P)	Sample Measurement										
PARM Code 00665 A Mon. Site No. EFA-01	Permit Requirement						Report (Mo.Avg.)	mg/L		Monthly	16-hr FPC
Flow (Total Plant Flow)	Sample Measurement										
PARM Code 50050 P Mon. Site No. FLW-06	Permit Requirement		3.55 (An.Avg.)	MGD						Continuous	Flow Totalizer
Flow (Total Plant Flow)	Sample Measurement										
PARM Code 50050 Q Mon. Site No. FLW-06	Permit Requirement	Report (Mo.Avg.)	Report (3Mo.Avg.)	MGD						Continuous	Flow Totalizer

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Wildwood WWTF

MONITORING GROUP R-001

PERMIT NUMBER: FLA013497-014-DW1

NUMBER:

MONITORING PERIOD

From:

To:

[illegible]

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed submit this report to: Department of Environmental Protection, 3319 Maguire Blvd, Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME:	City of Wildwood	PERMIT NUMBER:	FLA013497-014-DW1	
MAILING ADDRESS:	1290 Industrial Dr Wildwood, Florida 34785-	LIMIT:	Final	REPORT FREQUENCY:
		CLASS SIZE:	N/A	PROGRAM:
FACILITY:	Wildwood WWTF	MONITORING GROUP NUMBER:	R-002	Monthly
LOCATION:	1290 Industrial Dr NW EDGE OF CITY, NEAR SR #44 Wildwood, FL 34785-5201	MONITORING GROUP DESCRIPTION:	RIBs	Domestic
COUNTY:	Sumter	RE-SUBMITTED DMR:	☐	
OFFICE:	Central District	NO DISCHARGE FROM SITE:	☐	
		MONITORING PERIOD	From: _____ To: _____	

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Flow (To RIBs)	Sample Measurement										
PARM Code 50050 Y Mon. Site No. FLW-05	Permit Requirement		1.06 (An.Avg.)	MGD						Continuous	Flow Totalizer
Flow (To RIBs)	Sample Measurement										
PARM Code 50050 I Mon. Site No. FLW-05	Permit Requirement		Report (Mo.Avg.)	MGD						Continuous	Flow Totalizer
BOD, Carbonaceous 5 day, 20C	Sample Measurement										
PARM Code 80082 Y Mon. Site No. EFA-01	Permit Requirement					20.0 (An.Avg.)		mg/L		Weekly	16-hr FPC
BOD, Carbonaceous 5 day, 20C	Sample Measurement										
PARM Code 80082 A Mon. Site No. EFA-01	Permit Requirement				60.0 (Max.)	45.0 (Max.Wk.Avg.)	30.0 (Mo.Avg.)	mg/L		Weekly	16-hr FPC
Solids, Total Suspended	Sample Measurement										
PARM Code 00530 Y Mon. Site No. EFA-01	Permit Requirement					20.0 (An.Avg.)		mg/L		Weekly	16-hr FPC
Solids, Total Suspended	Sample Measurement										
PARM Code 00530 A Mon. Site No. EFA-01	Permit Requirement				60.0 (Max.)	45.0 (Max.Wk.Avg.)	30.0 (Mo.Avg.)	mg/L		Weekly	16-hr FPC

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Wildwood WWTF

MONITORING GROUP

R-002

PERMIT NUMBER: FLA013497-014-DW1

NUMBER:

MONITORING PERIOD

From: _____

To: _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Coliform, Fecal	Sample Measurement										
PARM Code 74055 Y Mon. Site No. EFA-01	Permit Requirement					200 (An.Avg.)		#/100mL		Weekly	Grab
Coliform, Fecal	Sample Measurement										
PARM Code 74055 A Mon. Site No. EFA-01	Permit Requirement					200 (Mo.Geo.Mn.)	800 (Max.)	#/100mL		Weekly	Grab
pH	Sample Measurement										
PARM Code 00400 A Mon. Site No. EFA-01	Permit Requirement				6.0 (Min.)		8.5 (Max.)	s.u.		Continuous	Meter
Chlorine, Total Residual (For Disinfection)	Sample Measurement										
PARM Code 50060 A Mon. Site No. EFA-01	Permit Requirement				0.5 (Min.)			mg/L		Continuous	Meter
Nitrogen, Nitrate, Total (as N)	Sample Measurement										
PARM Code 00620 A Mon. Site No. EFA-01	Permit Requirement						12.0 (Max.)	mg/L		Weekly	16-hr FPC

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed submit this report to: Department of Environmental Protection, 3319 Maguire Blvd, Suite 232, Orlando, FL 32803-3767

PERMITTEE NAME: City of Wildwood

MAILING ADDRESS: 1290 Industrial Dr
Wildwood, Florida 34785-

FACILITY: Wildwood WWTF

LOCATION: 1290 Industrial Dr
NW EDGE OF CITY, NEAR SR #44
Wildwood, FL 34785-5201

COUNTY: Sumter

OFFICE: Central District

PERMIT NUMBER: FLA013497-014-DW1

LIMIT: Final

CLASS SIZE: N/A

MONITORING GROUP NUMBER: RMP-Q

MONITORING GROUP DESCRIPTION: Biosolids Quantity

RE-SUBMITTED DMR: ☐

NO DISCHARGE FROM SITE: ☐

MONITORING PERIOD From: _____ To: _____

REPORT FREQUENCY: Monthly

PROGRAM: Domestic

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Biosolids Quantity (Transferred)	Sample Measurement										
PARM Code B0007 + Mon. Site No. RMP-1	Permit Requirement		Report (Mo.Total)	dry tons						Monthly	Calculated
Biosolids Quantity (Landfilled)	Sample Measurement										
PARM Code B0008 + Mon. Site No. RMP-2	Permit Requirement		Report (Mo.Total)	dry tons						Monthly	Calculated

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

DAILY SAMPLE RESULTS - PART B

Permit Number: FLA013497-014-DW1 Facility: Wildwood WWTF
Monitoring Period From: To:

	BOD, Carbonaceous 5 day, 20C (Influent) mg/L	BOD, Carbonaceous 5 day, 20C mg/L	Chlorine, Total Residual (For Disinfection) mg/L	Coliform, Fecal #/100mL	Flow (To PAR) MGD	Flow (To RIBs) MGD	Flow (Total Plant Flow) MGD	Nitrogen, Nitrate, Total (as N) mg/L	Nitrogen, Total mg/L	Phosphorus, Total (as P) mg/L	Solids, Total Suspended (Influent) mg/L
Code	80082	80082	50060	74055	50050	50050	50050	00620	00600	00665	00530
Mon. Site	INF-01	EFA-01	EFA-01	EFA-01	FLW-01	FLW-05	FLW-06	EFA-01	EFA-01	EFA-01	INF-01
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
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19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
Total											
Mo. Avg.											

PLANT STAFFING:

Day Shift Operator Class: Certificate No: Name:
Evening Shift Operator Class: Certificate No: Name:
Night Shift Operator Class: Certificate No: Name:
Lead Operator Class: Certificate No: Name:

DAILY SAMPLE RESULTS - PART B

Permit Number: FLA013497-014-DW1 Facility: Wildwood WWTF
Monitoring Period From: To:

	Solids, Total Suspended mg/L	Solids, Total Suspended mg/L	pH s.u.								
Code	00530	00530	00400								
Mon. Site	EFA-01	EFB-01	EFA-01								
1											
2											
3											
4											
5											
6											
7											
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25											
26											
27											
28											
29											
30											
31											
Total											
Mo. Avg.											

PLANT STAFFING:

Day Shift Operator Class: Certificate No: Name:
Evening Shift Operator Class: Certificate No: Name:
Night Shift Operator Class: Certificate No: Name:
Lead Operator Class: Certificate No: Name:

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Wildwood WWTF
 Permit Number: FLA013497-014-DW1
 County: Sumter

Monitoring Well ID: MWB-01
 Well Type: Background
 Description: MW-1 Lake Miona,
 MWB-24612

Report Frequency: Quarterly
 Program: Domestic

Office: Central District

Re-submitted DMR: ☐

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___ Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Quarterly				
Nitrogen, Nitrate, Total (as N)	00620		Report	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		Report	mg/L	Grab	Quarterly				
Chloride (as Cl)	00940		Report	mg/L	Grab	Quarterly				
Coliform, Fecal	74055		Report	#/100mL	Grab	Quarterly				
pH	00400		Report	s.u.	In Situ	Quarterly				
Turbidity	00070		Report	NTU	Grab	Quarterly				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Wildwood WWTF
 Permit Number: FLA013497-014-DW1
 County: Sumter

Monitoring Well ID: MWC-01
 Well Type: Compliance
 Description: MW-4 Lake Miona,
 MWC-24615

Report Frequency: Quarterly
 Program: Domestic

Office: Central District

Re-submitted DMR: ☐

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___ Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Quarterly				
Nitrogen, Nitrate, Total (as N)	00620		10	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		500	mg/L	Grab	Quarterly				
Chloride (as Cl)	00940		250	mg/L	Grab	Quarterly				
Coliform, Fecal	74055		4	#/100mL	Grab	Quarterly				
pH	00400		6.5-8.5	s.u.	In Situ	Quarterly				
Turbidity	00070		Report	NTU	Grab	Quarterly				

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Wildwood WWTF
 Permit Number: FLA013497-014-DW1
 County: Sumter

Monitoring Well ID: MWC-03
 Well Type: Compliance
 Description: MW-6 Lake Miona,
 MWC-24617

Report Frequency: Quarterly
 Program: Domestic

Office: Central District

Re-submitted DMR: ☐

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___ Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Quarterly				
Nitrogen, Nitrate, Total (as N)	00620		10	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		500	mg/L	Grab	Quarterly				
Chloride (as Cl)	00940		250	mg/L	Grab	Quarterly				
Coliform, Fecal	74055		4	#/100mL	Grab	Quarterly				
pH	00400		6.5-8.5	s.u.	In Situ	Quarterly				
Turbidity	00070		Report	NTU	Grab	Quarterly				

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Wildwood WWTF
 Permit Number: FLA013497-014-DW1
 County: Sumter

Monitoring Well ID: MWI-02
 Well Type: Intermediate
 Description: MW-3 Lake Miona,
 MWI-24614

Report Frequency: Quarterly
 Program: Domestic

Office: Central District

Re-submitted DMR: ☐

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___ Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Quarterly				
Nitrogen, Nitrate, Total (as N)	00620		Report	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		Report	mg/L	Grab	Quarterly				
Chloride (as Cl)	00940		Report	mg/L	Grab	Quarterly				
Coliform, Fecal	74055		Report	#/100mL	Grab	Quarterly				
pH	00400		Report	s.u.	In Situ	Quarterly				
Turbidity	00070		Report	NTU	Grab	Quarterly				

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Wildwood WWTF
 Permit Number: FLA013497-014-DW1
 County: Sumter

Monitoring Well ID: MWC-07
 Well Type: Compliance
 Description: MW-7 RIB, MWC-24624

Report Frequency: Quarterly
 Program: Domestic

Office: Central District

Re-submitted DMR: ☐

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___ Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Quarterly				
Nitrogen, Nitrate, Total (as N)	00620		10	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		500	mg/L	Grab	Quarterly				
Chloride (as Cl)	00940		250	mg/L	Grab	Quarterly				
Coliform, Fecal	74055		4	#/100mL	Grab	Quarterly				
pH	00400		6.5-8.5	s.u.	In Situ	Quarterly				
Turbidity	00070		Report	NTU	Grab	Quarterly				

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Wildwood WWTF
 Permit Number: FLA013497-014-DW1
 County: Sumter

Monitoring Well ID: MWC-09
 Well Type: Compliance
 Description: MW-9 RIB, MWC-24626

Report Frequency: Quarterly
 Program: Domestic

Office: Central District

Re-submitted DMR: ☐

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___ Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Quarterly				
Nitrogen, Nitrate, Total (as N)	00620		10	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		500	mg/L	Grab	Quarterly				
Chloride (as Cl)	00940		250	mg/L	Grab	Quarterly				
Coliform, Fecal	74055		4	#/100mL	Grab	Quarterly				
pH	00400		6.5-8.5	s.u.	In Situ	Quarterly				
Turbidity	00070		Report	NTU	Grab	Quarterly				

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Wildwood WWTF
 Permit Number: FLA013497-014-DW1
 County: Sumter

Monitoring Well ID: MWI-04
 Well Type: Intermediate
 Description: MW-6 RIB, MWI-24623

Report Frequency: Quarterly
 Program: Domestic

Office: Central District

Re-submitted DMR: ☐

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___ Yes ___ No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In Situ	Quarterly				
Nitrogen, Nitrate, Total (as N)	00620		Report	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		Report	mg/L	Grab	Quarterly				
Chloride (as Cl)	00940		Report	mg/L	Grab	Quarterly				
Coliform, Fecal	74055		Report	#/100mL	Grab	Quarterly				
pH	00400		Report	s.u.	In Situ	Quarterly				
Turbidity	00070		Report	NTU	Grab	Quarterly				

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

INSTRUCTIONS FOR COMPLETING THE WASTEWATER DISCHARGE MONITORING REPORT

Read these instructions before completing the DMR. Hard copies and/or electronic copies of the required parts of the DMR were provided with the permit. All required information shall be completed in full and typed or printed in ink. A signed, original DMR shall be mailed to the address printed on the DMR by the 28th of the month following the monitoring period. Facilities who submit their DMR(s) electronically through eDMR do not need to submit a hardcopy DMR. The DMR shall not be submitted before the end of the monitoring period.

The DMR consists of three parts--A, B, and D--all of which may or may not be applicable to every facility. Facilities may have one or more Part A's for reporting effluent or reclaimed water data. All domestic wastewater facilities will have a Part B for reporting daily sample results. Part D is used for reporting ground water monitoring well data.

When results are not available, the following codes should be used on parts A and D of the DMR and an explanation provided where appropriate. Note: Codes used on Part B for raw data are different.

CODE	DESCRIPTION/INSTRUCTIONS
ANC	Analysis not conducted.
DRY	Dry Well
FLD	Flood disaster.
IFS	Insufficient flow for sampling.
LS	Lost sample.
MNR	Monitoring not required this period.

CODE	DESCRIPTION/INSTRUCTIONS
NOD	No discharge from/to site.
OPS	Operations were shutdown so no sample could be taken.
OTH	Other. Please enter an explanation of why monitoring data were not available.
SEF	Sampling equipment failure.

When reporting analytical results that fall below a laboratory's reported method detection limits or practical quantification limits, the following instructions should be used, unless indicated otherwise in the permit or on the DMR:

- Results greater than or equal to the PQL shall be reported as the measured quantity.
- Results less than the PQL and greater than or equal to the MDL shall be reported as the laboratory's MDL value. These values shall be deemed equal to the MDL when necessary to calculate an average for that parameter and when determining compliance with permit limits.
- Results less than the MDL shall be reported by entering a less than sign ("<") followed by the laboratory's MDL value, e.g. < 0.001. A value of one-half the MDL or one-half the effluent limit, whichever is lower, shall be used for that sample when necessary to calculate an average for that parameter. Values less than the MDL are considered to demonstrate compliance with an effluent limitation.

PART A -DISCHARGE MONITORING REPORT (DMR)

Part A of the DMR is comprised of one or more sections, each having its own header information. Facility information is preprinted in the header as well as the monitoring group number, whether the limits and monitoring requirements are interim or final, and the required submittal frequency (e.g. monthly, annually, quarterly, etc.). Submit Part A based on the required reporting frequency in the header and the instructions shown in the permit. The following should be completed by the permittee or authorized representative:

Resubmitted DMR: Check this box if this DMR is being re-submitted because there was information missing from or information that needed correction on a previously submitted DMR. The information that is being revised should be clearly noted on the re-submitted DMR (e.g. highlight, circle, etc.)

No Discharge From Site: Check this box if no discharge occurs and, as a result, there are no data or codes to be entered for all of the parameters on the DMR for the entire monitoring group number; however, if the monitoring group includes other monitoring locations (e.g., influent sampling), the "NOD" code should be used to individually denote those parameters for which there was no discharge.

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

Sample Measurement: Before filling in sample measurements in the table, check to see that the data collected correspond to the limit indicated on the DMR (i.e. interim or final) and that the data correspond to the monitoring group number in the header. Enter the data or calculated results for each parameter on this row in the non-shaded area above the limit. Be sure the result being entered corresponds to the appropriate statistical base code (e.g. annual average, monthly average, single sample maximum, etc.) and units. Data qualifier codes are not to be reported on Part A.

No. Ex.: Enter the number of sample measurements during the monitoring period that exceeded the permit limit for each parameter in the non-shaded area. If none, enter zero.

Frequency of Analysis: The shaded areas in this column contain the minimum number of times the measurement is required to be made according to the permit. Enter the actual number of times the measurement was made in the space above the shaded area.

Sample Type: The shaded areas in this column contain the type of sample (e.g. grab, composite, continuous) required by the permit. Enter the actual sample type that was taken in the space above the shaded area.

Signature: This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.

Comment and Explanation of Any Violations: Use this area to explain any exceedances, any upset or by-pass events, or other items which require explanation. If more space is needed, reference all attachments in this area.

PART B - DAILY SAMPLE RESULTS

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

Daily Monitoring Results: Transfer all analytical data from your facility's laboratory or a contract laboratory's data sheets for all day(s) that samples were collected. Record the data in the units indicated. Table 1 in Chapter 62-160, F.A.C., contains a complete list of all the data qualifier codes that your laboratory may use when reporting analytical results. However, when transferring numerical results onto Part B of the DMR, only the following data qualifier codes should be used and an explanation provided where appropriate.

CODE	DESCRIPTION/INSTRUCTIONS
<	The compound was analyzed for but not detected.
A	Value reported is the mean (average) of two or more determinations.
J	Estimated value, value not accurate.
Q	Sample held beyond the actual holding time.
Y	Laboratory analysis was from an unpreserved or improperly preserved sample.

To calculate the monthly average, add each reported value to get a total. For flow, divide this total by the number of days in the month. For all other parameters, divide the total by the number of observations.

Plant Staffing: List the name, certificate number, and class of all state certified operators operating the facility during the monitoring period. Use additional sheets as necessary.

PART D - GROUND WATER MONITORING REPORT

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.

Date Sample Obtained: Enter the date the sample was taken. Also, check whether or not the well was purged before sampling.

Time Sample Obtained: Enter the time the sample was taken.

Sample Measurement: Record the results of the analysis. If the result was below the minimum detection limit, indicate that. Data qualifier codes are not to be reported on Part D.

Detection Limits: Record the detection limits of the analytical methods used.

Analysis Method: Indicate the analytical method used. Record the method number from Chapter 62-160 or Chapter 62-601, F.A.C., or from other sources.

Sampling Equipment Used: Indicate the procedure used to collect the sample (e.g. airlift, bucket/bailer, centrifugal pump, etc.)

Samples Filtered: Indicate whether the sample obtained was filtered by laboratory (L), filtered in field (F), or unfiltered (N).

Signature: This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.

Comments and Explanation: Use this space to make any comments on or explanations of results that are unexpected. If more space is needed, reference all attachments in this area.

SPECIAL INSTRUCTIONS FOR LIMITED WET WEATHER DISCHARGES

Flow (Limited Wet Weather Discharge): Enter the measured average flow rate during the period of discharge or divide gallons discharged by duration of discharge (converted into days). Record in million gallons per day (MGD).

Flow (Upstream): Enter the average flow rate in the receiving stream upstream from the point of discharge for the period of discharge. The average flow rate can be calculated based on two measurements; one made at the start and one made at the end of the discharge period. Measurements are to be made at the upstream gauging station described in the permit.

Actual Stream Dilution Ratio: To calculate the Actual Stream Dilution Ratio, divide the average upstream flow rate by the average discharge flow rate. Enter the Actual Stream Dilution Ratio accurate to the nearest 0.1.

No. of Days the SDF > Stream Dilution Ratio: For each day of discharge, compare the minimum Stream Dilution Factor (SDF) from the permit to the calculated Stream Dilution Ratio. On Part B of the DMR, enter an asterisk (*) if the SDF is greater than the Stream Dilution Ratio on any day of discharge. On Part A of the DMR, add up the days with an "*" and record the total number of days the Stream Dilution Factor was greater than the Stream Dilution Ratio.

CBOD₅: Enter the average CBOD₅ of the reclaimed water discharged during the period shown in duration of discharge.

TKN: Enter the average TKN of the reclaimed water discharged during the period shown in duration of discharge.

Actual Rainfall: Enter the actual rainfall for each day on Part B. Enter the actual cumulative rainfall to date for this calendar year and the actual total monthly rainfall on Part A. The cumulative rainfall to date for this calendar year is the total amount of rain, in inches, that has been recorded since January 1 of the current year through the month for which this DMR contains data.

Rainfall During Average Rainfall Year: On Part A, enter the total monthly rainfall during the average rainfall year and the cumulative rainfall for the average rainfall year. The cumulative rainfall for the average rainfall year is the amount of rain, in inches, which fell during the average rainfall year from January through the month for which this DMR contains data.

No. of Days LWWD Activated During Calendar Year: Enter the cumulative number of days that the limited wet weather discharge was activated since January 1 of the current year.

Reason for Discharge: Attach to the DMR a brief explanation of the factors contributing to the need to activate the limited wet weather discharge.

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: **CPH Scope of Services for the WWTP Expansion in the Amount of \$2,259,354**

REQUESTED ACTION: Authorization for City Manager to Execute Contract

CONTRACT: Vendor/Entity: CPH, Inc.

Effective Date: 9/26/2022 Termination Date:

Managing Division/Department: Utilities

BUDGET IMPACT: Included within the FY 23 budget

HISTORY/FACTS/ISSUES:

In December of last year the City, pursuant to Florida Statute 287.055 commonly known as the CCNA, issued an RFQ to receive submittals for professional engineering services for the wastewater treatment facility expansion project. The City Commission accepted the Selection Committee's ranking at the February 14, 2022 Commission meeting and authorized the City Manager to enter into contract negotiations with CPH, Inc. (CPH), the highest ranking firm.

At the March 14, 2022 City Commission meeting, the Commission authorized CPH to complete a Conceptual Design Report outlining the recommended steps to facilitate a phased expansion of the wastewater treatment plant to achieve a permitted capacity of 6.0 million gallons per day. CPH completed the Conceptual Design Report, and staff has recommended the City Commission adopt the Conceptual Design Report at the October 10, 2022 City Commission meeting.

The next phase of the project includes formal engineering design and permitting activities. The attached contract has been agreed upon by the City Manager and CPH and includes all design and permitting services required for the 6.0 million gallons per day expansion. Staff recommends the City Commission authorize the City Manager to execute the contract in the amount of \$2,259,354. Funds are allocated in the FY 23 budget.

CITY OF WILDWOOD, FL - WILDWOOD WRF

CPH, LLC SCOPE OF SERVICES

DESIGN OF EXISTING WRF IMPROVEMENTS AND A NEW 6.0 MGD BNR WRF

A. BACKGROUND

The City of Wildwood owns and operates a secondary treatment plus filtration facility located at 1290 Industrial Drive, Wildwood, FL. The Water Reclamation Facility (WRF) is permitted through the Florida Department of Environmental Protection (FDEP) and consists of the following infrastructure: (1) wastewater flow screening (single unit); (2) two flow equalization basins; (3) two independent oxidation ditch treatment trains (Kruger and Lakeside) operated in a series configuration; (4) two independent secondary clarification systems; (5) tertiary filtration system; (6) chlorine contact chambers; (7) two lined holding ponds; (8) aerobic digestion system; (9) biosolids dewatering system (belt press); and (10) electrical, controls, instrumentation and SCADA systems. The WRF is operated to provide secondary treatment, tertiary filtration and high-level disinfection in accordance with FDEP requirements.

The Consultant (CPH, LLC) has recently completed the following professional engineering services associated with the City of Wildwood WRF:

- 3-D topographic survey of the existing treatment facility and adjacent site (to the west).
- Raw wastewater (influent) and reclaimed water (effluent) database development and evaluation of the last five (5) years of flow and influent/effluent water quality characteristics.
- Characterization of the sidestream (filtrate) from the belt filter press and its potential impact on the operation of the biological treatment system.
- BIOWIN modeling of the existing biological treatment system (Kruger and Lakeside oxidation ditches operated in a series configuration) to determine the effective treatment capacity of the system and whether it can meet FDEP Operations Permit limitations.
- Conceptual layout and master planning of improvements required to keep the existing Wildwood WRF operating and producing an effluent that meets the limitations set forth in the existing FDEP Operations Permit.
- Conceptual layout and master planning of the new Wildwood WRF with an ultimate treatment capacity of 6.0 MGD AADF, expandable in phases, to meet future wastewater demands within the service area and anticipated effluent quality mandates.

The existing Wildwood WRF is in need of rehabilitation due to the following: (1) aging and obsolete facility infrastructure; (2) hydraulic issues in the existing facility piping systems; (3) operational overflow issues when raw wastewater flows exceed 2.30 MGD AADF (permitted at 3.55 MGD AADF); (4) corrosion issues; (5) inadequate aeration of the EQ basins and biological treatment systems; (6) inability to split flows properly between the two sets of oxidation ditches and also between the four secondary clarifiers; (7) the need to pump the effluent from the secondary clarifiers to the chlorine contact chambers for disinfection; (8) numerous electrical issues throughout the facility; (9) the inability to adequately drain the existing lined ponds; (10) the need for reclaimed water and reject water ground storage tanks; and (11) the facility does not meet FDEP and EPA Class I Reliability Criteria.

The design, permitting, bidding, construction, and start-up/optimization of a new Wildwood WRF (6.0 MGD ultimate capacity) will take approximately three (3) years and, thus, time is of the essence in getting the design of the new facility completed. Therefore, in this interim period while the new treatment facility is being designed and constructed, improvements to the existing City of Wildwood WRF are required to ensure that the raw wastewater from the collection system is treated to a quality that meets the FDEP Operations Permit limitations.

This Agreement is to provide professional engineering services for the design of the required short-term/interim improvements to the existing Wildwood WRF and design of the new 6.0 MGD AADF Wildwood WRF on the City owned property immediately west of the existing facility (long-term solution/improvements).

B. SCOPE OF WORK

The Consultant (CPH, LLC) shall provide professional engineering design, permitting, and preconstruction services, associated with the interim/short-term improvements to the existing treatment facility and the new 6.0 MGD AADF WRF (long-term improvements). The new treatment facility shall be capable of producing an AWT effluent and meet all Class I Reliability criteria. The proposed infrastructure, to be designed by the Consultant, for the interim/short-term improvements to the existing Wildwood WRF shall include the following:

Expansion of the Flow Equalization (EQ) Basin Pump Station.
Site piping, valving and flow meter modifications to convey the flow from the existing EQ Basins to each of the four (4) oxidation ditches, individually.
Conversion of the four (4) oxidation ditches from series operation to parallel operation.
Aeration system modifications (diffused aeration and blowers) to increase operational efficiency.
Site piping modifications to get the Kruger oxidation ditch effluent flows to the existing fifty (50) foot diameter secondary clarifiers.
Site piping modifications to get the Lakeside oxidation ditch effluent flows to the existing forty (40) foot diameter secondary clarifiers.
Conveyance of oxidation ditch effluent flows to the new 6.0 MGD reaeration basin/flow splitter box (after completion of construction of the proposed long-term improvements (Phase I of the new 6.0 MGD WRF)).
Electrical, controls, instrumentation and SCADA system improvements.
Site work, yard piping system, facility internal roadway system improvements, new buildings, signage, and miscellaneous appurtenances and ancillaries.

The proposed infrastructure, to be designed by the Consultant, for the new 6.0 MGD AADF (long-term) shall include the following:

Mechanical Screening System	Transfer Pump Station
Master Lift Station	Sludge Thickening System
EQ Basin and Pump Station (internal grit removal)	Aerobic Facultative Digestion System
5-Stage BIODENIPHO BNR Treatment System	Biosolids Dewatering Screw Press System
Reaeration Basin/Secondary Clarifier Flow Splitter Box	Chemical Storage and Feed Systems
Secondary Clarification System	Various Buildings
RAS/WAS Pump System	Electrical, Controls, Instrumentation and SCADA Systems
Tertiary Filtration System	Site work, yard piping, stormwater, roads/sidewalks, etc.
High-Level Disinfection System	

The Wildwood WRF is currently operating under FDEP Operations Permit No. FLA013497 which expires on January 22, 2027. As part of the design of the proposed facility improvements, the Consultant shall renew the FDEP Operations Permit for the facility with the new facility improvements implemented. The FDEP permitting fee shall be paid to the Department by the City.

Professional Construction Engineering and Inspection (CEI) services and BNR System Start-Up, Demonstration and Compliance Testing services shall be provided by the Consultant under a separate task assignment, under this contract, upon completion of the facility design improvements or CM/CMAR Contractor selection by the City.

The professional engineering services to be provided under this Scope of Services, by the Consultant, for the design, permitting and preconstruction services associated with the Wildwood WRF improvements and expansion project will be subdivided into various tasks as identified below.

C. Task 1 - Professional Subconsultant Services Associated with the Project Work

1. Geotechnical Subsurface Investigation. Coordinate with the geotechnical engineering firm employed by the Consultant (Tierra, Inc.) for obtaining soil borings and recommendations at the project site for the proposed improvements for foundation stability and compaction requirements. In addition, general classifications of soils and recommendations regarding drainage and stormwater detention pond percolation rates and recovery periods will be provided. A signed and sealed engineering report shall be generated from the work.
2. Electrical, Controls, Instrumentation and SCADA System Improvements. Coordinate with the electrical engineering firm employed by the Consultant (Bailey Engineering Consultants, Inc.) to provide the electrical/controls/instrumentation/SCADA, lighting systems and security design for the proposed facility improvements at the Wildwood WRF to meet Class I Reliability Standards.

3. Environmental Evaluation. Coordinate with the environmental firm employed by the Consultant (CPH, LLC) to assess the flora and fauna in the southwest and western areas of the treatment facility where a portion of the new 6.0 MGD treatment facility is proposed. This element includes environmental monitoring, reporting, and permitting with the regulatory agencies but does not include any relocation services, if required.

D. Task No. 2 - Workshop No. 1: Kick-off Meeting

1. Conduct a kick-off meeting within two (2) weeks of the Issuance of the Project Notice to Proceed (NTP) with Wildwood Engineering and Operations Staff, to discuss the following:
 - a. Project goals and objectives.
 - b. Existing WRF facility operation and any operational issues.
 - c. Project phasing/timing for design and construction of the proposed improvements.
 - d. Project delivery methods.
 - e. Unit operations and processes and the Biological Nutrient Removal (BNR) Process to be employed at the facility.
 - f. Proposed infrastructure improvements, project budget and schedule.
 - g. Advantages, disadvantages and system issues associated with the various types/manufacturers of the following proposed infrastructure, at a minimum:

Screening Systems	RAS Bleed System	Master Lift Station Configurations
EQ Basin Configurations	EQ Mixing Systems	EQ Pumping Systems
BNR Process	Clarification System	RAS/WAS Systems
Disinfection Systems	Tertiary Filtration Systems	Dewatering System

- h. Site layout constraints and recommendations.
- i. Criterion to be used for evaluation of the proposed infrastructure. This information will be used in the generation of the Preliminary Design Report (PDR).

E. Task No. 3 - Final Conceptual Improvements/Basis of Design

1. Proposed BNR Improvements
 - a. The Consultant shall conduct a review of existing regulatory conditions and standards related to BNR, AWT, reclaimed water, biosolids, and Class I Reliability requirements at the Wildwood WRF and monitoring and reporting regulated by the State of Florida and US EPA, including, but not limited to, the following:

Regulatory Rules	Title
62-4, F.A.C.	Permits
62-600, F.A.C.	Domestic Wastewater Facilities
62-610, F.A.C.	Reuse of Reclaimed Water and Land Application
62-620, F.A.C.	Wastewater Facility Permitting
62-640, F.A.C.	Biosolids (FDEP)
62-699, F.A.C.	Treatment Plant Classification and Staffing
40 CFR Part 503	Biosolids (EPA)
	Ten State Standards for Wastewater Facilities
	EPA Class I Reliability Criteria

- b. Generation of a final conceptual layout and master planning for the proposed interim/short-term improvements at the existing facility and long-term improvements related to the new 6.0 MGD AWT facility and associated infrastructure, based on the results of the geotechnical subsurface and environmental investigations.
- c. Task Deliverable: An electronic version (PDF) of the final conceptual layout of the proposed interim/short-term and long-term improvements, identified herein, for review and comment by City Staff.
 - 1) All City comments will be addressed and incorporated into the preliminary engineering design of the proposed interim/short-term improvements (existing facility) and the new 6.0 MGD WRF (long-term improvements).

F. Task No. 4 - Workshop No. 2: Final Conceptual Improvements Plan Review

1. Conduct a meeting with the City Engineering and Operations Staff to discuss the following:
 - a. The current facility unit operations/processes, associated infrastructure and equipment/infrastructure operations.
 - b. Review the final conceptual infrastructure improvements and facility master plan.
 - c. Review the proposed demolition plan.
 - d. Review the proposed treatment system project phasing/timing.
 - e. Review of the O&M requirements for the proposed facility improvements.

G. Task No. 5 - Preliminary Engineering Design of Proposed Improvements (30%)

1. Preliminary engineering design of the proposed interim/short-term and long-term improvements at the Wildwood WRF consisting of the infrastructure identified in Article B of this Scope of Services.

2. Prepare preliminary design calculations for the proposed interim/short-term (existing facility) and long-term improvements (new 6.0 MGD facility) at the Wildwood WRF.
3. Perform hydraulic modeling of the proposed improvements to ensure that:
 - a. Systems will function under hydraulic grade line, where required.
 - b. Pressurized systems are optimized and properly sized for the current and future raw wastewater flows anticipated.
4. Set preliminary elevations for all required facility structures.
5. BIOWIN modeling of the BNR System based on wastewater influent characteristics.
6. Influent and effluent piping system modifications.
7. Development of an Implementation Schedule and Opinion of Probable Construction Cost (OPCC) for the proposed infrastructure improvements at the Wildwood WRF.
8. Preliminary Engineering Design (30%) Deliverables
 - a. One (1) paper set (22" x 34") and an electronic version (PDF) of the preliminary engineering design drawings (30%) for the proposed facility improvements, identified in Article B, for review and comment by City Staff.
 - b. All City comments will be addressed and incorporated into the final design of the proposed improvements (interim/short-term and long-term) at the Wildwood WRF.
 - c. Work with the City selected CM/CMAR Contractor with respect to the overall facility design and development of an Opinion of Probable Construction Cost (OPCC) and Project Schedule.

H. Task No. 6 - Workshop No. 3: Preliminary Engineering Design (30%) Review

1. Conduct a meeting with Wildwood Engineering and Operations Staff to discuss the preliminary engineering design (30%) of the proposed facility improvements and, at a minimum, the following project elements:
 - 1) Civil engineering elements.
 - 2) Environmental engineering elements.
 - 3) Structural and mechanical components.
 - 4) Electrical, controls, instrumentation and SCADA system modifications.
 - 5) Site work, yard piping, roadway and miscellaneous improvements.
 - 6) Operations and maintenance considerations.

- b. The Consultant shall modify and finalize the preliminary engineering design (30%) of the proposed facility improvements at the Wildwood WRF based on input and review comments from City Engineering and Operations Staff.
2. Meet with FDEP to discuss the proposed Wildwood WRF improvements, implementation schedule and permitting requirements.

I. Task No. 7 - Preliminary Design Report (PDR): Wildwood WRF Improvements

1. The Consultant shall generate a Preliminary Design Report (PDR) supporting the proposed interim/short-term and long-term improvements, identified in Article B, at the Wildwood WRF in accordance with the requirements of Department Rules 62-600, 62-610, 62-620 and 62-640, F.A.C.
2. The Preliminary Design Report (PDR) shall include, at a minimum, the following items in accordance with the requirements of Chapter 62-620, F.A.C.:
 - a. Detailed project description and implementation schedule to construct the proposed interim/short-term and long-term improvements at the Wildwood WRF.
 - b. The name, location, type and useful capacity of the proposed infrastructure.
 - c. Wastewater Management System Service Area Map.
 - d. Existing Site Plan and process flow diagram showing unit operations and processes.
 - e. Site Plan and process flow diagram of the facility, after completion of the proposed interim/short-term and long-term improvements, showing unit operations and processes for all major components.
 - f. A description of materials that will be used and documentation that the materials and components will comply with FDEP requirements.
 - g. Technical information and design criteria for the proposed interim/short-term and long-term improvements, including, but not limited to, the following:
 - 1) Flow meter and sampling provisions.
 - 2) Detention times of the proposed improvements.
 - 3) Documentation supporting the proposed infrastructure.
 - 4) Stormwater management system improvements, as necessary.
 - 5) Internal roadway, sidewalk, driveway, site piping, new facility buildings, and infrastructure modifications.
 - 6) Other design information and details sufficient to demonstrate that the treatment facility improvements will comply with all applicable regulatory requirements.

- h. An assessment of the environmental effects of the project including odor control, noise control, public accessibility, proximity to residential areas, flood protection, lightning protection and aerosol drift.
- i. Discussion of the procedures to be utilized for keeping the treatment facility in operation (MOPO), or for minimizing interruptions, in the operation of the existing components, during construction of the proposed facility improvements.
- j. Preliminary Design Report (PDR) Deliverables
 - 1) One (1) electronic version (PDF) of the draft Preliminary Design Report (PDR) for the proposed interim/short-term and long-term improvements at the Wildwood WRF for the City Staff's review and comment.
 - 2) All City Staff comments will be addressed and incorporated into the final PDR document that will be used for FDEP permitting of the facility improvements.
 - 3) Provide the City with an electronic (PDF) version of the finalized PDR to be used for FDEP permitting of the proposed interim/short-term and long-term improvements at the Wildwood WRF.

J. Task No. 8 - Final Engineering Design of the Proposed Facility Improvements

- 1. The Consultant shall provide final engineering design services for the proposed facility improvements, identified in Article B, at the Wildwood WRF consisting of the following subtasks and design elements identified below.
- 2. Task 8A - Final Engineering Design (to 60% Completion)
 - a. Prepare a final site layout of the proposed facility improvements, identified in Article B, at the Wildwood WRF in accordance with all FDEP and EPA regulations.
 - b. Prepare final design calculations for the proposed improvements, identified in Article B, at the Wildwood WRF and set final grades for all required facility structures.
 - c. Meet with City Engineering and Operations Staff and finalize the basis of design for the proposed facility improvements based on operational experience, energy-efficiency, manpower requirements and continuity of treatment systems.
 - d. Final design of the proposed facility improvements, identified in Article B, at the Wildwood WRF (civil, environmental, structural, mechanical and electrical/controls/instrumentation/SCADA system improvements; landscaping, sodding, irrigation, sidewalks, driveways, roadway modifications, etc.).
 - e. Prepare stormwater calculations, design any required stormwater management system improvements, and prepare an FDEP Environmental Resources (stormwater management) Permit submittal package for the proposed improvements.
 - f. Task Deliverable: One paper set (22" x 34") and an electronic version (PDF) of the final engineering design drawings (60%) and technical specifications for the proposed facility improvements, identified in Article B, for review and comment by City Staff.

- 1) All City comments will be addressed and incorporated into the final design (90%) of the proposed facility interim/short-term and long-term improvements at the Wildwood WRF.
 - 2) Work with the City's selected CM/CMAR Contractor with respect to the overall facility design and development of an Opinion of Probable Construction Cost (OPCC) and Project Schedule.
3. Task 8B - Workshop No. 4: Final Engineering Design (60%) Review
- a. Conduct a meeting with the City Operations and Engineering Staff to discuss the final engineering design (60%) of the proposed facility improvements and, at a minimum, the following project elements:
 - 1) Civil engineering elements.
 - 2) Environmental engineering elements.
 - 3) Structural and mechanical components.
 - 4) Electrical, controls, instrumentation and SCADA system modifications.
 - 5) Site work, yard piping, roadway, sidewalk and miscellaneous improvements.
 - 6) Operations and maintenance considerations.
 - b. The Consultant shall modify and finalize the final engineering design of the proposed facility interim/short-term and long-term improvements (60%) at the Wildwood WRF based on input and review comments from City Staff.
4. Task 8C - Final Engineering Design (to 90% Completion)
- a. Finalize design calculations for the proposed improvements, identified in Article B, at the Wildwood WRF and set final grades for all required facility structures.
 - b. Final design of the proposed interim/short-term and long-term improvements, identified in Article B, at the Wildwood WRF (civil, environmental, mechanical, structural, treatment system hydraulics, sidewalks, roadways, driveways, etc.).
 - c. Task Deliverable: One paper set (22" x 34") and an electronic version (PDF) of the final engineering design drawings (90%) and technical specifications for the proposed facility improvements, identified in Article B, for review and comment by City Staff.
 - 1) All City comments will be addressed and incorporated into the final design (100%) of the proposed interim/short-term and long-term improvements at the Wildwood WRF.
 - 2) Work with the City's selected CM/CMAR Contractor with respect to the overall facility design and development of an Opinion of Probable Construction Cost (OPCC) and Project Schedule.

5. Task 8D - Workshop No. 5: Final Engineering Design (90%) Review

- a. Conduct a meeting with the City Operations and Engineering Staff to discuss the final engineering design of the proposed facility improvements (90%) and, at a minimum, the following project elements:
 - 1) Civil engineering elements.
 - 2) Environmental engineering elements.
 - 3) Structural and mechanical components.
 - 4) Electrical, controls, instrumentation and SCADA system modifications.
 - 5) Site work, yard piping, roadway and miscellaneous improvements.
 - 6) Operations and maintenance considerations.
- b. The Consultant shall modify and finalize the final engineering design (100%) of the proposed interim/short-term and long-term improvements at the Wildwood WRF based on input and review comments from City Staff.

6. Task 8E - Final Engineering Design (to 100% Completion)

- a. Completion of the final design of the proposed interim/short-term and long-term improvements, identified in Article B, at the Wildwood WRF.
- b. Task Deliverables
 - 1) 100% complete Contract Drawings and Technical Specifications (PDF) for the proposed interim/short-term and long-term improvements, identified in Article B, at the Wildwood WRF for FDEP permitting and construction.
 - 2) Work with the City's selected CM/CMAR Contractor with respect to the overall facility design and development of an Opinion of Probable Construction Cost (OPCC) and Project Schedule.

K. Task No. 9 - FDEP Permitting of the Proposed Improvements

1. Conduct a pre-application permitting meeting with FDEP to go through the technical design of the proposed facility improvements; thereby stream-lining the permitting process. The Consultant shall generate all documentation required for permitting of the proposed facility improvements, to include, at a minimum, the following:
 - a. FDEP Wastewater Permit Application Form 1: General Information: Preparation of FDEP Permit Application Form 1, for the proposed facility improvements at the Wildwood WRF and all accompanying documentation for the City's review, comment, and signature.

- b. FDEP Wastewater Permit Application Form 2A: Domestic WWTF's: Preparation of FDEP Permit Application Form 2A, for the proposed facility improvements at the Wildwood WRF and all accompanying documentation for the City's review, comment, and signature.
 - c. Supporting FDEP Documents: Preparation of a revised facility site plan for the proposed improvements at the Wildwood WRF, process flow diagram, process description, and other supporting documentation in accordance with the permit requirements and Chapters 62-620 and 62-640, F.A.C.
 - d. One (1) PDF version of signed and sealed Contract Drawings for the proposed improvements to be implemented at the Wildwood WRF.
 - e. One (1) PDF version of signed and sealed Technical Specifications for the proposed improvements to be implemented at the Wildwood WRF.
 - f. Environmental Resource Permit (ERP) Forms
 - 1) Preparation of all pertinent FDEP Environmental Resource Permit Application forms associated with permitting of the proposed facility improvements to be implemented for submittal to the FDEP.
 - 2) Preparation of all accompanying documentation for submittal to the regulatory agency.
 - g. *All FDEP and regulatory agency permitting fees shall be paid by the City.*
2. The Consultant shall provide one (1) electronic version (PDF) of the FDEP permit application package to City Staff for review and comment and shall make any changes/modifications to the permitting document, as necessary. The Consultant shall submit the finalized Permit Application Package to the FDEP on behalf of the City.

L. Task No. 10 - Wastewater Facilities Plan, FDEP SRF Construction Funding, and Documentation

1. To access low interest rate funding from the State of Florida SRF Program for the proposed interim/short-term and long-term improvements at the Wildwood WRF, a Wastewater Facilities Plan will be generated to obtain an SRF Construction Loan, to incorporate all of the proposed improvements at the Wildwood WRF, in accordance with all FDEP requirements. The document will include, at a minimum, the following sections:

■ Planning Document	■ Public Participation Process
■ Executive Summary	■ Financial Feasibility
■ Project Cost	■ Schedule
■ Environmental Effects	■ Adopting Resolution
■ Selected Alternative(s)	

2. Provide City Staff with an electronic version (PDF) of the Wastewater Facilities Plan for review and comment. All comments will be addressed and incorporated into the final Wastewater Facilities Plan document to be submitted to FDEP-Tallahassee.
3. Submittal of the finalized Wastewater Facilities Plan and all supporting documentation to FDEP-Tallahassee in association with project construction funding through the SRF Program.
4. Addressing of all Requests for Information (RFI's) from the Department.
5. SRF Request for Inclusion (RFI)
 - a. An SRF Request for Inclusion (RFI) document shall be developed for the construction loan associated with the Wildwood WRF Improvements project, in accordance with FDEP SRF requirements (62-503, F.A.C.).
 - b. The Request for Inclusion submittal(s) shall contain all project documentation required to obtain the low-interest SRF loan, including, but not limited to, the following:
 - 1) Project information (description, location, project scope and benefit, maps, service area, project area and permit number(s)).
 - 2) Estimated project costs (construction, demolition, legal, administrative, technical services during construction, contingency, etc.).
 - 3) Development of Priority List Scoring Information and Documentation.
 - 4) Development of Protection of Special Water Bodies Information and Documentation, if necessary, based on the improvements to be implemented.
 - 5) Cost/Benefit Analysis, as necessary.
 - 6) Project Schedule and associated documentation (documents, permits, etc.).
 - 7) Loan Application and Loan Execution Schedule.
 - c. Provide City Staff with an electronic version (PDF) of the SRF Request for Inclusion (RFI) for review and comment. All comments will be addressed and incorporated into the final Request for Inclusion (RFI) document to be submitted.
 - d. Submittal of the finalized SRF Request for Inclusion (RFI) and all supporting documentation to FDEP-Tallahassee in association with project construction funding through the FDEP SRF Program.
6. Site Certification
 - a. Provide certification to FDEP-Tallahassee that the City of Wildwood has acquired, or owns, all real property or real property rights that are or will be required for the construction, operation and maintenance of the facility improvements (interim/short-term and long-term) to be implemented at the Wildwood WRF.

- b. Provide the City with an electronic copy (PDF) of the Site Certification document for review and comment. All comments will be addressed and incorporated into the final Site Certification document.
 - c. Submittal of the finalized Site Certification document to FDEP-Tallahassee in association with project construction funding through the FDEP SRF Program.
7. Generate an electronic submittal package (PDF), in accordance with FDEP regulations and checklists, to ensure that the Project Contract Drawings and Technical Specifications meet all FDEP and SRF requirements. The City will be provided with an electronic copy (PDF) of the FDEP Submittal package for their records.
8. Ensure that all FDEP Supplementary Conditions for equipment/material contracts and construction contracts, as well as American Iron and Steel (AIS), Asset Management and Davis-Bacon Act requirements, have been properly integrated into the Technical Specifications.

M. Task No. 11 - Facility Safety Manual

1. Preparation of a Facility Safety Manual containing all of the pertinent safety and first aid procedures typically required by OSHA and EPA. This document will also be used to meet the O&M Manual requirements of the Florida Department of Environmental Protection (62-600 and 62-610, F.A.C.).
 - a. Generation of the Wildwood WRF Facility Safety Manual (FSM) shall consist of the following elements:
 - 1) Review of the current City safety documents.
 - 2) Review of State, FDEP, EPA and OSHA safety standards for incorporation into the Facility Safety Manual.
 - 3) Generation of a Facility Safety Manual for the Wildwood WRF
 - a) In accordance with FDEP requirements and sound engineering practice and principles, the Consultant shall prepare a Facility Safety Manual for the Wildwood WRF based on OSHA standards.
 - b) The Facility Safety Manual shall potentially include the following sections:

Preliminary "Draft" of the Wildwood WRF Facility Safety Manual	
Section No.	Section Title
1	Safety Management, Guidelines and Responsibilities
2	Occupational Health
3	First Aid Principles
4	First Aid

Preliminary “Draft” of the Wildwood WRF Facility Safety Manual	
Section No.	Section Title
5	Stress Management
6	Fundamentals of Accident Prevention
7	Safety and Loss Control
8	General Safety Rules
9	Injury and Illness Prevention Program
10	Accident and Workplace Injury Procedures and Reporting
11	Emergency Preparedness and Planning
12	Controlled Substances and Alcohol Policy
13	Employee Conduct and Workplace Violence
14	Contractor Safety Requirements
15	Motor Vehicle and Driver Safety
16	Industrial Hygiene
17	Hazards Communication Program (HAZCOM)
18	Bloodborne Pathogens Exposure Control
19	Housekeeping
20	Safety Systems
21	Building and Office Safety
22	Laboratory Safety
23	Ergonomics Guidelines
24	Proper Lifting Procedures
25	Fall Protection and Prevention
26	Fire Protection, Safety and Prevention
27	Fire System Impairment
28	Fire Extinguishers
29	Eye Wash and Emergency Shower Systems
30	Personal Protective Equipment
31	Respiratory Protection
32	Portable Hand Tools
33	Air Powered and Hydraulically Operated Tools
34	Gasoline Powered Tools
35	Electrically Powered Tools and Machines
36	Climatic Exposure
37	Guarding Work Areas
38	Chemical Inventory, Safety and MSDS

Preliminary "Draft" of the Wildwood WRF Facility Safety Manual	
Section No.	Section Title
39	Flammable/Combustible Liquids
40	Adhesives, Solvents, Pesticides and Other Chemicals
41	Material Handling and Storage
42	Confined Space Entry
43	Ladders
44	Scaffolding
45	Woodworking Safety
46	Steel Erection
47	Cranes, Hoists and Rigging
48	Excavation, Trenching and Shoring
49	Underground Construction
50	Demolition
51	Forklifts
52	Aerial Personnel Lifts
53	Powered Industrial Lift Trucks
54	Heavy Equipment
55	Machine Guarding
56	Electrical Safety
57	Lockout/Tagout (LOTO)
58	Gas Welding, Cutting and Compressed Gas Safety
59	Hot Work Permit
60	Hearing Protection and Conservation

- 4) A synopsis of the Facility Safety Manual will be generated for inclusion into the facility Operation and Maintenance Manual to meet all FDEP requirements.
- 5) Provide the City with one (1) paper copy and an electronic version (PDF) of the Facility Safety Manual (FSM) for review and comment.
 - a) All comments will be addressed and incorporated into the final FSM document that will be used for FDEP permitting.
- 6) Final Facility Safety Manual (FSM) Deliverables
 - a) Two (2) bound paper copies of the Facility Safety Manual for the Wildwood WRF.
 - b) One (1) electronic version (PDF) of the Facility Safety Manual for the Wildwood WRF.

- 7) The following documentation and information, in support of generating the Wildwood WRF - Facility Safety Manual, shall be provided by the City to the Consultant within two (2) weeks of the project Notice to Proceed (NTP):

Item No.	City Provided Project Information for the Facility Safety Manual*
1	An electronic copy of the City Safety Plan or WRF Safety Plan.
2	Any written safety procedures for the Wildwood WRF and City of Wildwood employees.
3	Electronic versions of all forms and procedures used by City staff.
4	Telephone Directory (Supervisors, Staff, Wildwood WRF, Fire, Poison Control, Hospital, Emergency Management, City Emergency, Health Department, Chemical Suppliers, Electricians, Heavy Equipment Operators, etc.).
5	A copy of <i>The Chlorine Institute's Sodium Hypochlorite Manual</i> (Pamphlet 96) for inclusion.
6	Written Standard Operating Procedures (SOPs) implemented at the Wildwood WRF.
7	List of all safety equipment (fire extinguishers by type, personal protective equipment, respirators, etc.) at the Wildwood WRF.
8	List of all tools used at the Wildwood WRF.
9	List of all safety and checkout forms used at the Wildwood WRF and by the City of Wildwood.
10	Accident and workplace injury procedures and reporting.
11	Written safety management, guidelines and responsibilities.
12	City controlled substances and alcohol policy.
13	City employee conduct and workplace violence policy.
14	City safety training program.
15	Office safety procedures.
16	Written fuel spill clean-up procedures.
17	Written confined space entry, welding/hot work, LOTO, and excavation/trenching procedures.
18	Emergency Response Center location and all protocols/operations utilized during events.
19	Chemical inventory of all chemicals and copies of all MSDS/SDS sheets.
20	Written wastewater spill response, cleanup and reporting procedures.
21	Written power, SCADA, equipment, natural hazard, or evacuation responses/procedures.
	Any other City items related to the FSM Sections identified in Article M(3)(b) herein.

* *Electronic versions of documents are preferable*

N. Task No. 12 - Wildwood WRF Operations Permit Renewal

1. The Wildwood WRF is currently operating under FDEP Operations Permit No. FLA013497 which expires on January 22, 2027. In accordance with the above referenced FDEP Operations Permit conditions and Chapters 62-4, 62-600 and 62-620, F.A.C. and the significant treatment system modifications to be made at the facility (changing the facility Class and Category), the City must submit an Operations Permit Renewal Package and all associated permitting reports, information and documentation to the Florida Department of Environmental Protection (FDEP).

2. The Consultant shall provide the following professional engineering services for the Wildwood WRF FDEP Operations Permit Renewal. The specific professional engineering services include the following tasks:
 - a. FDEP Wastewater Permit Application Form 1 - General Information
 - 1) Preparation of FDEP Wastewater Permit Application Form 1 and all accompanying information and documentation for the City's review, comment and signature.
 - b. FDEP Wastewater Permit Application Form 2A - Domestic WWTF's
 - 1) Preparation of the FDEP Wastewater Permit Application Form 2A and all accompanying information and documentation for the City's review, comment and signature.
 - c. Wildwood WRF - Various Maps and Graphics
 - 1) Prepare a site location map, facility topographic map, aerial view of the facility, wastewater management system service area map, reclaimed water service area map, and other pertinent information required in accordance with the permit renewal requirements and Chapter 62-620, F.A.C.
 - d. Wildwood WRF - Site Plan
 - 1) Preparation of a Facility Site Plan for the Wildwood WRF in accordance with FDEP Operations Permit renewal requirements and Chapter 62-620, F.A.C.
 - e. Wildwood WRF - Process Flow Diagram
 - 1) Preparation of a Process Flow Diagram for the Wildwood WRF in accordance with the FDEP Operations Permit renewal requirements and Chapter 62-620, F.A.C.
 - f. Biosolids Mangement System
 - 1) The Consultant shall compile all of the biosolids processing data, with assistance from the City, pertaining to the biosolids dewatering system operations, and the mass (wet and dry tons) of biosolids generated and disposed of through the City's third-party Contractor, in accordance with FDEP regulations, for submittal in support of the Operations Permit Renewal.
 - g. Reuse Feasibility Study
 - 1) The Water Management District (WMD) has designated the entire District as a Water Conservation Area in accordance with FS 373.069. This designation implements the requirements of FS 403.064, which provides for the beneficial use of reclaimed water. As a result, a Reuse Feasibility Study must be prepared in accordance with FDEP's *"Guidelines for Preparation of Reuse Feasibility Studies for Applicants Having Responsibility for Wastewater Management"*.
 - 2) The Consultant shall prepare an abbreviated report addressing the pertinent requirements within the FDEP guidelines.

h. Binding Agreements and Documentation of Controls on Individual Users of Reclaimed Water

- 1) The Consultant will collect and compile all of the City's Binding Agreements with various Reclaimed Water Users and documentation of controls of individual users.
- 2) The Consultant shall incorporate the documentation into a report for submission with the Operations Permit Renewal Package for the Wildwood WRF.

i. Operation and Maintenance Performance Report (OMPR)

- 1) The Consultant shall prepare an Operation and Maintenance Performance Report (OMPR) in accordance with the requirements of Chapter 62-600, F.A.C.
- 2) The generation of the OMPR requires an "*on-site*" evaluation of the Wildwood WRF unit operations, unit processes and infrastructure (physical condition, treatment efficiency, trends, and identification of problems, deficiencies and corrective actions required), in accordance with FDEP standards and requirements (62-600, 62-610, 62-620 and 62-640).
- 3) The Consultant shall assist the City in submitting flow meter and instrumentation annual certifications and historical operations, records, and groundwater monitoring data and the Operation and Maintenance Performance Report (OMPR).

j. Annual Reclaimed Water Analysis Report

- 1) The Consultant shall assist the City in the preparation and submittal of an Annual Reclaimed Water Analysis Report (including the last five (5) Calendar Years of data) for the Wildwood WRF in accordance with Chapters 62-600 and 62-620, F.A.C. for submittal with the FDEP Operations Permit Renewal Package.

k. Additional Documentation

- 1) The Consultant shall provide or produce any additional documentation required to meet the requirements for the Operations Permit Renewal Package, as required by FDEP to include, but is not limited to, the following:
 - a) Current and Potential Reclaimed Water Sites.
 - b) Reclaimed Water System Documentation.
3. The Operations Permit Application Package for the Wildwood WRF shall be prepared in accordance with FDEP guidelines and rules and shall be submitted to City Staff for review and comment. After making any required modifications, the Consultant shall submit an electronic copy (PDF) of the Operations Permit Renewal Application Package, all reports and all required documentation to FDEP. An electronic copy of the FDEP Operations Permit Renewal Application Package submittal, in a PDF format, shall also be provided to the City for their records.

4. The following documentation/information, in support of generating the FDEP Operation Permit Renewal Application Package (all elements above), shall be provided by City Operations Staff during the Permit Renewal Process:

Item No.	WRF Provided Project Information for the FDEP Operations Permit Renewal
1	Wildwood WRF DMR's for the past five (5) calendar years.
2	Significant Industrial User (SIU) Information, relevant to Section 5 of FDEP Form 2A, for Users within the Wildwood WRF Wastewater Management System Service Area.
3	Current and future lists of reclaimed water irrigation sites within the Wildwood WRF Reclaimed Water Service Area including location, acreage, inches per week applied and capacity (MGD).
4	Current Wastewater Collection/Transmission and Treatment Facility System Map (colorized JPEG or PDF) including location of the WWTP's and WTP's. Discussion of any potential issues with the collection/transmission system that need to be addressed.
5	Current Wastewater System Service Area Map (PDF, JPEG).
6	Current Reclaimed Water System Service Area Map (PDF, JPEG).
7	All correspondence between the Wildwood WRF and FDEP over the last five-year period.
8	Primary/Secondary Analysis of the Reclaimed Water/Effluent from the Wildwood WRF (last five (5) calendar years) per the current FDEP Operations Permit.
9	Biosolids information for the last five (5) years that was submitted to FDEP for the Wildwood WRF Wastewater Management System. Information shall include the annual mass of biosolids produced (dry tons and wet tons), Class of Residuals produced (AA, A or B), biosolids treatment processes used, Vector Attraction Reduction option used to meet US EPA Part 503 regulations (Options 1 - 11), Pathogen Reduction method utilized, etc.
10	Biosolids disposal information including permitted disposal sites, locations, site owner(s), and any contracts with third-party sludge operators (Shelley's, etc.), etc.
11	Biosolids laboratory analyses conducted over the last five (5) calendar years. If not conducted by the City, then information shall be obtained from the third-party sludge operator being used by the City.
12	Assessment of the amount of Infiltration and Inflow (I/I) within the wastewater collection system and any steps underway or planned to minimize the Infiltration/Inflow (I/I).
13	All uses of reclaimed water within the Wildwood WRF Reclaimed Water Service Area (irrigation, toilet flushing, fire protection, aesthetic purposes, crops, etc.).
14	Current staffing plan at the Wildwood WRF including the names, Operating Class (A, B, etc.) and Certificate Number of each facility Operator.
15	A listing and detailed description of any violations that have occurred within the last 24 months at the Wildwood WRF (including all letters/correspondence to and from FDEP).
16	Binding Agreements and Documentation of Controls on Individual Users of Reclaimed Water.
17	An electronic copy of the current Facility Safety Plan.
18	An electronic copy of the City Emergency Management and Response (EMR) Plan
19	An electronic copy of the Industrial Waste Pretreatment Program (IWPP) and/or Resolution.
20	The last two (2) Wildwood WRF Local Limits Evaluations/Reports, in an electronic format, for use in the Operations Permit Renewal Process.
21	Any additional documentation required in support of the Operations Permit Renewal Package for the Wildwood WRF, as needed.

O. Task No. 13 - Preconstruction Services

1. The Consultant shall provide bidding and pre-construction services for the Wildwood WRF Improvements project based on an alternative project delivery method, previously discussed with City Staff, including, but not limited to, the following:

Alternative Delivery Method (CM/CMAR)
Assist the City in developing an RFQ solicitation for the Construction Management (CM) or Construction Management at Risk (CMAR) alternative delivery method for the proposed project improvements at the Wildwood WRF.
Coordinate with the City for preparation and issuance of addendums to all potential Contractors during the RFQ solicitation period.
Assist the City in reviewing RFQ submittals and contractor qualifications from the CM/CMAR solicitation and make a recommendation to the City for award of the CM/CMAR Contract.
Assist the City in awarding the CM/CMAR Contract, issuing the Notice of Award, Notice to Proceed and the Notice of Commencement to the selected Contractor.
Work with the CM/CMAR Contractor during the final design process to conduct project value engineering (VE) workshops and develop the project Opinions of Probable Construction Cost (OPCC) and Project Schedule.
Assist the City in finalizing any construction funding or grant assistance and all required documentation.

P. Items Not Included in this Scope of Services

1. This Scope of Services **does not include** the following professional services:
 - 1) Asset Management Plan (AMP) for Wildwood WRF (generation of this plan reduces the SRF Construction Loan's interest rate, if this financing method is used).
 - 2) Vulnerability Assessment (VA) of the Wildwood WRF.
 - 3) Development of Standard Operating Procedures (SOP's) for the Wildwood WRF.
 - 4) Generation of a "detailed" Emergency Management and Response Plan for the Wildwood WRF in accordance with FDEP, EPA and OSHA requirements.
 - 5) Updating of the facility Operation and Maintenance (O&M) Manual.
 - 6) FDEP permitting and FDEP Operations Permit Renewal fees. All permitting and permit renewal fees shall be the responsibility of the City, separate from this Scope of Services.
 - 7) Post-Design Services, Construction Engineering, Inspection and Management (CEIM) Services associated with the construction of the proposed facility improvements at the Wildwood WRF are not included in this Scope of Services. A separate scope will be provided to the City during the Preliminary or Final Design project phase, when the final scope of improvements to be constructed is known and this project task assignment can be properly quantified and priced.

- 8) Any relocation of species identified in the Environmental evaluation of the proposed facility improvements.

These professional engineering services **can be added**, at a later date, as an Addendum to this Scope of Services or under a separate Scope of Services.

Q. BASIS OF COMPENSATION

The Consultant agrees to perform the professional design, permitting, and preconstruction services, associated with the interim/short-term improvements to the existing treatment facility and the new 6.0 MGD AADF WRF (long-term improvements), outlined herein, for a lump sum, fixed fee of \$2,259,354, inclusive of out-of-pocket expenses.

The City shall make payment to the Consultant, monthly, based on the percentage of the project work completed.

Due to the current status of the economy, rising inflation rates, unstable markets for the pricing of commodities, equipment, materials and construction services, and supply chain issues, project costs are out of the control of both the City of Wildwood and CPH, LLC. Any significant redesign needed due to any of these factors will require an adjustment to the basis of compensation (engineering fees).

R. ACCEPTANCE

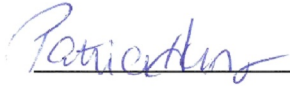
IN WITNESS WHEREOF, this _____ day of _____, 2022.

For: CITY OF WILDWOOD, FLORIDA

By: _____
Jason F. McHugh, City Manager

WITNESS:

For: CPH, LLC



Patricia Hunt
Executive Assistant, HR Director



By: _____

Benjamin M. Fries
Vice-President/Associate

City of Wildwood WRF: BNR Expansion Project - Professional Engineering Design Services Fee Breakdown*

Task No.	Project Element	CPH, LLC	Subconsultants		
			Bailey Engr Consultants	Tierra, Inc.	CPH, LLC Environmental
		Environmental, Civil, Structural, Mechanical, etc.	Electrical, Controls, Instrumentation, SCADA	Geotechnical Engineering	Environmental Evaluation
1	Subconsultant Work				
	Geotechnical Subsurface Investigation of the Wildwood WRF	\$12,071		\$120,708	
	Electrical, Controls, Instrumentation and SCADA Design of the proposed facility Improvements	\$30,000	\$400,000		
	Environmental Evaluation (flora/fauna) of the Wildwood WRF Site (west and southwest portions of the facility)	\$1,300			\$13,000
2	Workshop No. 1 - Kick-off Meeting	\$4,500			
3	Final Conceptual Improvements/Basis of Design	\$16,235			
4	Workshop No. 2 - Final Conceptual Improvements Plan Review	\$4,500			
5	Preliminary Engineering of Proposed Improvements (30%)	\$402,875			
6	Workshop No. 3 - Preliminary Engineering Design (30%) Review	\$4,500			
7	Preliminary Design Report (PDR): Wildwood WRF Improvements	\$28,150			
8	Final Engineering Design of Proposed Improvements				
	8A - Final Engineering Design (to 60% Completion)	\$428,785			
	8B - Workshop No. 4: Final Engineering Design (60%) Review	\$4,500			
	8C - Final Engineering Design (to 90% Completion)	\$467,940			
	8D - Workshop No. 5: Final Engineering Design (90%) Review	\$4,500			
	8E - Final Engineering Design (to 100% Completion)	\$168,285			
9	FDEP Permitting of the Proposed Improvements	\$24,250			

City of Wildwood WRF: BNR Expansion Project - Professional Engineering Design Services Fee Breakdown*

Task No.	Project Element	Subconsultants			
		CPH, LLC	Bailey Engr Consultants	Tierra, Inc.	CPH, LLC Environmental
		Environmental, Civil, Structural, Mechanical, etc.	Electrical, Controls, Instrumentation, SCADA	Geotechnical Engineering	Environmental Evaluation
10	Wastewater Facilities Plan, FDEP SRF Construction Funding/Documentation	\$19,745			
11	Facility Safety Manual	\$31,485			
12	FDEP Operations Permit Renewal	\$28,785			
13	Preconstruction Services	\$43,240			
Professional Engineering Design Services - Subtotals:		\$1,725,646	\$400,000	\$120,708	\$13,000
Percentage of Overall Project Work:		76.4%	17.7%	5.3%	0.6%
Professional Engineering Design Services - Total:			\$2,259,354		

* Professional Construction Engineering and Inspection (CEI) services and BNR System Start-Up, Demonstration and Compliance Testing services shall be provided by CPH, LLC, under a separate task assignment, under this contract, upon completion of the interim/short-term and long-term design improvements or CMAR Contractor selection by the City (Construction Compliance Services; Construction Inspection Compliance Services; Start-up, Demonstration and Compliance Testing; and Project Performance Certification).

Due to the current status of the economy, rising inflation rates, unstable markets for the pricing of commodities, equipment, materials and construction services, and supply chain issues, project costs are out of the control of both the City of Wildwood and CPH, LLC. Any significant redesign needed due to any of these factors will require an adjustment to the basis of compensation (engineering fees).

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: **Purchase of 50 Manhole Rings and Covers for \$24,571.00**

REQUESTED ACTION: Staff Recommends Approval

CONTRACT: Vendor/Entity: Ferguson Waterworks
Effective Date: 09/30/2022 Termination Date:
Managing Division/Department: Wastewater Division / Utility Department

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

The City's central sewer system needs preventative and periodic maintenance on a yearly basis. Due to certain waste and gases, the brick and concrete structure inside the manholes deteriorates over time. To keep the system's integrity sound and functional without interruption in service, the wastewater division is requesting to purchase fifty (50) hinged manhole rings and covers. Attached are three quotes received by staff, with Ferguson Waterworks being the lowest bid. This is an approved project in the 22/23 budget.

Staff recommends the purchase of fifty (50) manhole rings and covers from Ferguson Waterworks for the amount of \$24,571.00. Funds are available in account 401-535-60-6610 (Sewer System Renewal and Replacement).

QUOTE SUMMARY FORM

(for purchases more then \$500.00)



Instructions: Use this form to list quotes received and to recommend a vendor for award. Attach the Quote Summary Form along with three written quotes from your vendors as backup.

Commodity or Service 50 Manhole Ring and Covers

	Vendor Name	Contact Name	Date & Quote #	Phone Number	Total Quote (include shipping)	
1	Ferguson Waterworks	JEO	9-30-2022 / B516751	352-237-0273	\$24,571.00	
2	Hayes Pipe Supply, INC	NA	9-22-2022 / 66165	813-241-4040	\$25,000.00	
3	Core & Main	NA	9-26-2022 / 2551700	352-748-7473	\$35,385.00	
4						
5						

Include ALL quotes received

More then \$500.00 - Minimum of 3 Written Quotes

MUST use applicable vendors.

Recommended Vendor: Ferguson Waterworks

Winning Bid Amount: \$ **24,571.00**

If the Recommended Vendor IS NOT the low, please explain why:

** Requires prior procurement approval*

Purchaser Wastewater Division

Direct Phone # 352-330-1346

Department Utilities

Director Signature

A handwritten signature in blue ink, appearing to read "Mark O'Connell".

Date:

9/30/22

Effective: 10-8-2018

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FEL-OCALA, FL WW
3501 SW 13TH STREET #200
OCALA, FL 34474-2857

Phone: 352-237-0273
Fax: 352-237-3326

Deliver To:

From: 0

Comments:

11:14:26 SEP 30 2022

Page 1 of 1

FEL-OCALA, FL WW #44

Price Quotation

Phone: 352-237-0273

Fax: 352-237-3326

Bid No: B516751
Bid Date: 09/30/22
Quoted By: JEO

Cust Phone: 352-330-1330
Terms: NET 10TH PROX

Customer: CITY OF WILDWOOD
100 N MAIN STREET
WILDWOOD, FL 34785

Ship To: CITY OF WILDWOOD
SEWER DEPARTMENT
1290B INDUSTRIAL ROAD
ATTN: JOHN CORNELL

Cust PO#:

Job Name: MANHOLE BID

Item	Description	Quantity	Net Price	UM	Total
SP-PPAMREX24WLDWO	24" HINGED RING & COVER	50	489.370	EA	24468.50

Net Total: \$24468.50
Tax: \$0.00
Freight: \$102.50
Total: \$24571.00

Quoted prices are based upon receipt of the total quantity for immediate shipment (48 hours). SHIPMENTS BEYOND 48 HOURS SHALL BE AT THE PRICE IN EFFECT AT TIME OF SHIPMENT UNLESS NOTED OTHERWISE. QUOTES FOR PRODUCTS SHIPPED FOR RESALE ARE NOT FIRM UNLESS NOTED OTHERWISE.

CONTACT YOUR SALES REPRESENTATIVE IMMEDIATELY FOR ASSISTANCE WITH DBE/MBE/WBE/SMALL BUSINESS REQUIREMENTS.

Seller not responsible for delays, lack of product or increase of pricing due to causes beyond our control, and/or based upon Local, State and Federal laws governing type of products that can be sold or put into commerce. This Quote is offered contingent upon the Buyer's acceptance of Seller's terms and conditions, which are incorporated by reference and found either following this document, or on the web at <https://www.ferguson.com/content/website-info/terms-of-sale>
Govt Buyers: All items are open market unless noted otherwise.

LEAD LAW WARNING: It is illegal to install products that are not "lead free" in accordance with US Federal or other applicable law in potable water systems anticipated for human consumption. Products with "NP" in the description are NOT lead free and can only be installed in non-potable applications. Buyer is solely responsible for product selection.
COVID-19 ORDER: ANY REFERENCE TO OR INCORPORATION OF EXECUTIVE ORDER 14042 AND/OR THE EO-IMPLEMENTING FEDERAL CLAUSES (FAR 52.223-99 AND/OR DFARS 252.223-7999) IS EXPRESSLY REJECTED BY SELLER AND SHALL NOT APPLY AS SELLER IS A MATERIALS SUPPLIER AND THEREFORE EXEMPT UNDER THE EXECUTIVE ORDER.

John Cornell
401-535-30-5200 sewer
Manhole Rehab



HOW ARE WE DOING? WE WANT YOUR FEEDBACK!

Scan the QR code or use the link below to

complete a survey about your bids:

<https://survey.medallia.com/?bidsorder&fc=44&on=54771>



HAYES PIPE SUPPLY, INC.

9416 E. Dr. MLK, Jr. Boulevard • Tampa, FL 33610
(813) 241-4040 • Fax (813) 241-4041
www.hayespipe.com

QUO # - 66165

PAGE - 1

TO: CITY OF WILDWOOD

MANHOLE RING & COVERS 9/22/22

CITY OF WILDWOOD

100 N MAIN ST

WILDWOOD FL 34785

Plan Date	Last Revision	BID DATE	BID TIME
9/22/2022	.	9/26/2022	:00

QUANTITY	DESCRIPTION	UNIT	PRICE	EXTENSION
----------	-------------	------	-------	-----------

Due to escalating scrap iron prices being driven by the Russia-Ukraine War, our manufacturers have imposed a scrap iron surcharge/volatility adder. This has heavily impacted prices and availability of DI Pipe. We will be forced to pass along all surcharges/volatility adders. For your convenience, we will include these surcharges/volatility adders in your unit prices effective immediately-March 23, 2022. These manufacturer surcharges/volatility adders are subject to change without notice.

Due to continued supply chain issues and changes within the manufacturer's price protection policies, effective today, March 23, 2022, **all materials are subject to pricing at time of shipment.** Material availability and timeliness of shipments cannot be guaranteed.
These terms supersede all other contractual provisions including buyer's purchase orders.

50	24IN PAMREX HINGED RING & COVER	EA	500.00	25,000.00
Total For Quoted Items				25,000.00

HAYES PIPE SUPPLY, INC.

BY. _____

Due to current supply chain disruptions, materials are subject to pricing at time of shipment. Material availability and timeliness of shipments cannot be guaranteed. **These terms supersede all other contractual provisions including buyer's purchase orders.**

Mains - Main Line Accessories - Service Materials - Casing Pipe

□ Nashville, TN • (615) 255-4040
□ Knoxville, TN • (865) 525-1717
□ Lexington, KY • (859) 231-8323
□ Tampa, FL • (813) 241-4040
□ Longview, TX • (903) 753-5533

Murfreesboro, TN • (615) 217-3040 □
Acworth, GA • (770) 529-8883 □
Louisville, KY • (502) 454-8500 □
Lake Helen, FL • (386) 228-9819 □
Columbia, SC • (803) 695-4040 □



Bid Proposal for 24" Hinged ring and cover

CITY OF WILDWOOD
Bid Date: 09/26/2022
Core & Main 2551700

Core & Main
9577 N US Hwy 301
Wildwood, FL 34785
Phone: 352-748-7473
Fax: 352-748-2843

Seq#	Qty	Description	Units	Price	Ext Price
		DUE TO CURRENT SUPPLY CHAIN DISRUPTIONS, MATERIALS ARE SUBJECT TO PRICING AT TIME OF SHIPMENT. MATERIAL AVAILABILITY AND TIMELINESS OF SHIPMENTS CANNOT BE GUARANTEED. THIS TERM SUPERSEDES ALL OTHER CONTRACTUAL PROVISIONS.			
10		24" PAMREX HINGED RING N COVER			
20	50	PAMREX24 24 MH F&C IMP	EA	707.70	35,385.00
				Sub Total	35,385.00
				Tax	0.00
				Total	35,385.00

Branch Terms:

PIPE MUST BE ORDERED AND RELEASED FOR DELIVERY BY XX.XX.XX AND SHIPPED COMPLETE BY XX.XX.XX

SPECIAL ORDER ITEMS MAY BE NON-RETURNABLE OR SUBJECT TO RESTOCKING CHARGES.
ITEMS RETURNED MUST BE IN RESALABLE CONDITION IN ORDER TO RECEIVE CREDIT.

THIS TAKE-OFF REPRESENTS OUR INTERPRETATION OF THE PLANS AND SPECIFICATIONS AND IS OFFERED AS AN AID TO BIDDING ONLY.

UNLESS OTHERWISE SPECIFIED HEREIN, PRICES QUOTED ARE VALID IF ACCEPTED BY CUSTOMER AND PRODUCTS ARE RELEASED BY CUSTOMER FOR MANUFACTURE WITHIN THIRTY (30) CALENDAR DAYS FROM THE DATE OF THIS QUOTATION. CORE & MAIN LP RESERVES THE RIGHT TO INCREASE PRICES TO ADDRESS FACTORS, INCLUDING BUT NOT LIMITED TO, GOVERNMENT REGULATIONS, TARIFFS, TRANSPORTATION, FUEL AND RAW MATERIAL COSTS. DELIVERY WILL COMMENCE BASED UPON MANUFACTURER LEAD TIMES. ANY MATERIAL DELIVERIES DELAYED BEYOND MANUFACTURER LEAD TIMES MAY BE SUBJECT TO PRICE INCREASES AND/OR APPLICABLE STORAGE FEES. THIS BID PROPOSAL IS CONTINGENT UPON BUYER'S ACCEPTANCE OF SELLER'S TERMS AND CONDITIONS OF SALE, AS MODIFIED FROM TIME TO TIME, WHICH CAN BE FOUND AT: <https://coreandmain.com/TandC/>

CITY COMMISSION OF THE CITY OF WILDWOOD
EXECUTIVE SUMMARY

SUBJECT: Pay App No. 3 for Florida Metal Building Services, LLC in the amount of \$20,306.00

REQUESTED ACTION: Staff Recommends Approval

CONTRACT: Vendor/Entity: Florida Metal Building Services, LLC

Effective Date: 9-30-2022

Termination Date:

Managing Division/Department: Water Division / Utility Department

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

On March 14th, 2022, the City Commission approved the purchase and installation of a metal utility building at the Municipal Services Complex. Attached is pay application No. 3 for the project.

City Staff has reviewed the pay app and recommend approval for Pay App No. 3 to Florida Metal Buildings, LLC. in the amount of \$20,306.00. Funds are available in account 401-533-60-6200 (Capital Improvements - Buildings). The balance left on this contract is \$25,334.00.

PO# 22-00590

Florida Metal Building Services, LLC

5445 S Pine Ave
Ocala FL 34480
(352)789-6009

License: CGC1510307

Progress Billing

Application: 3

Period: 09/26/2022

Owner: City of Wildwood
100 N Main Street
Wildwood FL 34785

Job Location: Warfield Complex Metal Bldg
711 Huey St
Wildwood FL 34785

Application For Payment On Contract

Original Contract.....	155,325.00
Net Change by Change Orders.....	0.00
Contract Sum to Date.....	155,325.00
Total Complete to Date.....	129,991.00
 Total Retained.....	 0.00
Total Earned Less Retained.....	129,991.00
 Less Previous Billings.....	 109,685.00
Current Payment Due.....	20,306.00
 Balance on Contract.....	 25,334.00

Contractor's Certification of Work

The undersigned contractor certifies that, to the best of the contractor's knowledge, the work on the above named job has been completed in accordance with the plans and specifications to the level of completion indicated on the attached schedule of completion.

Contractor: _____

Date: 9/26/22

State of: Florida

County of: Marion

Subscribed and sworn to before
me this 26 day of September 2022

Notary Public: Wendy Cleverley

My Commission Expires: 4-11-23



Wendee A Cleverley
Comm. # GG322483
Expires: April 11, 2023
Bonded Thru Aaron Notary

Terms: Invoices are due and payable from the date of invoice. All overdue amounts will be charged a service charge of 0.00 % per annum. Please make checks payable to: Florida Metal Building Services, LLC

Thank you for your prompt payment.

Non-Refundable Deposit for Engineered Drawings and/or Purchase of Building.

Cancellation of Building/Purchase Order is subject to an additional 15% cancellation fee.

Notes: Any funds collected for these services are non-refundable should the Owner terminate the project for any reason.

1/10
9/30/22

PROGRESS BILLING

Application: 3

Period: 09/26/2022

Schedule of Work Completed

Description of Work	Scheduled	Changes	Contract	Previous	Current Comp.	Stored Mat.	Total Comp.	%	Balance	Retained
Deposit/Approval Drawings	23,298.00		23,298.00	23,298.00			23,298.00	100.00		
PEMB Material	86,387.00		86,387.00	86,387.00			86,387.00	100.00		
Labor	16,957.00		16,957.00						16,957.00	
Roll up Doors	8,377.00		8,377.00						8,377.00	
Concrete Slab	20,306.00		20,306.00		20,306.00		20,306.00	100.00		
Totals:	155,325.00		155,325.00	109,685.00	20,306.00		129,991.00	83.69	25,334.00	

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: Wildwood Country Resort Lift Station #8 Relocation Pay Applications #3 and #4 for the Total Amount of \$37,418.63

REQUESTED ACTION: Staff Recommends Approval

CONTRACT: Vendor/Entity: Marion Rock. Inc
Effective Date: 9-30-2022 Termination Date:
Managing Division/Department: Wastewater Division / Utility Department

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

Lift Station No. 8 in Wildwood Country Resort is being relocated and upgraded pursuant to the approved property swap agreement between the City and The Villages. This is also to accommodate the decommissioning of the Continental Country Club wastewater treatment facility and the SR 44 force main project. This relocation project was approved on December 21, 2021. Attached are pay applications #3 and #4 for this project.

Kimley Horn and staff have reviewed and recommend approval of pay application #3 for \$1,485.00 and #4 for \$35,933.63, to Marion Rock, Inc, totaling \$37,418.63. This is a budgeted project in the FY 22 and 23 fiscal year budgets. Funds are available in account 401-535-70-7303 (Wildwood Estates LS).

CONSTRUCTION SUBCONTRACTOR PAYMENT REQUISITION

FROM Marion Rock, Inc.
5979 SE Maricamp Rd
Ocala, FL 34472
352-687-2023
nicole.marionrock@gmail.com

DATE 09/20/22
 REQUISITION NO. 4
 PROJECT: Wildwood Estates Lift Station PO # 22 01181
 PERIOD FROM 09/01/22 TO 09/20/22

EXECUTED CHANGE ORDERS

NO.	DATE	ADD (DEDUCT)	AMOUNT
Net Amount of Change Orders			\$0.00

Original Contract Amount	\$519,954.00
Net Amount of Change Orders	\$0.00
Contract Sum To Date	\$519,954.00
Completed to Date <u>41.80%</u> (B)	\$217,326.25
Material Stored (B)	\$0.00
Total Completed / Stored	\$217,326.25
Retainage <u>10.00%</u>	\$21,732.63
Total Earned Less Retainage	\$195,593.63
Less Previous Requisitions	\$159,660.00
This Requisition	\$35,933.63

(B) Attach documentation for accounts claimed

STATE OF FLORIDA
 COUNTY OF

Marion

BEFORE ME, the undersigned authority, personally appeared

Ryan Boutwell

as

V President

of Marion Rock, Inc. who, after being duly sworn, deposes and says

1. That for and in consideration of the payment of this subcontractor payment requisition, the undersigned hereby releases all liens, lien rights, claims, debts or demands of any kind or nature whatsoever which the undersigned now or might hereafter have against Owner, the building, property and/or premises described above, on account of all work, labor and materials furnished to the date hereof by or for the undersigned and used in and about the construction of any building situated on the above described property or any part thereof, or in improving the above described property or any part thereof. That the undersigned or at the direction of the undersigned, has paid for all work, labor performed and materials used on the above property by the undersigned to the date hereof, and this statement is given under oath to enable the undersigned to obtain partial payment from Owner; that all persons contracting directly with, or directly employed by the undersigned, or in connection with said improvements, and under and in connection with this contract between Owner and the undersigned regarding the premises, have been paid in full to date.

2. That in the event the undersigned is a corporation or partnership the undersigned represents and warrants that he is duly authorized to execute this Affidavit and Lien Release on behalf of such organization

DATED this 20th day of September 20 22

59-3402323

FEDERAL ID#

Marion Rock, Inc.

Subcontractor

By Ryan Boutwell

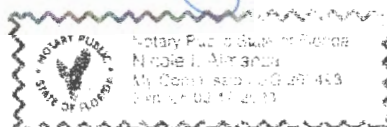
Kimley»Horn

SWORN TO and subscribed before this 20th day of September 20 22

- ☒ NO EXCEPTIONS TAKEN
- ☐ CORRECTIONS NOTED
- ☐ REJECTED
- ☐ VERIFY & MAKE CORRECTIONS
- ☐ RESUBMIT
- ☐ FOR INFORMATION ONLY

Our limited review is only for conformance with the design concept of the project and general compliance with the information given in our Plans and Specifications. Contractor is responsible for: dimensions to be confirmed and correlated at the job site, information that pertains to the fabrication processes or to techniques of construction, quantities, safety, coordination with other work, and for conformance to the requirements of the plans and specifications. Review does not authorize changes to contract unless stated specifically in separate letter or change order.

Reviewed By: TREY CLAYTON Date: 9/26/22



Nicole Almanza

Notary Public

Continuation Sheet (similar to G703)

A	B	C	D	E	F	G		H	I
Item No	Description of Work	Scheduled Value	Work Completed		Materials Presently Stored (Not in D or E)	Total Completed and Stored to Date (D + E + F)	% Complete (G / C)	Balance to Finish (C - G)	Retainage (10%)
			From Previous Applications (D + E)	This Period					
1	MOB	11,500.00	5,000.00	3,000.00		8,000.00	70%	3,500.00	800.00
2	Clearing & grubbing	6,500.00	6,500.00			6,500.00	100%	-	650.00
3	Environmental protection	3,150.00	3,150.00			3,150.00	100%	-	315.00
4	Survey layout and record drawings	3,400.00	2,000.00	700.00		2,700.00	79%	700.00	270.00
5	Dewatering	9,500.00	9,500.00			9,500.00	100%	-	950.00
	Sitework					-			
6	General earthwork per plan	9,465.00	5,000.00			5,000.00	53%	4,465.00	500.00
7	Lift station site work	52,275.00	25,000.00	12,045.75		37,045.75	71%	15,229.25	3,704.58
	Site Utilities					-			
8	8" DR 18 C900 PVC force main (277LF \$64.00)	17,728.00		12,285.50		12,285.50	69%	5,442.50	1,228.55
9	Water service	5,890.00		2,300.00		2,300.00	39%	3,590.00	230.00
10	8" gate valve (2EA \$1700.00)	3,400.00		3,400.00		3,400.00	100%	-	340.00
11	Air release valve	3,150.00		1,475.00		1,475.00	47%	1,675.00	147.50
12	8" restrained plug	540.00		540.00		540.00	100%	-	54.00
13	8" cap	580.00		580.00		580.00	100%	-	58.00
14	Open cut existing force main	10,865.00				-	0%	10,865.00	-
15	12" gravity main (SDR 26) (71LF \$81.00)	5,751.00		3,600.00		3,600.00	63%	2,151.00	360.00
16	8-10'deep 4' diameter manhole (2EA \$11825.00)	23,650.00				-	0%	23,650.00	-
17	Core existing manhole and grout and repair west invert	4,710.00				-	0%	4,710.00	-
	Lift Station					-			
18	WW Estates lift station	230,000.00	110,000.00			110,000.00	48%	120,000.00	11,000.00
19	Lift station electrical and instrumentation	96,650.00				-	0%	96,650.00	-
20	Electrical service allowance	10,000.00				-	0%	10,000.00	-
21	Payment & Performance bond	11,250.00	11,250.00			11,250.00	100%	-	1,125.00

Continuation Sheet (similar to G703)

	Totals	\$ 519,954.00	\$ 177,400.00	\$ 39,926.25	\$ -	\$ 217,326.25	42%	\$ 302,627.75	\$ 21,732.63
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FROM	<u>Marion Rock, Inc</u>	DATE	<u>08/19/22</u>
	<u>5979 SE Maricamp Rd</u>	REQUISITION NO	<u>3</u>
	<u>Ocala, Fl, 34472</u>		
	<u>352-687-2023</u>	PROJECT:	<u>Wildwood Estates Lift Station-PO # 22-01181</u>
	<u>nicole.marionrock@gmail.com</u>		
		PERIOD FROM	<u>08/01/22</u> TO <u>08/19/22</u>

Original Contract Amount		\$519,954.00
Net Amount of Change Orders		\$0.00
Contract Sum To Date		\$519,954.00
Completed to Date	34.12% (B)	\$177,400.00
Material Stored	(B)	\$0.00
Total Completed / Stored		\$177,400.00
Retainage	10.00%	\$17,740.00
Total Earned Less Retainage		\$159,660.00
Less Previous Requisitions		\$158,175.00
This Requisition		\$1,485.00

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Continuation Sheet (similar to G703)

A	B	C	D	E	F	G		H	I
Item No.	Description of Work	Scheduled Value	Work Completed		Materials Presently Stored (Not in D or E)	Total Completed and Stored to Date (D + E + F)	% Complete (G / C)	Balance to Finish (C - G)	Retainage (10%)
			From Previous Applications (D + E)	This Period					
1	MOB	11,500.00	5,000.00			5,000.00	43%	6,500.00	500.00
2	Clearing & grubbing	6,500.00	6,500.00			6,500.00	100%	-	650.00
3	Environmental protection	3,150.00	1,500.00	1,650.00		3,150.00	100%	-	315.00
4	Survey layout and record drawings	3,400.00	2,000.00			2,000.00	59%	1,400.00	200.00
5	Dewatering	9,500.00	9,500.00			9,500.00	100%	-	950.00
	Sitework					-			
6	General earthwork per plan	9,465.00	5,000.00			5,000.00	53%	4,465.00	500.00
7	Lift station site work	52,275.00	25,000.00			25,000.00	48%	27,275.00	2,500.00
	Site Utilities					-			
8	8" DR 18 C900 PVC force main (277LF \$64.00)	17,728.00				-	0%	17,728.00	-
9	Water service	5,890.00				-	0%	5,890.00	-
10	8" gate valve (2EA \$1700.00)	3,400.00				-	0%	3,400.00	-
11	Air release valve	3,150.00				-	0%	3,150.00	-
12	8" restrained plug	540.00				-	0%	540.00	-
13	8" cap	580.00				-	0%	580.00	-
14	Open cut exsiting force main	10,865.00				-	0%	10,865.00	-
15	12" gravity main (SDR 26) (71LF \$81.00)	5,751.00				-	0%	5,751.00	-
16	8-10'deep 4' diameter manhole (2EA \$11825.00)	23,650.00				-	0%	23,650.00	-
17	Core existing manhole and grout and repair west invert	4,710.00				-	0%	4,710.00	-
	Lift Station					-			
18	VW Estates lift station	230,000.00	110,000.00			110,000.00	48%	120,000.00	11,000.00
19	Lift station electrical and instrumentation	96,650.00				-	0%	96,650.00	-
20	Electrical service allowance	10,000.00				-	0%	10,000.00	-
21	Payment & Performance bond	11,250.00	11,250.00			11,250.00	100%	-	1,125.00

Continuation Sheet (similar to G703)

	Totals	\$ 519,954.00	\$ 175,750.00	\$ 1,650.00	\$ -	\$ 177,400.00	34%	\$ 342,554.00	\$ 17,740.00
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CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: **Purchase of Ten (10) Sanitary Sewer Air Release Valves with Enclosures for \$15,549.00**

REQUESTED ACTION: Staff Recommends Approval

CONTRACT: Vendor/Entity: Hayes Pipe Supply, INC
Effective Date: 9-30-2022 Termination Date:
Managing Division/Department: Wastewater Division / Utility Department

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

In 2021, the Utility Department adopted its new annual maintenance program. In that program, staff must locate and service all air release valves in the system. Staff received the attached three quotes to purchase ten (10) air release valves with enclosures to have in stock to replace failing valves when necessary during those annual inspections.

Staff recommends purchasing the ten (10) air release valves and enclosures from the lowest bidder, Hayes Pipe Supply, Inc., for the amount of \$15,549.00. Funds are available in account #401-535-30-5200 (Operating Supplies).

QUOTE SUMMARY FORM

(for purchases more than \$500.00)



Instructions: Use this form to list quotes received and to recommend a vendor for award. Attach the Quote Summary Form along with three written quotes from your vendors as backup.

Commodity or Service Purchase of Air Release Valves with Enclosures

	Vendor Name	Contact Name	Date & Quote #	Phone Number	Total Quote (include shipping)	
1	Hayes Pipe Supply, INC	NA	9-26-2022 / 67879	386-228-9819	\$15,549.00	
2	Ferguson Waterworks	NA	9-26-2022 / B516659	352-237-0273	\$15,549.40	
3	Core & Main	NA	9-23-2022 / 2549620	352-748-7473	\$22,008.40	
4						
5						

Include ALL quotes received

More than \$500.00 - Minimum of 3 Written Quotes

MUST use applicable vendors.

Recommended Vendor: Hayes Pipe Supply, INC

Winning Bid Amount: \$ 15,549.00

If the Recommended Vendor IS NOT the low, please explain why:

** Requires prior procurement approval*

Purchaser Wastewater Department

Direct Phone # 352-330-1346

Department Utilities

Director Signature

Mark O'Neil

Date:

9/30/22

Effective: 10-8-2018

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HAYES PIPE SUPPLY, INC.

680 West Main Street • Lake Helen, FL 32744
(386) 228-9819 • Fax (386) 228-9823
www.hayespipe.com

QUO # - 67879

PAGE - 1

TO: CITY OF WILDWOOD

CITY OF WILDWOOD

100 N MAIN ST

D-025PT02 ARV QUOTE

WILDWOOD FL 34785

Plan Date	Last Revision	BID DATE	BID TIME
9/26/2022	092622	9/26/2022	:00

QUANTITY	DESCRIPTION	UNIT	PRICE	EXTENSION
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 Due to escalating scrap iron prices being driven by the Russia-Ukraine War, our manufacturers have imposed a scrap iron surcharge/volatility adder. This has heavily impacted prices and availability of DI Pipe. We will be forced to pass along all surcharges/volatility adders. For your convenience, we will include these surcharges/volatility adders in your unit prices effective immediately-March 23, 2022. These manufacturer surcharges/volatility adders are subject to change without notice.

 Due to continued supply chain issues and changes within the manufacturer's price protection policies, effective today, March 23, 2022, **all materials are subject to pricing at time of shipment.** Material availability and timeliness of shipments cannot be guaranteed.
These terms supersede all other contractual provisions including buyer's purchase orders.

10	2IN ARI D-025-PT02 NYLON SEWER COMBINATION AIR RELEASE VALVE	EA	1,055.00	10,550.00
10	WATER PLUS H-30 ARV ENCLOSURE GREEN	EA	499.90	4,999.00

Total For Quoted Items	15,549.00
------------------------	-----------

HAYES PIPE SUPPLY, INC.

BY. _____

Due to current supply chain disruptions, materials are subject to pricing at time of shipment. Material availability and timeliness of shipments cannot be guaranteed. **These terms supersede all other contractual provisions including buyer's purchase orders.**

Mains - Main Line Accessories - Service Materials - Casing Pipe

☐ Nashville, TN · (615) 255-4040
☐ Knoxville, TN · (865) 525-1717
☐ Lexington, KY · (859) 231-8323
☐ Tampa, FL · (813) 241-4040
☐ Longview, TX · (903) 753-5533

☐ Murfreesboro, TN · (615) 217-3040
☐ Acworth, GA · (770) 529-8883
☐ Louisville, KY · (502) 454-8500
☐ Lake Helen, FL · (386) 228-9819
☐ Columbia, SC · (803) 695-4040



FEL-OCALA, FL WW
3501 SW 13TH STREET #200
OCALA, FL 34474-2857

Phone: 352-237-0273
Fax: 352-237-3326

Deliver To:

From: 0

Comments:

08:22:00 SEP 26 2022

Page 1 of 1

FEL-OCALA, FL WW #44

Price Quotation

Phone: 352-237-0273

Fax: 352-237-3326

Bid No: B516659
Bid Date: 09/26/22
Quoted By: JEO

Cust Phone: 352-330-1330
Terms: NET 10TH PROX

Customer: CITY OF WILDWOOD
100 N MAIN STREET
WILDWOOD, FL 34785

Ship To: CITY OF WILDWOOD
SEWER DEPARTMENT
1290B INDUSTRIAL DRIVE
ATTN: JOHN CORNELL

Cust PO#:

Job Name: ARV BID

Item	Description	Quantity	Net Price	UM	Total
SP-AD025PTO2	2" DUEL FUNCT. D25 ARV W/NYLON BODY 2" DUEL FUNCTION ARV	10	1055.060	EA	10550.60
SP-H30G	VENTED ARV ENCLOSURE GREEN GREEN ARV ENCLOSURE	10	499.880	EA	4998.80

Net Total: \$15549.40
Tax: \$0.00
Freight: \$0.00
Total: \$15549.40

Quoted prices are based upon receipt of the total quantity for immediate shipment (48 hours). SHIPMENTS BEYOND 48 HOURS SHALL BE AT THE PRICE IN EFFECT AT TIME OF SHIPMENT UNLESS NOTED OTHERWISE. QUOTES FOR PRODUCTS SHIPPED FOR RESALE ARE NOT FIRM UNLESS NOTED OTHERWISE.

CONTACT YOUR SALES REPRESENTATIVE IMMEDIATELY FOR ASSISTANCE WITH DBE/MBE/WBE/SMALL BUSINESS REQUIREMENTS.

Seller not responsible for delays, lack of product or increase of pricing due to causes beyond our control, and/or based upon Local, State and Federal laws governing type of products that can be sold or put into commerce. This Quote is offered contingent upon the Buyer's acceptance of Seller's terms and conditions, which are incorporated by reference and found either following this document, or on the web at <https://www.ferguson.com/content/website-info/terms-of-sale>
Govt Buyers: All items are open market unless noted otherwise.

LEAD LAW WARNING: It is illegal to install products that are not "lead free" in accordance with US Federal or other applicable law in potable water systems anticipated for human consumption. Products with "NP" in the description are NOT lead free and can only be installed in non-potable applications. Buyer is solely responsible for product selection.
COVID-19 ORDER: ANY REFERENCE TO OR INCORPORATION OF EXECUTIVE ORDER 14042 AND/OR THE EO-IMPLEMENTING FEDERAL CLAUSES (FAR 52.223-99 AND/OR DFARS 252.223-7999) IS EXPRESSLY REJECTED BY SELLER AND SHALL NOT APPLY AS SELLER IS A MATERIALS SUPPLIER AND THEREFORE EXEMPT UNDER THE EXECUTIVE ORDER.



HOW ARE WE DOING? WE WANT YOUR FEEDBACK!

Scan the QR code or use the link below to
complete a survey about your bids:

<https://survey.medallia.com/?bidsorder&fc=44&on=54771>



Bid Proposal for 2" ARV & Green enclosure

CITY OF WILDWOOD
Bid Date: 09/23/2022
Core & Main 2549620

Core & Main
9577 N US Hwy 301
Wildwood, FL 34785
Phone: 352-748-7473
Fax: 352-748-2843

Seq#	Qty	Description	Units	Price	Ext Price
		DUE TO CURRENT SUPPLY CHAIN DISRUPTIONS, MATERIALS ARE SUBJECT TO PRICING AT TIME OF SHIPMENT. MATERIAL AVAILABILITY AND TIMELINESS OF SHIPMENTS CANNOT BE GUARANTEED. THIS TERM SUPERSEDES ALL OTHER CONTRACTUAL PROVISIONS.			
10		ARV			
20	10	2" ARI D-025P SEWAGE DUAL ARV PLASTIC BODY	EA	1,493.31	14,933.10
30		ENCLOSURE			
40	10	H30-G VENTED ARV ENCLOSURE	EA	707.53	7,075.30
50					
				Sub Total	22,008.40
				Tax	0.00
				Total	22,008.40

Branch Terms:

PIPE MUST BE ORDERED AND RELEASED FOR DELIVERY BY XX.XX.XX AND SHIPPED COMPLETE BY XX.XX.XX

SPECIAL ORDER ITEMS MAY BE NON-RETURNABLE OR SUBJECT TO RESTOCKING CHARGES.
ITEMS RETURNED MUST BE IN RESALABLE CONDITION IN ORDER TO RECEIVE CREDIT.

THIS TAKE-OFF REPRESENTS OUR INTERPRETATION OF THE PLANS AND SPECIFICATIONS AND
IS OFFERED AS AN AID TO BIDDING ONLY.

UNLESS OTHERWISE SPECIFIED HEREIN, PRICES QUOTED ARE VALID IF ACCEPTED BY CUSTOMER AND PRODUCTS ARE RELEASED BY
CUSTOMER FOR MANUFACTURE WITHIN THIRTY (30) CALENDAR DAYS FROM THE DATE OF THIS QUOTATION. CORE & MAIN LP
RESERVES THE RIGHT TO INCREASE PRICES TO ADDRESS FACTORS, INCLUDING BUT NOT LIMITED TO, GOVERNMENT REGULATIONS,
TARIFFS, TRANSPORTATION, FUEL AND RAW MATERIAL COSTS. DELIVERY WILL COMMENCE BASED UPON MANUFACTURER LEAD
TIMES. ANY MATERIAL DELIVERIES DELAYED BEYOND MANUFACTURER LEAD TIMES MAY BE SUBJECT TO PRICE INCREASES AND/OR
APPLICABLE STORAGE FEES. THIS BID PROPOSAL IS CONTINGENT UPON BUYER'S ACCEPTANCE OF SELLER'S TERMS AND
CONDITIONS OF SALE, AS MODIFIED FROM TIME TO TIME, WHICH CAN BE FOUND AT: <https://coreandmain.com/TandC/>

CITY COMMISSION OF THE CITY OF WILDWOOD
EXECUTIVE SUMMARY

SUBJECT: Holiday Lighting Contract in the Amount of \$47,070.00

REQUESTED ACTION: Staff recommends approval.

CONTRACT: Vendor/Entity: Holiday Lighting of Central Florida

Effective Date: 10/1/2019

Termination Date: 1/5/2023

Managing Division/Department: Parks and Recreation

BUDGET IMPACT: This was a budgeted item from 2022-2023 fiscal year from account 001-572-30-3400.

HISTORY/FACTS/ISSUES:

Holiday Lighting of Central Florida was previously selected through the RFP process to provide holiday lighting services. This year is the last year of the contract. The attached quote covers the installation of holiday lights around City Hall, including the annex, courtyard, and the monument sign. Installation will take place the week of November 7, 2022, with take down occurring the week of January 3, 2023.

/PROPOSAL

Holiday Lighting of Central Florida

Date **October 3, 2022**
City of Wildwood
100 N. Main Street
Wildwood, FL 34786

email address:
phone number: (352) 330-1330

Job Description: Holiday Lighting of Central Florida to install LED lighting on the City of Wildwood through a public light display in front of City Hall. This proposal will help create that by the following:
Installation to take place on November 7, 2022 through November 11, 2022. Takedown to take place on January 3, 2023 through January 6, 2023.

All lights electrical connections are to be sealed in accordance with being Marine grade connections.			
Project	Total Material	Total Labor	Total Cost
Highway 301 Monument			
Lighted Garland across the top of the monument	\$210.00	\$130.00	\$340.00
Wrap three Ligustrum rear of the monument	\$750.00	\$390.00	\$1,140.00
Wrap hedges on either side of the monument	\$250.00	\$130.00	\$380.00
Two teardrop wreaths on either side of the monument	\$400.00	\$130.00	\$530.00
Centerpiece Christmas Tree			
Ornaments package		\$650.00	\$650.00
Tree, 20' RGB Animated commercial Christmas tree		\$2,925.00	\$2,925.00
3' 3D snowbirds tree topper, LED		\$195.00	\$195.00
Trees in the Courtyard			
Wrapping 6 Juniper Trees – Warm White		\$2,080.00	\$2,080.00
Wrapping 12 Oak Trees – Warm White		\$3,250.00	\$3,250.00
Cascading Tubes for Animation			
36" LED Falling Snow Tube - Warm White		\$1,625.00	\$1,625.00
24" LED Falling Snow Tube - Warm White		\$1,625.00	\$1,625.00
Holispheres Red,Blue,Green		\$1,625.00	\$1,625.00
City Hall			
Wrap 4 Large Columns in lighted Garland front of City Hall		\$1,690.00	\$1,690.00
Wrap 10 Small Columns in lighted Garland front of City Hall		\$2,080.00	\$2,080.00
Garland above City Hall Sign		\$260.00	\$260.00
Roblini in front of City Hall	\$250.00	\$130.00	\$380.00
Ligustrum's on the side of City Hall	\$750.00	\$390.00	\$1,140.00

City Hall Annex			
Wrap 6 Small Columns in lighted Garland front of Annex		\$1,300.00	\$1,300.00
Garland above Door of Annex		\$130.00	\$130.00
Roblin in front of City Hall Annex	\$675.00	\$195.00	\$870.00
24” bows and 18” bows	\$1,275.00	\$130.00	\$1,405.00
50 foot boom lifts	\$7,200.00		\$7,200.00
Miscellaneous supplies (Three-way outlet adapter, Zip ties, Zip cord)	\$300.00		\$300.00
Takedown, tag, box		\$12,950.00	\$12,950.00
Transport	\$1,000.00		\$1,000.00
City of Wildwood Total	\$13,060.00	\$34,010.00	\$47,070.00
Proposal dated October 3, 2022		\$47,070.00	
To be paid out as follows:			
Nonrefundable deposit due upon execution of “the Agreement” NO LATER THAN October 7, 2022		\$10,000.00	
Payment due upon installation		\$24,070.00	
Balance due upon takedown		\$13,000.00	

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: **City Hall Speaker Installation in the Amount of \$29,622.69**

REQUESTED ACTION: Staff recommends approval to award the project to LD Lighting.

CONTRACT:

Effective Date:	Vendor/Entity:
Termination Date:	
Managing Division/Department:	

BUDGET IMPACT: Budgeted item from City Hall Courtyard Rehab account 301-572-60-6305.

HISTORY/FACTS/ISSUES:

At a recent Commission meeting, the Commission expressed a desire for a speaker system around City Hall for events held in the courtyard. The Parks & Recreation Department collaborated with the IT Department to create a design plan, which includes the installation of speakers on all sides of City Hall as well as landscape speakers throughout the courtyard from the planters to US 301.

Staff requested quotes from three companies. Each company sent representatives to meet with staff at City Hall to review the full scope of work and specific design elements. This process resulted in the three attached matching quotes, with LD Lighting submitting the lowest quote in the amount of \$29,622.69.

ESTIMATE

407-419-1236

LDLightings.com

LDLightings@mail.com
Orlando, FL

Date: 10/6/2022

Customer Sign:

Customer
Print:

Audio - web interface inc. playlist
management and scheduling - \$99 for player
and 34.99/mo INCLUDES DRM licensing

Description	Quantity	Unit Price	Cost
Labor - Crew - Sound System (Inc. Flower Speaker Mounting, Pulling Wire, Mounting Speakers)			\$ 2,680.00
Speaker Cable Per FT Commercial Grade	1285	\$ 1.50	\$ 1,927.50
B+W AM1 Mounted Speaker	15	\$499.00	\$ 7,485.00
Planter Style Speakers	10	\$695.00	\$ 6,950.00
Complete Audio Equipment in. Mic, Stack, Amp, WIRELESS CONTROL - With external selector (INC. Labor + Setup)	1	\$9,430.19	\$ 9,430.19
Consumables speaker system (conduit, junction boxes, hardware, internal wall box, brush cover)	1	\$625.00	\$ 625.00
Side Walk Cross (Damage Free Jetting)	10	\$ 40.00	\$ 400.00
Waterproof connectors (Splice x2 per)	50	\$ 2.50	\$ 125.00
		Subtotal	\$ 29,622.69
		Total	\$ 29,622.69

Security Deposit Required

\$7,410

Payment Options:

Check - *Make payable to LD DESIGN LLC* Cashapp - Send to \$LiamDeverson
Zelle - *Send to LDLightings@mail.com* PayPal - Send to LDLightings@mail.com
Venmo - Send to @Liam-Deverson (PayPal Subject to a 3% Fee)

Terms and Conditions:

Estimate price is valid for 30 days.

365 day parts and labor warranty period with an \$85 callout fee. (Call out fee subject to yearly inflation

Payments: No work will be scheduled without a 25% down payment and agreement to the warranty / terms and conditions. Payments can be made by Check, Cash, Zelle, PayPal (subject to a 2.8% fee), Venmo, Cashapp, Apple Pay. The remaining balance will need to be paid upon project completion. Unless otherwise specified in writing, invoices not paid within 30 days of the invoice date will accrue interest at 12% per month. Plus 25% on the said account as attorney's fees and cost of collection in case suit. All change orders must be paid by the client and acknowledged by the client and installer including parts, labor and deposit.

Technology: LDDesign LLC is not liable for Wi-Fi connectivity issues, the client's local network should broadcast a separate 2.4G band ONLY. LDDesign's lighting system is not compatible with SOME multiple mesh network routers that only broadcast combined 2.4G & 5G bands. Any additional Wi-Fi connectivity diagnosis and repair is subject to additional parts and labor costs.

Warranty: Parts and Labor is subject to a 365-day limited warranty period, after which an \$85 call out fee is charged. Warranty is nontransferable and does not cover the following: Vandalism, Settlement, Accidental Damage, Mowers, Weedwhackers, Misuse or Abuse, Structural Shrinkage, Lightning, Property Structure Distortion, Fire, Windstorm, Tornado, Earthquake, Hail, Hurricane, Windstorm, any other acts of God, Mold, Local Wi-Fi Connectivity Issues, Foreign Object Impact, Water and Ice Damage, Dissimilar Material Damage, Sun or UV Fading or Discoloring, Floods, Inadequate Gutter or Roof Drainage, Product Alteration Outside Intended use.



Security Solutions of Central FL, LLC

PO Box 384
Oxford, FL 34484
352-303-8313
wes@sumtersecurity.com
www.sumtersecurity.com
FL Electrical License # ES12001757

SEND TO

City of Wildwood

PROPOSAL

DATE	9/15/2022
PROPOSAL #	1554
PO#	
Terms	Due on Receipt

City Hall Speaker System

DESCRIPTION	AMOUNT
Parts & Labor to install a new speaker system at the Wildwood City Hall. Speakers will be installed in the Courtyard and on the City Hall building on all sides. All parts, trenching, wiring, and labor needed are included on this proposal. Parts include;	\$33,863.00
12- Rockustics 6.5" Omnidirectional Outdoor Speaker in Granite Grey w/ Pea Gravel	
12- Planter ANTI THEFT DEVICE-XT/ Hardware	
01- MULTIMIX 10 WIRELESS- 10-Channel Rackmount Mixer with Bluetooth Wireless	
05- DELUXE RACK MOUNTED 100W VOLUME CONTROL	
01- VOLUME CONTROL RACK MOUNTING PLATE	
06- EVID 6.2T Speaker (Pair), 6" Surface Mount Speaker, 70V, Black	
01- RACKWORKS SERIES Standard 2U Drawer, 14.2" Deep	
01- Navepoint 4U Rack Drawer	
01- G-TOUR 10X12 PU- Gator POP-UP CONSOLE RACK CASE; 10U TOP; 12U BOTTOM; W/ CASTERS	
01- Denon DN-300Z CD/Media Player with Bluetooth®/USB/SD/Aux and AM/FM Tuner	
01- Furman 15A Standard Power Conditioner	
02- Sennheiser Wireless Handheld Microphone System EW 100 G4-835-S	
02- Ashly KLR3200 Series Power Amplifier	
01- UNI-1-C Universal Connector Panel, XLR In-Line Plug	
01- SINGLE GANG STAINLESS STEEL PLATE WITH (1) FEMALE 3 PIN XLR	
01- FWD-EB1- FORWARD 1SP FLANGED BLANK PNLFLAT BLACK, eb2, eb3, eb4	
Speaker Wire- 2 CONDUCTOR 16AWG UNSHIELDED CL3- FPL RATED INDOOR/OUTDOOR Direct Burial	
Labor to Install All equipment, Trenching, Boring	
Contingency- Will NOT Be Billed Unless Needed- 5%	\$1,690.00

PROPOSAL ACCEPTED: CUSTOMER AGREES TO PAY THE AMOUNT LISTED.

OTHER COMMENTS

1. Total payment due on receipt.

Subtotal	35,553.00
Taxable	-
Tax rate	0.000%
Tax due	-
Other	-
TOTAL	\$ 35,553.00

Make all checks payable to
Security Solutions of Central FL

City of Wildwood City Hall Speaker System Proposal

12 Planter Speakers (Courtyard)
12 Wall Mount Speakers (City Hall Building)
September 15, 2022

Wildwood City Hall Speaker Layout





Security Solutions of Central FL, LLC

PO Box 384
Oxford, FL 34484
352-303-8313
wes@sumtersecurity.com
www.sumtersecurity.com
FL Electrical License # ES12001757

SEND TO

City of Wildwood

PROPOSAL

DATE	9/15/2022
PROPOSAL #	1554
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02- Ashly KLR3200 Series Power Amplifier	
01- UNI-1-C Universal Connector Panel, XLR In-Line Plug	
01- SINGLE GANG STAINLESS STEEL PLATE WITH (1) FEMALE 3 PIN XLR	
01- FWD-EB1- FORWARD 15P FLANGED BLANK PNL/FLAT BLACK, eb2, eb3, eb4	
Speaker Wire- 2 CONDUCTOR 16AWG UNSHIELDED CL3- FPL RATED INDOOR/OUTDOOR Direct Burial	
Labor to Install All equipment, Trenching, Boring	
Contingency- Will NOT Be Billed Unless Needed- 5%	\$1,690.00

PROPOSAL ACCEPTED: CUSTOMER AGREES TO PAY THE AMOUNT LISTED.

OTHER COMMENTS

1. Total payment due on receipt.

Subtotal	35,553.00
Taxable	-
Tax rate	0.000%
Tax due	-
Other	-
TOTAL	\$ 35,553.00

Make all checks payable to
Security Solutions of Central FL

Rockustics Outdoor OmniPlanter

6.5 Speaker in Granite Grey

w/ Anti Theft Plate Install in Ground





Preliminary Specification: OmniPlanter 6.5

System Type	6.5" coaxial, planter speaker (optional 64 Watt transformer available)
Impedance (nominal)	4 Ohms (nominal)
Sensitivity dB @ 2.38 V/1m ³	92 dB
Frequency Response (-10 dB) ¹	76 Hz - 19.5 kHz
Transducer - Low-Frequency Driver	165.1 mm (6.5 in.)
Transducer - High-Frequency Driver	19 mm (0.75 in.) mylar dome tweeter
Low-Frequency Voice Coil	25 mm (1 in.)
Enclosure Material	Rotation-molded, UV-stable polyethylene
Inputs	Wire lead
Color Options	Gray granite or terra cotta granite
Diameter	508 mm (20 in.)
Height	431.8 mm (17 in.)
Weight	6.35 kg (14 lbs.)
Included Accessories	N/A
Optional Accessories	64 Watt transformer
Packaging	1 Per box
Regulatory - CE	Approved
RoHS	Approved

¹ Frequency response is measured in half space

² Continuous power rating, EIA-426-B test

³ 2.83 Volts at a distance of 1 meter.

Key Features

- One coaxial 6.5 inch (165 mm) polypropylene driver with butyl rubber surround and one 0.75 inch (19 mm) mylar dome tweeter delivering 360° of dynamic audio
- UV-, scratch-, chlorine- and weather-resistant enclosure with professional-grade components for long-lasting performance and durability.
- Planter design with a 508 mm (20 in.) diameter bowl designed to accommodate live plants and allow for drainage.
- Constructed of rotation-molded, UV-stable polyethylene.
- Color options: gray granite or terra cotta granite
- Optional accessories: 64 Watt 70/100 volt transformer

Description

The Rockustics OmniPlanter 6.5 is a premium 2-way outdoor loudspeaker solution that doubles as a 20 inch (508 mm) diameter planter designed to accommodate live plants and allow for drainage. The OmniPlanter 6.5 is designed to provide a full 360 degrees of audio coverage. The planter is constructed of rotation-molded, UV-stable polyethylene, designed to withstand rain, frost, snow and ice.

Applications

The OmniPlanter 6.5 is an ideal choice for theme parks, promenades, playgrounds, shopping malls, restaurants, resorts, gardens and other outdoor applications requiring omnidirectional sound. OmniPlanter speakers take advantage of an optional 64 Watt transformer (request prior to order) for use in commercial applications.

Alesis MULTIMIX 10 WIRELESS- 10-Channel Rackmount Mixer with Bluetooth





WWW.ALESIS.COM June 10, 2014



MultiMix 10 Wireless 10-Channel Rackmount Mixer with Bluetooth Wireless

Convenient connections plus a stereo Bluetooth channel add true versatility.

The Alesis MultiMix 10 Wireless is redefining the rackmount mixer category. Compact and complete, the MultiMix 10 Wireless delivers ten-channel mixing in a neat 3U package that is perfect for smaller clubs and venues, houses of worship, as well as mobile/traveling systems. The MultiMix 10 Wireless benefits from an array of easily accessible front panel jacks that enhance the versatility and usefulness of this generously equipped mixer. Topping off the feature list is a channel dedicated to receiving the stereo playback from any Bluetooth device. The MultiMix 10 Wireless is a new breed of rackmount mixer.

ALL ARE WELCOME

The MultiMix 10 Wireless provides a wealth of inputs to accommodate nearly any audio input. Channels 1-4 are ideal for vocals or acoustically miced instruments, direct boxes, and more. Each provides an XLR mic input with available phantom power; a balanced 1/4" TRS line input, plus a TRS 1/4" insert jack for incorporating additional effects or working with a second mixer. Channels 5-8 have been set as stereo pairs, offering 1/4" left and right inputs. These channels are ideal for stereo sources such as a keyboard, electronic drum set, drum machine, external mixer, etc. Channels 7-8 also provide left and right RCA inputs.

All information is preliminary and subject to change.

FEATURES

Key Features:

- ♦ Convenient front panel jacks add versatility
- ♦ Space-saving 3U rackmount design is perfect for venues and mobile rigs
- ♦ Bluetooth streaming with simple single-button pairing
- ♦ Articulating Bluetooth antenna for optimum reception
- ♦ 4 high-gain midline preamps with inserts
- ♦ 2-band high and low shelving EQ on every channel
- ♦ Pre-fader and post-fader aux sends; stereo aux return

Includes:

- ♦ MultiMix 10 Wireless
- ♦ Power Supply
- ♦ Quickstart Guide
- ♦ Safety & Warranty Manual

**EVID 6.2- Dual 6" 2-way surface-mount
loudspeaker**
City Hall- Wall Mounted



Key Features:

- Line-array enhanced coverage control
- Organic, unobtrusive shape
- Strong-Arm-Mount™ for easy, flexible aiming
- Full-bandwidth overload protection
- Weather resistant - Conforms to Mil Spec 810 and IEC 529 IP 34
- Dual 6-inch LF transducers for extended bass and greater power handling and output
- Ti direct-radiator HF transducer, Neodymium structure
- High sensitivity
- Magnetically shielded
- Zinc-plated grilles
- Transformer Versions



Technical Specifications:

Frequency Response ¹ (-10 dB)	62 Hz - 20 kHz
Power Handling ²	300W Cont. Prog./600W Peak
Sensitivity ³	94 dB, 1W/1m
Impedance	8 ohms
Max SPL	118 dB
Horizontal Coverage ⁴	100°
Vertical Coverage ⁴	80°
Crossover Frequency	1.6 kHz
LF Transducer	2 x 6" (100 mm)
HF Transducer	1" (25 mm)
Protection	Full System
Weather Resistance	Meets Mil Spec 810 humidity, salt spray, temperature and UV, and IEC 529 IP 34 splashproof ratings
Swing x Rotation	100° x 90°
Terminals	Phoenix Connector
Enclosure Material	ABS (paintable)
T* Version Wattage Taps	70V: 7.5 W 70V/100V: 15W, 30W, 60W, 8 ohm bypass
Dim (H x W x D)	16.5" x 9" x 11.75" (419 mm x 228 mm x 298 mm)
Net Weight (each)	12 lbs (5.3kg)
Shipping Weight (pair)	27 lbs (12.3 kg)
Included Accessories	SAM™, hex key
¹ Half Space (wall mounting) ² Continuous Program Rating: 3 dB greater than continuous pink noise rating (IEC-shaped pink noise with 6dB crest factor) ³ Avg: Half Space (wall mounting) ⁴ When mounted with long axis in vertical plane	

General Description:

The EVID 6.2 is an extended-range loudspeaker ideal for indoor and outdoor applications requiring high-quality sound. Its extended range and smooth bass provide ample SPL levels in larger environments such as shopping malls, sports bars, health clubs, and so on.

The 6.2's three-dimensional elliptic baffle symmetrically locates the 1" Ti direct radiator high-frequency element with a Coherent Coverage Waveguide in front of and between the 6" low-frequency drivers. The careful shaping, location, and 10° splaying of the LF units provide coverage control by the resulting line array. Lobing is controlled by physically "shadowing" the LF transducers from each other over the bandwidth where they would normally exhibit interference. EVID's mounting system provides greater range of aiming angles in both horizontal and vertical planes than other types. The curved grille features designed-in weather resistance and a hidden leash for safety.

All models are available in black or white, and can easily be painted to match the décor. Transformer versions are also available for constant voltage systems.

Gator 10X12 PU Pop-Up Console Rack Case - 10 Space Top and 12 Space Front and Rear Rackable Audio Equipment *Outdoor Audio Equipment on Rolling Cart*





(7)

10U Top, 12U Side Road Rack Case

UPC 716408505664**MODEL** G-TOUR 10X12 PU

COLOR	Black
WEIGHT	99.23 lbs
HINGES	-
WHEELS	Casters
ATA ACCEPTED	Y
LOCKABLE	No
HANDLES	4 Springloaded
LATCHES	8 Recessed Twist
WATER RESISTANCE	Gasket in Lid

Interior Dimensions

Length
16.25"

Width 19"

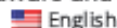
Height 21"

FEATURES

9mm Plywood Construction with Laminated Exterior

Red Recessed Twist Latches and Spring-Loaded
Rubber-Gripped Handles

Heavy-Duty Commercial Grade Plated Hardware and
Reinforced Ball Corners



English

Denon CD/Media Player with Bluetooth®/USB/SD/Aux and AM/FM Tuner



DN-300Z

Media Player with Bluetooth™ Receiver and AM/FM Tuner



Expects the unexpected.

Combining the best of disc, wireless, and solid state media playback, the Denon Professional DN-300Z is an all-in-one audio player you can count on when the whole room is listening. Ideal for FOH, education, music and rehearsal studios, houses of worship, restaurants and more, it has an answer to every request - all consolidated into a compact 1RU design. Extending Denon Professional's dedication to powerful solutions that are easy-to-use, the DN-300Z puts the media of both today and tomorrow into a format accessible to any user.

Building on nearly three decades of producing world-class media playback and distribution devices, the DN-300Z is the piece of mind clients and installers demand. In a space-saving single rackmount chassis, DN-300Z provides access to all popular audio playback formats including Bluetooth wireless and AM/FM radio.

Even more, the DN-300Z makes no sacrifices when it comes to usability or reliability. This versatile solution is much more than a collection of format players stuffed into a 1RU box - it was thoughtfully developed for intuitive use in high-pressure scenarios such as corporate presentations, education, houses of worship, and live events.

The front panel's backlit LCD screen provides at-a-glance status of playback modes and content, providing clear readouts to even the most novice user. Designed to adapt to any scenario, switching formats on the fly has never been easier. Media types and their respective controls are grouped together so users will never have to dive through deep menus or use the instruction manual to perform basic functions. Direct access to CD tracks, global transport controls (play/pause/search), and a rotary-push encoder translate to fast, hands-on command when you need to get to your content.

...continued on next page



Rear panel

www.denonpro.com

Features

- Super-fast loading, slot-in CD mechanism
- Supports removable USB thumb and HDDs, SD/SDHC cards
- Wireless audio playback from devices via Bluetooth™
- Plays CD, MP3, WAV, and AAC files
- 3.5mm Aux-In for audio playback of other devices
- AM/FM Tuner w/ dedicated audio out for multi-room use
- Unbalanced combi audio output
- 10-key direct track access
- Random, Repeat One, Repeat All, and continuous play modes
- Folder only and All play modes
- IR controllable with included, compact remote
- 1RU chassis with removable rack ears
- Detachable IEC-weighted AC Inlet
- 100-220v switching power supply

All information subject to change without notice.

Sennheiser Wireless Microphone System

Cardioid, dynamic wireless system for singers or presenters





evolution wireless G4
ew 100 G4-835-S | ew 100 G4-845-S |
ew 100 G4-865-S | Vocal Set



Versatile wireless systems for those who sing, speak or play instruments with up to 42 MHz tuning bandwidth in a stable UHF range and fast, simultaneous setup of up to 12 linked systems.

State-of-the-art live sound featuring Sennheiser's renowned e 835, e 845 and e 865 capsules on a lightweight aluminum transmitter with integrated mute switch.

FEATURES

- Engineered for professional live sound: Rugged all-in-one wireless system for singers and presenters.
- State-of-the-art live sound featuring Sennheiser's renowned e 835, e 845, e 865, e 935, e 945 capsules on a lightweight aluminium transmitter with integrated mute switch
- True diversity half-rack receiver in a full-metal housing with intuitive LCD display for full control
- Easy and flexible wireless synchronization between transmitter and receiver via Infrared
- Fast frequency allocation for up to 12 receivers via new linking functionality
- Up to 20 compatible channels
- Up to 42 MHz bandwidth with 1680 selectable frequencies, fully tunable in a stable UHF range
- Transmission Range: up to 100 meters / 300 feet
- High RF output power (up to 30 mW) depending on country regulations

DELIVERY INCLUDES

- EM 100 G4 true diversity receiver
- SKM 100 G4-S handheld transmitter
- MMD 835-1 microphone head (835-S variants only)
- MMD 845-1 microphone head (845-S variants only)
- MME 865-1 microphone head (865-S variants only)
- GA 3 rackmount set
- MZQ 1 microphone clamp
- power supply
- 2 AA batteries
- 2 rod antennas
- RJ 10 cable
- quick guide
- safety guide
- manufacturer declaration sheet
- frequency supplement sheet

KLR Series high-efficiency, high-power amplifier





5 Year Warranty



20k Rated*



KLR uses Neutrik® Components



ASHLY

KLR2000
KLR3200
KLR4000
KLR5000



KLR SERIES Two-Channel, High-Performance Power Amplifiers

The KLR Series are lightweight, high-performance amplifiers incorporating the latest technologies delivering quality and value at an affordable price. Whether your application is professional audio or fixed performance installation, KLR amplifiers are optimized to provide reliable audio performance with sonic perfection.

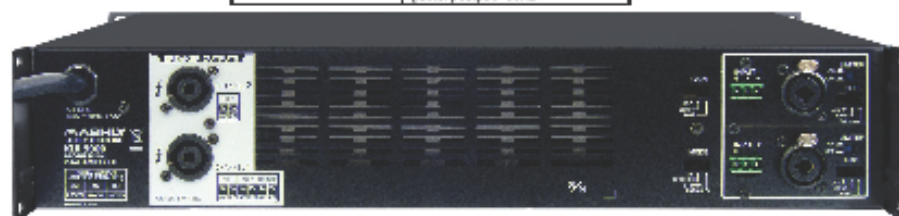
Covering a power range from 1000 to 2500 Watts per channel at 2 Ohms the KLR-2000, KLR-3200, KLR-4000 and KLR-5000 are perfectly suited for a wide range of sound reinforcement. All four KLR amplifiers are optimized to deliver high levels of sustained power, extraordinary audio performance, and road-proven reliability into 2, 4, or 8 Ohm loads and are housed in a uniform, rugged 2RU chassis. Each KLR amplifier uses a switch mode power supply which assures you of flawless lows, punchy mids and pristine highs. The output topology of the KLR-2000 is Class-AB, while the KLR-3200, 4000, and 5000 are a 2-step Class-H design.

KLR Features:

- Rated for 2 Ohms operation
- Balanced inputs via 3-pin Euroblock
- Combo XLR/TRS connectors
- Neutrik® speakON® type output connectors
- Switch-mode power supply with extensive protection circuitry
- On/off limiter switch
- Forced-air cooled (front-in, rear-out)
- Removable dust filters, easy to clean
- Front-mounted attenuators
- Removable amp handles for permanent installation
- Optional locking front panel volume knobs
- Safety/Compliance: cCSAus, CE, FCC, RoHS

Specifications	Note: 0dBu = 0.775 VRMS
Frequency Response (1W @ 8 Ohms)	20Hz–20kHz (+0.3dB) 5Hz–70kHz (–3dB down point)
Damping Factor	>380 [200Hz @ rated power @ 8 Ohms]
THD (20Hz–20kHz)	10dB below rated output @ 4 Ohms <0.05%
Input Impedance	12k Ohm, balanced
Max Input Level	+23dBu
HPF	30Hz, 50Hz, Off (12dB/Oct)
Amplifier Protection	Output Overcurrent, DC Output, Chassis Temperature, Mains Breaker (KLR-5000 uses internal Mains fuse)
Operating Temp/Humidity	–10°C to +40°C/Humidity: 0% to 90%
Front Panel	
Airflow/Cooling	Front-to-Rear, Variable Speed Fan
Front Panel Indicators	Protection/Clip, Signal, Power
Attenuators	Front Panel (each channel)
Rear Panel	
Input Connectors (each Ch)	3-pin Euroblock, XLR, 1/4" TRS Phone Jack
Output Connectors	4-pin SpeakON® type (each channel)
Power Cable Connector	3-prong NEMA 5–15, 5–20 for KLR-5000
Weights, Dimensions & Power	
Dimensions	19" W x 3.5" H x 16" D (482mm x 88mm x 407mm)
Unit Weight	KLR-2000: 26.2lbs (11.9kg) KLR-3200: 26.4lbs (12kg) KLR-4000: 26.6lbs (12kg) KLR-5000: 28lbs (12.7kg)
Shipping Weight	KLR-2000: 33lbs (15kg) KLR-3200: 33lbs (15kg) KLR-4000: 33lbs (15kg) KLR-5000: 35lbs (16kg)
Power Requirements	120VAC or 240VAC, ±10% (factory set) 50–60Hz

KLR Models	2000	3200	4000	5000
Max Output Power: Per Channel, 20Hz–20kHz, 1%THD, Both Channels Driven				
2 Ohms	1,000W	1,600W	2,000W	2,500W
4 Ohms	600W	1,000W	1,400W	1,700W
8 Ohms	350W	650W	850W	1,000W
Bridge Mode, 20Hz–20kHz, 1%THD				
4 Ohms	2,000W	3,200W	4,000W	5,000W
Constant Voltage Options: Per Channel, 20Hz–20kHz, 1% THD				
70V	—	800W*	—	—
Line Current Draw: 120VAC 60Hz, All Channels Driven @ 4 Ohms				
Idle	0.99A	0.92A	1.05A	1.14A
1/8th Power (Pink Noise)	9.7A	11.4A	14.0A	17.5A
1/3 Power (Sine Wave)	14.9A	16.6A	19.8A	24.7A
Thermal Dissipation: BTU/hr, All Channels Driven				
Idle	164	136	171	215
1/8th Power (Pink Noise)	1876	2063	2489	3111
1/3 Power (Sine Wave)	2880	3001	3516	4395
Additional Specs				
Signal-to-Noise (20Hz–20kHz, unweighted)	>108dB	>109dB	>109dB	>110dB
Input Gain Switch	1V, 20dB, 26dB	1V, 26dB, 32dB	1V, 26dB, 32dB	1.4V, 26dB, 32dB
Output Circuitry	Class AB	2-Step Class H	2-Step Class H	2-Step Class H



* The KLR 3200 can also be used as a two-channel 70V distributed output amplifier providing up to 800W per channel.
©2014 All features, specifications and graphical representations are subject to change without notice.

DS-0615

Volume Control Plate- Will be Located in City Hall IT Room Rack to Control Audio Zones Around City Hall





ENTERTAINMENT SYSTEMS



**AUDIO ADDITIONS
CITY OF WILDWOOD
PARKS & RECREATION
WILDWOOD, FLORIDA
09/19/2022
REVISION - 2**



REVISION - 2

AUDIO ADDITIONS

SMPL Systems is very pleased to be invited to provide our revised proposal for the Design, Engineering and Installation for the Audio Additions at the City of Wildwood, Florida City Hall, location. The options for consideration based on the following information requested by the client:

- 1) Design, procurement, and installation of required a speaker system to provide Background, Paging, Public Address & Live Performance.
- 2) Installation of peripheral equipment/supporting equipment in addition:
 - a. Bluetooth transmitter & receiver system
 - b. Allowing for an expanded system

As the scope of this project is limited, our proposal is associated with a single design phase that will provide a complete useable audio system for this option. A drawing package of system drawings will be created to reflect the added system.

As per the request of the owner/client – The design concept will allow for a wide variety of activities to utilize the system. This is a revised proposal based on conversations during the site survey conducted and real-time client input.

SMPL Systems provide a wide range of expertise, creativity and experience in audiovisual design and consulting. Where we stand apart is in the way that creative technological concepts are applied and executed. We always provide our clients with service and delivery targeted to exceed expectations, create solutions that integrate form and function, and to deliver the best experience for the client.

SMPL will perform the design relating to the evaluation and selection of the most economical audio systems for this project, keeping in mind the direction and desires of the client. We will design the systems to support today's wants and needs and to accommodate future expansion and functionality.

During the design phase, the design engineer stringently oversees the process of equipment selection, layout and projected integration challenges. The team develops the schedule, manages based upon it and reports weekly to the client representative on the progress of the project. Design is the most critical point of the project because accuracy at this phase will result in time savings, quality assurance and costs reductions.

This system is based on communications with the client and additional requirements.

OVERALL

The Scope of Work shall include all services necessary to provide a complete design of the Audiovisual Systems for implementation.

SMPL Systems will:

- Work closely and collaborate with Owner, and other pertinent team members on the overall design of the scope of work.
- Prepare audiovisual equipment layout drawings and equipment specifications for Owner's review.
- Coordinate Audiovisual and Interactive design work with Architect's design work including but not limited to:
 - The coordination of all electrical supply locations, communications/low voltage cabling, HVAC device locations, fixed building elements, ceiling, lighting, furniture and millwork.
- Verify and comment on site conditions as required.
- Provide Auto Cad drawings of the Audiovisual Design.
- Provide coordination with other systems as required.
- Follow the design review process established by the Owner/Client.

SCOPE:

AUDIO SYSTEM:

This system will include premium surface mounted speakers as well as performance speakers coupled with a higher output amplifier and full Digital signal processor (DSP) to better tune the signal inputs and outputs.

This system will include the higher end Soundscape ATS-Bollard speakers coupled with a higher output amplifier and routed through the DSP to better tune the signal inputs and outputs. The amplifier will allow the speakers to be set in pairs to better tune them for the areas they will be set.

This system will include a dual digital microphone system with higher end handheld wireless microphones.

- This will allow 2 microphones to be utilized simultaneously and will have a better buffer from interference due to a more powerful antennae system.

The system will include both an audio input and Bluetooth Dante system to facilitate extended usage which will be in an outdoor location coordinated with the owner/client.

A touch screen control system located at the rack location. This will allow the user to have more precise control over the systems.

All equipment will be housed in a premium mobile furniture rack.

ASSUMPTIONS & EXCLUSIONS:

1. It is assumed that labor is as stated in the attached proposal only. No verbal or assumed differences apply.
2. It is assumed that F.B.O = Furnished by Owner (or GC)
3. It is assumed Owner's Electrical Engineer will specify conduit sizes and routing. They should base their design on requirements provided by A/V Contractor.
4. It is assumed that all electrical work required will be furnished by the owner.
5. It is assumed that all structural engineering and certification will be F.B.O and any costs incurred with needing PE stamped drawings shall be reimbursed by owner.
6. It is assumed that Sales/Use Tax is not included with the proposal, however, may be added as

necessary.

7. It is assumed that the equipment list will be conceptual and may be revised during the system integration process. Every effort will be made to ensure that the final design cost does not vary from the budgeted value.
8. It is assumed that any costs for mock-ups, including hardware, labor and shipping are excluded from this proposal and will be handled on a case-by-case basis.
9. It is assumed that Owner will be responsible for providing "clean power", an air conditioned and dust-free environment for A/V systems as needed.
10. It is assumed that prices are valid for 30 days from date on proposal.
11. The software to operate the system is included in the costs.
12. It is assumed that property is responsible for all wall penetrations from inside to outside the building

Reimbursables:

1. It is assumed that all expenses for travel that are not listed within the proposal will be reimbursable by the Owner or Client at cost.
2. All permitting and inspection costs will be billed to the owner/client at cost.

CONCLUSION

SMPL Systems has developed its business and reputation on delivering on all accounts and standing behind our designs, product and workmanship with excellent service and dedication. Those commitments result in a great long-term relationship and satisfaction of ownership.

Quality and reliability are not a goal, they are a requirement. SMPL has built its client satisfaction record on continuously finding solutions to every challenge and never settling for less than excellence from its associates.

The design team has a diverse body of experience and background in the audiovisual and entertainment business, and its reputation is founded on the concept of delivering the highest quality services with the most highly trained, dedicated, resourceful talent. SMPL Systems achieves its objectives by putting the needs of the Client first, and by being fair and honest.

SMPL Systems mission is to direct and verify quality control during the design and integration process. Good quality assurance procedures enable the design team to provide service, which exceeds Client expectations and surpasses industry standards.

Item	Qty	Make	Model	Description	Notes	System Price	
		AUDIO SYSTEMS					
	12	Soundscape	ATS-BOLLARD	Omni-directional outdoor speaker - 5.25" Inch, Two Way -with 360 Degree Coverage	ea		
	6	Klipsch	CA-650	6.5" 2-Way All-weather Surface Mount Speaker	ea		
	6	Community	W2-2W8	TWO-WAY DUAL 8-INCH FULL-RANGE WEATHER-RESISTANT LOUDSPEAKER	ea		
	1	Shure	ULXD4D - G50	Dual-Channel Digital Wireless System	ea		
	2	Shure	UA860V	Omnidirectional Antenna	ea		
	2	Shure	ULXD2/B58	Digital Handheld Transmitter - Beta 58 Capsule	ea		
	1	QSC	Core 8 Flex	Digital Signal Processor	ea		
	1	QSC	CX-Q 4k8	Multi-Channel Amp	ea		
	2	QSC	MP-A40V	4-CH FlexAmp 70V	ea		
	1	QSC	TSC-50-G3	5" Network Toch Screen Controller	ea		
	1	QSC	TSC-50t-G3	Table top mounting accessory for TSC-50W-G3	ea		
	1	Netgear	GS108PP-100NAS	8-Port Network Switch - Dante	ea		
	1	QSC/Attero Tech	D2i	Single Gang Dante	ea		
	1	QSC/Attero Tech	unD6IO-BT	Bluetooth Reciver - Dante	ea		
	1	Lowell	LWSR-1022	Wall mounted Equipment Rack	ea		
	1	W Box Technologies	OE-RCKMT1000	Battery Back Up 1000	ea		
	2	Windy City Wire	723110VNQ	14-02 UNS STR DB TC Quad	1000 ft		
	1	Windy City Wire	556600-110A	23-4P UNS SOL CMP C6A Blk Jkt	500 ft		
	1	Windy City Wire	RG8-BLK	RG8U 88%TCB 9.5 SOL PVC Blk	500 ft		
	1	SMPL	Custom	Misc. Wires & Connectors/Hardware	Lot		
TOTAL						\$34,407.40	
2		SMPL Services					
	4	SMPL	Project Management Services				
	10	SMPL	Engineering				
	10	SMPL	Control Software programming				
	10	SMPL	Rack Fabrication				
	45	SMPL	Installation				
	2	SMPL	System Commissioning				
	1	SMPL	Project Final Deliverables				
82		TOTAL					\$9,048.00
3		Other Charges that may be applicable :					
	1	SMPL	Freight	Shipping and Handling	5.0%		
	1	SMPL	Travel	Travel Expenses /Per Diem			
						\$2,720.37	
Net Contract Total							
4		1	SMPL	Sales Taxes	FLORIDA	NOT INCLUDED	
	1	SMPL	Warranty	Warranty Services	2.0%	\$688.15	
Price to Customer						\$46,863.92	

Quote Acceptance:

Acceptance Date: _____

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: Road Closure Request for San Pedro Maldonado Mission Event

REQUESTED ACTION: Staff recommends approval.

CONTRACT: Vendor/Entity:
Effective Date: Termination Date:
Managing Division/Department:

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

Staff received the attached letter from Reverend Gianni Agostinelli of the San Pedro Maldonado Mission. The church is holding a celebration on December 11, 2022 from 8am to 8pm, and is requesting the temporary closure of Wonders Street between US 301 and Gamble St. In previous years, the Commission has approved this request. If approved this year, the Police Department and Parks & Recreation will be notified to coordinate barricading the street for the event.



San Pedro Maldonado Mission

210 Wonders St., Wildwood, FL 34785
(352) 787-9208

September 5, 2022

Mr. Jason F. McHugh
City Manager
City Hall 100 N Main Street
City of Wildwood
Wildwood, FL 34785

Dear Mr. McHugh:

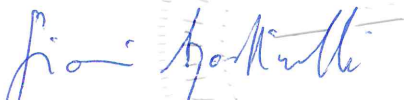
The congregation of San Pedro Maldonado is currently planning for the fourth annual Our Lady of Guadalupe Celebration to be held Sunday, December 11, 2022 from 8:00am to 8:00pm.

Prior to the service, in a reenactment of Mary's apparitions to St. Juan Diego, the congregation gathers outside the church and process around the church grounds and into the sanctuary. After the Holy Mass the congregation will gather outside the church for some traditional and folkloric dances and activities.

Because many families with small children participate in this celebration each year, we respectfully request the temporary closure of Wonders Street between U.S. Highway 301 and Gamble Street from 8:00am to 8:00pm on December 11, 2022.

I have asked Mr. Roberto Canals to coordinate the necessary permissions and ensure the compliance with any prerequisites and stipulations the City may require in order to favorably consider this request. You and your staff may contact Roberto at (352) 396-5842

Sincerely,



Rev. Gianni Agostinelli, Pastor

CITY COMMISSION OF THE CITY OF WILDWOOD

EXECUTIVE SUMMARY

SUBJECT: Property Acquisition for Oak Grove Village Drainage Improvements

REQUESTED ACTION: Staff requests direction from the City Commission.

CONTRACT:

Effective Date:	Vendor/Entity:
Termination Date:	
Managing Division/Department:	

BUDGET IMPACT: Component of CIP project budgeted in FY23.

HISTORY/FACTS/ISSUES:

Oak Grove Village Mobile Home Park is known to have flooding issues during high water events. The City has budgeted \$900,000 in FY23 to undergo mitigation efforts to rectify the known hazard. The City's engineer, Kimley Horn, has analyzed the area for potential site locations and also provided an OPC (attached) on the project of \$864,000, not including property acquisition. The ideal location is a property owned by Tom Campbell. Mr. Campbell has indicated a willingness to sell the property to the City at the appraised price. He has acquired an appraisal of the property which indicates that the property is worth \$95,000. The property includes a mobile home, which is currently empty but generally has a renter living in it. Mr. Campbell needs clear direction from the City as to whether it wants to purchase the property, as well as the timing of the purchase, so that he can decide on whether to rent the property. The property appraisal is attached for review.

RESIDENTIAL APPRAISAL REPORT

SUBJECT	Property Address: 923 Village Dr		City: Wildwood		State: FL		Zip Code: 34785	
	County: Sumter		Legal Description: BEG 90.18 FT N OF SW COR OF SE 1/4 OF NE 1/4 OF SE 1/4 FOR POB THENCE E 95 FT N 45.09 FT W 95 FT S 45.09 FT TO POB MANULKI N MH ESTATES					
	Tax Year: 2021		R.E. Taxes: \$ 506		Assessor's Parcel #: G07F011		Borrower (if applicable): -	
	Current Owner of Record: Thomas Campbell		Occupant: ☐ Owner ☐ Tenant ☒ Vacant ☒ Manufactured Housing					
ASSIGNMENT	Project Type: ☐ PUD ☐ Condominium ☐ Cooperative ☐ Other (describe)		HOA: \$ 0		☐ per year ☐ per month			
	Market Area Name: Manulkin MH Estates		Map Reference: 45540		Census Tract: 9113.01			
	The purpose of this appraisal is to develop an opinion of: ☒ Market Value (as defined), or ☐ other type of value (describe)							
	This report reflects the following value (if not Current, see comments): ☒ Current (the Inspection Date is the Effective Date) ☐ Retrospective ☐ Prospective							
MARKET AREA DESCRIPTION	Approaches developed for this appraisal: ☒ Sales Comparison Approach ☐ Cost Approach ☐ Income Approach (See Reconciliation Comments and Scope of Work)							
	Property Rights Appraised: ☒ Fee Simple ☐ Leasehold ☐ Leased Fee ☐ Other (describe)							
	Intended Use: Determine Market Value							
	Intended User(s) (by name or type): Thomas Campbell							
SITE DESCRIPTION	Client: Thomas Campbell		Address: 923 Village Drive, Wildwood, FL 34785					
	Appraiser: Jamie Wooten		Address: 36344 Via Marcia, Fruitland Park, FL 34731					
	Location: ☐ Urban ☒ Suburban ☐ Rural		Built up: ☒ Over 75% ☐ 25-75% ☐ Under 25%		Growth rate: ☐ Rapid ☒ Stable ☐ Slow		Property values: ☐ Increasing ☒ Stable ☐ Declining	
	Demand/supply: ☒ Shortage ☐ In Balance		Marketing time: ☒ Under 3 Mos. ☐ 3-6 Mos. ☐ Over 6 Mos.		Predominant Occupancy: ☐ Owner ☐ Tenant ☐ Vacant (0-5%) ☐ Vacant (>5%)		One-Unit Housing: PRICE (\$000) AGE (yrs) 51 Low 7 250 High 64 92 Pred 31	
IMPROVEMENTS	Present Land Use: One-Unit 90% 2-4 Unit 1% Multi-Unit 1% Comm'l 5% Vacant 3%		Change in Land Use: ☒ Not Likely ☐ Likely * ☐ In Process * * To: _____					
	Market Area Boundaries, Description, and Market Conditions (including support for the above characteristics and trends): shortage. A 3 month or less marketing period. There are a variety of financing programs available. Boundaries..North: Lake Miona, South: Warm Springs Avenue, East: Lake Deaton, West: I-75.							
	Dimensions: Refer to plat map							
	Zoning Classification: Res							
Site Area: 4,095 sf								
Description: Residential								
Zoning Compliance: ☒ Legal ☐ Legal nonconforming (grandfathered) ☐ Illegal ☐ No zoning								
Are CC&Rs applicable? ☐ Yes ☒ No ☐ Unknown Have the documents been reviewed? ☐ Yes ☐ No Ground Rent (if applicable) \$ /								
Highest & Best Use as improved: ☒ Present use, or ☐ Other use (explain)								
Actual Use as of Effective Date: Manufactured Home Use as appraised in this report: Manufactured Home								
Summary of Highest & Best Use: The appraiser has concluded the highest and best use of the property, as improved, to be its current use. This opinion is supported by the fact that the improved property is physically possible (see improvements description and pictures), is a legal use (see site section/zoning), is financially feasible (see sales comparison approach for sales of similar properties) and is considered to be the maximally productive use (improvements contribute positively to the site and it would not be feasible to change them to a more productive use without substantial capital improvement).								
Utilities		Public Other Provider/Description		Off-site Improvements Type Public Private		Topography Flat		
Electricity	☒	☐		Street	ASPHLT/BLKTOP	☒	☐	
Gas	☐	☐	none	Curb/Gutter		☐	☐	
Water	☒	☐		Sidewalk		☐	☐	
Sanitary Sewer	☒	☐		Street Lights		☐	☐	
Storm Sewer	☒	☐		Alley	none	☐	☐	
Other site elements: ☒ Inside Lot ☐ Corner Lot ☐ Cul de Sac ☐ Underground Utilities ☐ Other (describe)								
FEMA Spec'l Flood Hazard Area ☐ Yes ☒ No FEMA Flood Zone X		FEMA Map # 12119C0131D		FEMA Map Date 9/27/2013				
Site Comments: I have not checked the land records for recorded easements and have reported only apparent easements, encroachments and other apparent adverse conditions. No off site improvements noted at time of inspection.								
General Description		Exterior Description		Foundation		Basement		
# of Units	1 ☐ Acc.Unit	Foundation	Blk&Beam/AVG	Slab		Area Sq. Ft.	0 ☒ None	
# of Stories	1	Exterior Walls	METAL SID/AVG	Crawl Space	X	% Finished	0	
Type	☒ Det. ☐ Att. ☐	Roof Surface	Metal/AVG	Basement		Ceiling		
Design (Style)	DT1;Mnfrtd	Gutters & Dwnspts.	ALUM/AVG	Sump Pump	☐	Walls		
☒ Existing ☐ Proposed ☐ Und.Cons.		Window Type	DBL HUNG/Good	Dampness	☐	Floor		
Actual Age (Yrs.)	36	Storm/Screens	Nylon/Good	Settlement		Outside Entry		
Effective Age (Yrs.)	20			Infestation				
						Heating		
						Type FWA		
						Fuel Electric		
						Cooling CAC		
						Central X		
						Other		

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RESIDENTIAL APPRAISAL REPORT

Campbell

File No.: 0001582

DESCRIPTION OF IMPROVEMENTS (continued)	Interior Description	Appliances	Attic ☒ None	Amenities	Car Storage ☐ None
	Floors Vinyl/AVG	Refrigerator ☒	Stairs ☐	Fireplace(s) # 0	Garage # of cars (4 Tot.)
	Walls Plywood/AVG	Range/Oven ☒	Drop Stair ☐	Woodstove(s) # 0	Attach. _____
	Trim/Finish Wood/paint/AVG	Disposal ☐	Scuttle ☐	Patio Screen _____	Detach. _____
	Bath Floor Vinyl/AVG	Dishwasher ☐	Doorway ☐	Deck None _____	Blt.-In _____
	Bath Wainscot FBRGLS/AVG	Fan/Hood ☐	Floor ☐	Porch Covered _____	Carport 2
	Doors Wood/AVG	Microwave ☒	Heated ☐	Fence None _____	Driveway 2
	Washer/Dryer ☐	Finished ☐	Pool None _____	Surface _____	
Finished area above grade contains: 4 Rooms 2 Bedrooms 2.0 Bath(s) 785 Square Feet of Gross Living Area Above Grade					
Additional features: None					

Describe the condition of the property (including physical, functional and external obsolescence):

SALES COMPARISON APPROACH TO VALUE (if developed)

☐ The Sales Comparison Approach was not developed for this appraisal.

FEATURE	SUBJECT	COMPARABLE SALE # 1		COMPARABLE SALE # 2		COMPARABLE SALE # 3	
		DESCRIPTION	+ (-) \$ Adjust.	DESCRIPTION	+ (-) \$ Adjust.	DESCRIPTION	+ (-) \$ Adjust.
Address	923 Village Dr Wildwood, FL 34785	807 Water Oak St Wildwood, FL 34785		5561 Williamsburg Ln Wildwood, FL 34785		3395 County Road 510A Wildwood, FL 34785	
Proximity to Subject		0.07 miles NE		1.45 miles SE		2.92 miles S	
Sale Price	\$	\$ 63,900		\$ 83,000		\$ 135,000	
Sale Price/GLA	\$ /sq.ft.	\$ 88.75 /sq.ft.		\$ 98.81 /sq.ft.		\$ 146.10 /sq.ft.	
Data Source(s)		MFRMLS #G5053831;DOM 4		MFRMLS #G5056332;DOM 8		MFRMLS #G5050682;DOM 67	
Verification Source(s)		Doc #4276-725/Realist		Doc #4328-403/Realist		Doc #4275-338/Realist	
VALUE ADJUSTMENTS	DESCRIPTION	DESCRIPTION	+ (-) \$ Adjust.	DESCRIPTION	+ (-) \$ Adjust.	DESCRIPTION	+ (-) \$ Adjust.
Sales or Financing		ArmLth		ArmLth		ArmLth	
Concessions		Cash;0		Cash;0		Cash;0	
Date of Sale/Time		s05/22;c04/22		s08/22;c06/22		s04/22;c03/22	
Rights Appraised	Fee Simple	Fee Simple		Fee Simple		Fee Simple	
Location	Residential	Residential		Residential		Residential	
Site	4,095 sf	4524 sf		5000 sf		39640 sf	-15,000
View	TYP	TYP		TYP		TYP	
Design (Style)	DT1;Mnfctrd	DT1;Mnfctrd		DT1;Mnfctrd		DT1;Mnfctrd	
Quality of Construction	Average	Average		Average		Average	
Age	36	46		39		36	
Condition	Good	Average	+10,000	Good		Good	
Above Grade	Total Bdrms Baths	Total Bdrms Baths		Total Bdrms Baths		Total Bdrms Baths	
Room Count	4 2 2.0	4 2 1.0	+3,000	4 2 2.0		5 2 2.0	0
Gross Living Area	785 sq.ft.	720 sq.ft.		840 sq.ft.		924 sq.ft.	-4,200
Basement & Finished	0sf	0sf		0sf		0sf	
Rooms Below Grade							
Functional Utility	Average	Average		Average		Average	
Heating/Cooling	FWA/CAC	FWA/CAC		FWA/CAC		FWA/WAC	
Energy Efficient Items	None	None		None		None	
Garage/Carport	2cp2dw	1cp1dw	+2,000	1cp1dw	+2,000	None	+4,000
Porch/Patio/Deck	Screen Patio	Screen Patio		Screen Patio		Covered Patio	0
Fireplaces	None	None		None		None	
Pool Features	No Pool	No Pool		No Pool		No Pool	
Net Adjustment (Total)		☒ + ☐ - \$ 15,000		☒ + ☐ - \$ 2,000		☐ + ☒ - \$ -15,200	
Adjusted Sale Price of Comparables		\$ 78,900		\$ 85,000		\$ 119,800	

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RESIDENTIAL APPRAISAL REPORT

Campbell
File No.: 0001582

SALES COMPARISON APPROACH (continued)

Summary of Sales Comparison Approach While all comparables share many meaningful attributes with the subject property and support the appraised value, Comparable(s) 1,2 and 3 were given the most weight in the final value conclusion as all are recent closed sales of similar size manufactured homes in the area. Due to the lack of sales and listings, sales 2,3 and 4 exceed the 1 mile search radius guidelines. While the unadjusted price range of the comparable sales is greater than 25% of the unadjusted sale price of the lowest comparable sale, the large range was necessary due to the lack of more similar sales and listings. See Addendum.

Indicated Value by Sales Comparison Approach \$ 95,000

TRANSFER HISTORY

My research ☐ did ☒ did not reveal any prior sales or transfers of the subject property for the three years prior to the effective date of this appraisal.

Data Source(s): Realist

1st Prior Subject Sale/Transfer

Analysis of sale/transfer history and/or any current agreement of sale/listing:

Date:

Price:

Source(s): Realist

2nd Prior Subject Sale/Transfer

Date:

Price:

Source(s):

COST APPROACH

COST APPROACH TO VALUE (if developed) ☒ The Cost Approach was not developed for this appraisal.

Provide adequate information for replication of the following cost figures and calculations.

Support for the opinion of site value (summary of comparable land sales or other methods for estimating site value):

ESTIMATED ☐ REPRODUCTION OR ☐ REPLACEMENT COST NEW

Source of cost data:

Quality rating from cost service:

Effective date of cost data:

Comments on Cost Approach (gross living area calculations, depreciation, etc.):

OPINION OF SITE VALUE

DWELLING Sq.Ft. @ \$ = \$

Sq.Ft. @ \$ = \$

Sq.Ft. @ \$ = \$

Sq.Ft. @ \$ = \$

Sq.Ft. @ \$ = \$

Sq.Ft. @ \$ = \$

Garage/Carport Sq.Ft. @ \$ = \$

Total Estimate of Cost-New = \$

Less Physical Functional External

Depreciation = \$()

Depreciated Cost of Improvements = \$

"As-is" Value of Site Improvements = \$

= \$

= \$

Estimated Remaining Economic Life (if required):

Years

INDICATED VALUE BY COST APPROACH

= \$

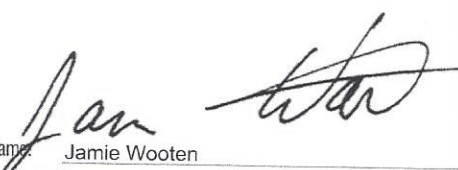
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INCOME APPROACH	INCOME APPROACH TO VALUE (if developed) ☒ The Income Approach was not developed for this appraisal.			
	Estimated Monthly Market Rent \$ _____		X Gross Rent Multiplier _____ = \$ _____	
Summary of Income Approach (including support for market rent and GRM): _____ _____ _____ _____ _____				
PUD	PROJECT INFORMATION FOR PUDs (if applicable) ☐ The Subject is part of a Planned Unit Development.			
	Legal Name of Project: _____ Describe common elements and recreational facilities: _____ _____ _____ _____			
RECONCILIATION	Indicated Value by: Sales Comparison Approach \$ 95,000		Cost Approach (if developed) \$ _____	
	Income Approach (if developed) \$ _____		Final Reconciliation _____ _____ _____ _____	
	This appraisal is made ☒ "as is", ☐ subject to completion per plans and specifications on the basis of a Hypothetical Condition that the improvements have been completed, ☐ subject to the following repairs or alterations on the basis of a Hypothetical Condition that the repairs or alterations have been completed, ☐ subject to the following required inspection based on the Extraordinary Assumption that the condition or deficiency does not require alteration or repair: _____ _____			
	☐ This report is also subject to other Hypothetical Conditions and/or Extraordinary Assumptions as specified in the attached addenda.			
ATTACHMENTS	Based on the degree of inspection of the subject property, as indicated below, defined Scope of Work, Statement of Assumptions and Limiting Conditions, and Appraiser's Certifications, my (our) Opinion of the Market Value (or other specified value type), as defined herein, of the real property that is the subject of this report is: \$ 95,000 , as of: 09/13/2022 , which is the effective date of this appraisal. If indicated above, this Opinion of Value is subject to Hypothetical Conditions and/or Extraordinary Assumptions included in this report. See attached addenda.			
	A true and complete copy of this report contains <u>32</u> pages, including exhibits which are considered an integral part of the report. This appraisal report may not be properly understood without reference to the information contained in the complete report.			
	Attached Exhibits: ☒ Scope of Work ☐ Limiting Cond./Certifications ☐ Narrative Addendum ☒ Photograph Addenda ☒ Sketch Addendum ☒ Map Addenda ☐ Additional Sales ☐ Cost Addendum ☐ Flood Addendum ☐ Manuf. House Addendum ☐ Hypothetical Conditions ☐ Extraordinary Assumptions ☐ _____			
	Client Contact: _____ Client Name: <u>Thomas Campbell</u> E-Mail: _____ Address: <u>923 Village Drive, Wildwood, FL 34785</u>			
SIGNATURES	APPRaiser  Appraiser Name: <u>Jamie Wooten</u> Company: <u>Sun Country R.E. Appraisal Services, Inc</u> Phone: <u>852-434-9699</u> Fax: _____ E-Mail: <u>suncountryappraisals@gmail.com</u> Date of Report (Signature): <u>09/15/2022</u> License or Certification #: <u>Cert. Res. RD7381</u> State: <u>FL</u> Designation: <u>State Certified Residential Appraiser</u> Expiration Date of License or Certification: <u>11/30/2024</u> Inspection of Subject: ☒ Interior & Exterior ☐ Exterior Only ☐ None Date of Inspection: <u>09/13/2022</u>		SUPERVISORY APPRAISER (if required) or CO-APPRAISER (if applicable) Supervisory or Co-Appraiser Name: _____ Company: _____ Phone: _____ Fax: _____ E-Mail: _____ Date of Report (Signature): _____ License or Certification #: _____ State: _____ Designation: _____ Expiration Date of License or Certification: _____ Inspection of Subject: ☐ Interior & Exterior ☐ Exterior Only ☐ None Date of Inspection: _____	

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ADDITIONAL COMPARABLE SALES

Campbell
File No.: 0001582

FEATURE		SUBJECT		COMPARABLE SALE # 4		COMPARABLE SALE # 5		COMPARABLE SALE # 6	
Address 923 Village Dr		Wildwood, FL 34785		5508 Lansing Dr					
Proximity to Subject				1.54 miles SE					
Sale Price		\$		\$ 119,000		\$		\$	
Sale Price/GLA		\$/sq.ft.		\$ 85.49 /sq.ft.		\$/sq.ft.		\$/sq.ft.	
Data Source(s)				MFRMLS #G5060111;DOM 2					
Verification Source(s)				Realist					
VALUE ADJUSTMENTS		DESCRIPTION		DESCRIPTION + (-) \$ Adjust.		DESCRIPTION + (-) \$ Adjust.		DESCRIPTION + (-) \$ Adjust.	
Sales or Financing				Listing					
Concessions									
Date of Sale/Time				c09/22					
Rights Appraised		Fee Simple		Fee Simple					
Location		Residential		Residential					
Site		4,095 sf		6050 sf		0			
View		TYP		TYP					
Design (Style)		DT1;Mnfctrd		DT1;Mnfctrd					
Quality of Construction		Average		Average					
Age		36		40		0			
Condition		Good		Good					
Above Grade		Total Bdrms Baths		Total Bdrms Baths		Total Bdrms Baths		Total Bdrms Baths	
Room Count		4 2 2.0		5 2 2.0		0			
Gross Living Area		785 sq.ft.		1,392 sq.ft.		-18,200		sq.ft.	
Basement & Finished		0sf		0sf				sq.ft.	
Rooms Below Grade									
Functional Utility		Average		Average					
Heating/Cooling		FWA/CAC		FWA/CAC					
Energy Efficient Items		None		None					
Garage/Carport		2cp2dw		1cp1dw		+2,000			
Porch/Patio/Deck		Screen Patio		Screen Patio					
Fireplaces		None		None					
Pool Features		No Pool		No Pool					
Net Adjustment (Total)				☐ + ☒ - \$ -16,200		☐ + ☐ - \$		☐ + ☐ - \$	
Adjusted Sale Price of Comparables				\$ 102,800		\$		\$	

SALES COMPARISON APPROACH

Summary of Sales Comparison Approach



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Supplemental Addendum

File No. 0001582

Borrower/Client				-		File No. 0001582	
Property Address				923 Village Dr			
City		Wildwood		County		Sumter	
				State		FL	
Lender		United Wholesale Mortgage		Zip Code		34785	

REPORT TYPE

This real property appraisal report has been prepared under the Uniform Standards of Professional Appraisal Practice option entitled "Appraisal Report".

SCOPE OF WORKSubject Property Identification:

The appraiser has viewed all readily accessible areas of the dwelling (and any other building structure located on the property). This complete visual inspection is not intended to be the same depth or for the same purpose as a home inspection. The appraiser has viewed the property solely for valuation purposes and to observe property characteristics that a typical purchaser would consider in their decision making process, as well as those items outlined in the assumptions and limited conditions and certification to this appraisal. Personal property was not included in the appraised value.

Sources of Information:

The appraisal is based on the information gathered from public records; viewing of the subject property, neighborhood and comparable properties; and other sources specifically identified in this report. When conflicting information has been discovered, the sources deemed most reliable have been used.

At the request of the client, this appraisal report has been prepared in compliance with the Uniform Appraisal Dataset (UAD) from Fannie Mae and Freddie Mac. The UAD requires the appraiser to use standardized responses that include specific formats, definitions, abbreviations, and acronyms. The appraiser attempted to obtain an adequate amount of information in the normal course of business regarding the subject and comparable properties. Some of the standardized responses required by the UAD, especially those in which the appraiser has not had the opportunity to verify personally or measure, could mistakenly imply greater precision and reliability in the data than is factually correct or typical in the normal course of business. Examples include condition and quality ratings as well as comparable sales and listing data. Not every element of the subject property was viewable and comparable property data was generally obtained from third-party sources. Consequently, this information should be considered an "estimate" unless otherwise noted by the appraiser.

Additional Appraiser Certification

I have performed no prior appraisal services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.

SUBJECT SECTIONLegal Description

-The legal description as shown on pg. 1 of the report is the complete description as found in lake county appraiser site.

Occupancy/Utilities

-At the time of inspection the subject property was occupied and all utilities were on and functioning.

NEIGHBORHOOD - MARKET CONDITIONS

At the time of inspection not enough market sale activity has taken place to reach a conclusion about the effects, if any, regarding COVID-19 a/k/a Coronavirus on the subject market.

EXPOSURE TIME

- A reasonable exposure time for the subject property at the opinion of value indicated is estimated to be the same as the marketing time reported in the neighborhood section on page one of this report.

SITE SECTIONSite Dimensions

-The subject's actual dimensions are not available in the normal course of business. A plat map has been included as supplement in this report.

Site / Accessibility

-The Subject property is accessible year round in all types of weather conditions.

Other Land Use

-The Other Land Use on page 1 is vacant. This does not have a negative impact on the subject's marketability and value.

HIGHEST AND BEST USE

The appraiser has concluded the highest and best use of the property, as improved, to be its current use. This opinion is supported by the fact that the improved property is physically possible (see improvements description and pictures), is a legal use (see site section/zoning), is financially feasible (see sales comparison approach for sales of similar properties) and is considered to be the maximally productive use (improvements contribute positively to the site and it would not be feasible to change them to a more productive use without substantial capital improvement).

SUMMARY OF SALES COMPARISON APPROACHComparable Search Parameters

-In my research for comparables, I used the following parameters sales within a 3 mile radius, within the last 12month, within 600-1500 sq feet.

Industry Guidelines

-Industry guidelines suggest comparable sales be within six months, one mile, and have gross adjustments less than 25%, net adjustments less than 15%, and individual adjustments not exceeding 10%. In this appraisal, these guidelines were not met. the appraiser expanded search criteria to locate the most similar sales and listings.

Supplemental Addendum

File No. 0001582

Borrower/Client	-				
Property Address	923 Village Dr				
City	Wildwood	County	Sumter	State	FL Zip Code 34785
Lender	United Wholesale Mortgage				

Sales Price to list Price Adjustments / Actives & Pendings

-Active/Pending Listings 4 have NOT been adjusted as market as research indicates that sellers are receiving 100% of list price.

Adjusted Price of Comparable Sales/Range Exceeds 25% of lowest sale

- While the adjusted price range of the comparable sales is greater than 25% of the adjusted sale price of the lowest comparable sale, the large range was necessary due to the lack of more similar sales and listings.

APPROACH(ES) TO VALUECost Approach Completed Per Client Request / Income Approach Not Completed

-The appraiser has determined that the sales comparison approach is the most relevant analysis in this assignment and that there is sufficient information to develop a credible opinion of value by this approach alone, however, per client request, the cost approach has been developed. Because there is limited measurable market evidence to support the site value & derivation of total depreciation due to the subject's age, the cost approach, while developed, WAS NOT considered by the appraiser when determining the final estimate of value. Development of the income approach was not part of the scope of work for this assignment, nor was it necessary to develop a credible opinion of value.

USPAP ADDENDUM

Campbell
File No. 0001582

Borrower		-	
Property Address		923 Village Dr	
City	Wildwood	County	Sumter
Lender	United Wholesale Mortgage	State	FL
		Zip Code	34785

This report was prepared under the following USPAP reporting option:

☒ Appraisal Report This report was prepared in accordance with USPAP Standards Rule 2-2(a).

☐ Restricted Appraisal Report This report was prepared in accordance with USPAP Standards Rule 2-2(b).

Reasonable Exposure Time

My opinion of a reasonable exposure time for the subject property at the market value stated in this report is: under 3 Months

Additional Certifications

I certify that, to the best of my knowledge and belief:

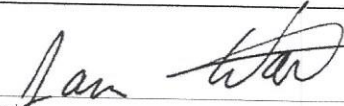
☒ I have NOT performed services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.

☐ I HAVE performed services, as an appraiser or in another capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment. Those services are described in the comments below.

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- Unless otherwise indicated, I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
- I have no bias with respect to the property that is the subject of this report or the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice that were in effect at the time this report was prepared.
- Unless otherwise indicated, I have made a personal inspection of the property that is the subject of this report.
- Unless otherwise indicated, no one provided significant real property appraisal assistance to the person(s) signing this certification (if there are exceptions, the name of each individual providing significant real property appraisal assistance is stated elsewhere in this report).

Additional Comments

APPRAISER:

Signature: 

Name: Jamie Woolen

Date Signed: 09/15/2022

State Certification #: Cert. Res. RD7381

or State License #: _____

State: FL

Expiration Date of Certification or License: 11/30/2024

Effective Date of Appraisal: 09/13/2022

SUPERVISORY APPRAISER: (only if required)

Signature: _____

Name: _____

Date Signed: _____

State Certification #: _____

or State License #: _____

State: _____

Expiration Date of Certification or License: _____

Supervisory Appraiser Inspection of Subject Property:

☐ Did Not ☐ Exterior-only from Street ☐ Interior and Exterior

Assumptions, Limiting Conditions & Scope of Work

Campbell

File No.: 0001582

Property Address: 923 Village Dr

City: Wildwood

State: FL

Zip Code: 34785

Client: Thomas Campbell

Address: 923 Village Drive, Wildwood, FL 34785

Appraiser: Jamie Wooten

Address: 36344 Via Marcia, Fruitland Park, FL 34731

STATEMENT OF ASSUMPTIONS & LIMITING CONDITIONS

- The appraiser will not be responsible for matters of a legal nature that affect either the property being appraised or the title to it. The appraiser assumes that the title is good and marketable and, therefore, will not render any opinions about the title. The property is appraised on the basis

of it being under responsible ownership.

- The appraiser may have provided a sketch in the appraisal report to show approximate dimensions of the improvements, and any such sketch

is included only to assist the reader of the report in visualizing the property and understanding the appraiser's determination of its size. Unless otherwise indicated, a Land Survey was not performed.

- If so indicated, the appraiser has examined the available flood maps that are provided by the Federal Emergency Management Agency (or other

data sources) and has noted in the appraisal report whether the subject site is located in an identified Special Flood Hazard Area. Because the appraiser is not a surveyor, he or she makes no guarantees, express or implied, regarding this determination.

- The appraiser will not give testimony or appear in court because he or she made an appraisal of the property in question, unless specific arrangements to do so have been made beforehand.

- If the cost approach is included in this appraisal, the appraiser has estimated the value of the land in the cost approach at its highest and best

use, and the improvements at their contributory value. These separate valuations of the land and improvements must not be used in conjunction

with any other appraisal and are invalid if they are so used. Unless otherwise specifically indicated, the cost approach value is not an insurance

value, and should not be used as such.

- The appraiser has noted in the appraisal report any adverse conditions (including, but not limited to, needed repairs, depreciation, the presence

of hazardous wastes, toxic substances, etc.) observed during the inspection of the subject property, or that he or she became aware of during the

normal research involved in performing the appraisal. Unless otherwise stated in the appraisal report, the appraiser has no knowledge of any

hidden or unapparent conditions of the property, or adverse environmental conditions (including, but not limited to, the presence of hazardous

wastes, toxic substances, etc.) that would make the property more or less valuable, and has assumed that there are no such conditions and

makes no guarantees or warranties, express or implied, regarding the condition of the property. The appraiser will not be responsible for any

such conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because the

appraiser is not an expert in the field of environmental hazards, the appraisal report must not be considered as an environmental assessment of

the property.

- The appraiser obtained the information, estimates, and opinions that were expressed in the appraisal report from sources that he or she considers to be reliable and believes them to be true and correct. The appraiser does not assume responsibility for the accuracy of such items

that were furnished by other parties.

- The appraiser will not disclose the contents of the appraisal report except as provided for in the Uniform Standards of Professional Appraisal Practice, and any applicable federal, state or local laws.

- If this appraisal is indicated as subject to satisfactory completion, repairs, or alterations, the appraiser has based his or her appraisal report

and valuation conclusion on the assumption that completion of the improvements will be performed in a workmanlike manner.

- An appraiser's client is the party (or parties) who engage an appraiser in a specific assignment. Any other party acquiring this report from the

client does not become a party to the appraiser-client relationship. Any persons receiving this appraisal report because of disclosure requirements applicable to the appraiser's client do not become intended users of this report unless specifically identified by the client at the time of the assignment.

- The appraiser's written consent and approval must be obtained before this appraisal report can be conveyed by anyone to the public, through advertising, public relations, news, sales, or by means of any other media, or by its inclusion in a private or public database.

- An appraisal of real property is not a 'home inspection' and should not be construed as such. As part of the valuation process, the appraiser performs a non-invasive visual inventory that is not intended to reveal defects or detrimental conditions that are not readily apparent. The presence of such conditions or defects could adversely affect the appraiser's opinion of value. Clients with concerns about such potential negative factors are encouraged to engage the appropriate type of expert to investigate.

The Scope of Work is the type and extent of research and analyses performed in an appraisal assignment that is required to produce credible assignment results, given the nature of the appraisal problem, the specific requirements of the intended user(s) and the intended use of the appraisal report. Reliance upon this report, regardless of how acquired, by any party or for any use, other than those specified in this report by

the Appraiser, is prohibited. The Opinion of Value that is the conclusion of this report is credible only within the context of the Scope of Work, Effective Date, the Date of Report, the Intended User(s), the Intended Use, the stated Assumptions and Limiting Conditions, any Hypothetical Conditions and/or Extraordinary Assumptions, and the Type of Value, as defined herein. The appraiser, appraisal firm, and related parties assume no obligation, liability, or accountability, and will not be responsible for any unauthorized use of this report or its conclusions.

Additional Comments (Scope of Work, Extraordinary Assumptions, Hypothetical Conditions, etc.):

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Certifications

Campbell

File No.: 0001582

Property Address: 923 Village Dr City: Wildwood State: FL Zip Code: 34785
 Client: Thomas Campbell Address: 923 Village Drive, Wildwood, FL 34785
 Appraiser: Jamie Wooten Address: 36344 Via Marcia, Fruitland Park, FL 34731

APPRAISER'S CERTIFICATION

I certify that, to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The credibility of this report, for the stated use by the stated user(s), of the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
- Unless otherwise indicated, I have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice that were in effect at the time this report was prepared.
- I did not base, either partially or completely, my analysis and/or the opinion of value in the appraisal report on the race, color, religion, sex, handicap, familial status, or national origin of either the prospective owners or occupants of the subject property, or of the present owners or occupants of the properties in the vicinity of the subject property.
- Unless otherwise indicated, I have made a personal inspection of the property that is the subject of this report.
- Unless otherwise indicated, no one provided significant real property appraisal assistance to the person(s) signing this certification.

Additional Certifications:

DEFINITION OF MARKET VALUE *:

Market value means the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. Buyer and seller are typically motivated;
2. Both parties are well informed or well advised and acting in what they consider their own best interests;
3. A reasonable time is allowed for exposure in the open market;
4. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
5. The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

* This definition is from regulations published by federal regulatory agencies pursuant to Title XI of the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA) of 1989 between July 5, 1990, and August 24, 1990, by the Federal Reserve System (FRS), National Credit Union Administration (NCUA), Federal Deposit Insurance Corporation (FDIC), the Office of Thrift Supervision (OTS), and

Client Contact:	Client Name: Thomas Campbell
E-Mail:	Address: 923 Village Drive, Wildwood, FL 34785
APPRAISER	
	
Appraiser Name: Jamie Wooten	SUPERVISORY APPRAISER (if required) or CO-APPRAISER (if applicable)
Company: Sun Country R.E. Appraisal Services, Inc	Supervisory or Co-Appraiser Name:
Phone: 352-434-9699 Fax:	Company:
E-Mail: suncountryappraisals@gmail.com	Phone: Fax:
Date Report Signed: 09/15/2022	E-Mail:
License or Certification #: Cert. Res. RD7381 State: FL	Date Report Signed:
Designation: State Certified Residential Appraiser	License or Certification #: State:
Expiration Date of License or Certification: 11/30/2024	Designation:
Inspection of Subject: ☒ Interior & Exterior ☐ Exterior Only ☐ None	Expiration Date of License or Certification:
Date of Inspection: 09/13/2022	Inspection of Subject: ☐ Interior & Exterior ☐ Exterior Only ☐ None
	Date of Inspection:

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DEFINITION OF MARKET VALUE: The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby: (1) buyer and seller are typically motivated; (2) both parties are well informed or well advised, and each acting in what they consider their own best interests; (3) a reasonable time is allowed for exposure in the open market; (4) payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and (5) the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions* granted by anyone associated with the sale. (Source: FDIC Interagency Appraisal and Evaluation Guidelines, 2010.)

* Adjustments to the comparables must be made for special or creative financing or sales concessions. No adjustments are necessary for those costs which are normally paid by sellers as a result of tradition or law in a market area; these costs are readily identifiable since the seller pays these costs in virtually all sales transactions. Special or creative financing adjustments can be made to the comparable property by comparisons to financing terms offered by a third party institutional lender that is not already involved in the property or transaction. Any adjustment should not be calculated on a mechanical dollar for dollar cost of the financing or concession but the dollar amount of any adjustment should approximate the market's reaction to the financing or concessions based on the appraiser's judgment.

STATEMENT OF LIMITING CONDITIONS AND CERTIFICATION

CONTINGENT AND LIMITING CONDITIONS: The appraiser's certification that appears in the appraisal report is subject to the following conditions:

1. The appraiser will not be responsible for matters of a legal nature that affect either the property being appraised or the title to it. The appraiser assumes that the title is good and marketable and, therefore, will not render any opinions about the title. The property is valued on the basis of it being under responsible ownership.
2. Any sketch provided in the appraisal report may show approximate dimensions of the improvements and is included only to assist the reader of the report in visualizing the property. The appraiser has made no survey of the property.
3. The appraiser will not give testimony or appear in court because he or she made an appraisal of the property in question, unless specific arrangements to do so have been made beforehand, or as otherwise required by law.
4. Any distribution of valuation between land and improvements in the report applies only under the existing program of utilization. These separate valuations of the land and improvements must not be used in conjunction with any other appraisal and are invalid if they are so used.
5. The appraiser has no knowledge of any hidden or unapparent conditions of the property or adverse environmental conditions (including the presence of hazardous waste, toxic substances, etc.) that would make the property more or less valuable, and has assumed that there are no such conditions and makes no guarantees or warranties, express or implied, regarding the condition of the property. The appraiser will not be responsible for any such conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. This appraisal report must not be considered an environmental assessment of the subject property.
6. The appraiser obtained the information, estimates, and opinions that were expressed in the appraisal report from sources that he or she considers to be reliable and believes them to be true and correct. The appraiser does not assume responsibility for the accuracy of such items that were furnished by other parties.
7. The appraiser will not disclose the contents of the appraisal report except as provided for in the Uniform Standards of Professional Appraisal Practice, and any applicable federal, state or local laws.
8. The appraiser has based his or her appraisal report and valuation conclusion for an appraisal that is subject to satisfactory completion, repairs, or alterations on the assumption that completion of the improvements will be performed in a workmanlike manner.
9. The appraiser must provide his or her prior written consent before the lender/client specified in the appraisal report can distribute the appraisal report (including conclusions about the property value, the appraiser's identity and professional designations, and references to any professional appraisal organizations or the firm with which the appraiser is associated) to anyone other than the borrower; the mortgagee or its successors and assigns; the mortgage insurer; consultants; professional appraisal organizations; any state or federally approved financial institution; or any department, agency, or instrumentality of the United States or any state or the District of Columbia; except that the lender/client may distribute the property description section of the report only to data collection or reporting service(s) without having to obtain the appraiser's prior written consent. The appraiser's written consent and approval must also be obtained before the appraisal can be conveyed by anyone to the public through advertising, public relations, news, sales, or other media.
10. The appraiser is not an employee of the company or individual(s) ordering this report and compensation is not contingent upon the reporting of a predetermined value or direction of value or upon an action or event resulting from the analysis, opinions, conclusions, or the use of this report. This assignment is not based on a required minimum, specific valuation, or the approval of a loan.

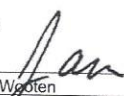
CERTIFICATION: The appraiser certifies and agrees that:

1. The statements of fact contained in this report are true and correct.
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
3. Unless otherwise indicated, I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
4. Unless otherwise indicated, I have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
5. I have no bias with respect to the property that is the subject of this report or the parties involved with this assignment.
6. My engagement in this assignment was not contingent upon developing or reporting predetermined results.
7. My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
8. My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice that were in effect at the time this report was prepared.
9. Unless otherwise indicated, I have made a personal inspection of the interior and exterior areas of the property that is the subject of this report, and the exteriors of all properties listed as comparables.
10. Unless otherwise indicated, no one provided significant real property appraisal assistance to the person(s) signing this certification (if there are exceptions, the name of each individual providing significant real property appraisal assistance is stated elsewhere in this report).

ADDRESS OF PROPERTY ANALYZED:

923 Village Dr, Wildwood, FL 34785

APPRAISER:

Signature: 
Name: Jamie Wooten
Title: State Certified Residential Appraiser
State Certification #: Cert. Res. RD7381
or State License #:
State: FL Expiration Date of Certification or License: 11/30/2024
Date Signed: 09/15/2022

SUPERVISORY or CO-APPRAISER (if applicable):

Signature: _____
Name: _____
Title: _____
State Certification #: _____
or State License #: _____
State: _____ Expiration Date of Certification or License: _____
Date Signed: _____
☐ Did ☐ Did Not Inspect Property

Page 2 of 2

Market Conditions Addendum to the Appraisal Report

Campbell
File No. 0001582

The purpose of this addendum is to provide the lender/client with a clear and accurate understanding of the market trends and conditions prevalent in the subject neighborhood. This is a required addendum for all appraisal reports with an effective date on or after April 1, 2009.

Property Address 923 Village Dr City Wildwood State FL ZIP Code 34785

Borrower -

Instructions: The appraiser must use the information required on this form as the basis for his/her conclusions, and must provide support for those conclusions, regarding housing trends and overall market conditions as reported in the Neighborhood section of the appraisal report form. The appraiser must fill in all the information to the extent it is available and reliable and must provide analysis as indicated below. If any required data is unavailable or is considered unreliable, the appraiser must provide an explanation. It is recognized that not all data sources will be able to provide data for the shaded areas below; if it is available, however, the appraiser must include the data in the analysis. If data sources provide the required information as an average instead of the median, the appraiser should report the available figure and identify it as an average. Sales and listings must be properties that compete with the subject property, determined by applying the criteria that would be used by a prospective buyer of the subject property. The appraiser must explain any anomalies in the data, such as seasonal markets, new construction, foreclosures, etc.

Inventory Analysis	Prior 7-12 Months	Prior 4-6 Months	Current - 3 Months	Overall Trend		
Total # of Comparable Sales (Settled)	9	3	7	☐ Increasing	☒ Stable	☐ Declining
Absorption Rate (Total Sales/Months)	1.50	1.00	2.33	☐ Increasing	☒ Stable	☐ Declining
Total # of Comparable Active Listings	2	3	2	☐ Declining	☒ Stable	☐ Increasing
Months of Housing Supply (Total Listings/Ab.Rate)	1.3	3.0	0.9	☐ Declining	☒ Stable	☐ Increasing
Median Sale & List Price, DOM, Sale/List %	Prior 7-12 Months	Prior 4-6 Months	Current - 3 Months	Overall Trend		
Median Comparable Sale Price	\$80,000	\$115,000	\$110,000	☐ Increasing	☒ Stable	☐ Declining
Median Comparable Sales Days on Market	22	18	8	☒ Declining	☐ Stable	☐ Increasing
Median Comparable List Price	\$199,950	\$119,900	\$242,500	☐ Increasing	☒ Stable	☐ Declining
Median Comparable Listings Days on Market	331	33	417	☐ Declining	☒ Stable	☐ Increasing
Median Sale Price as % of List Price	96%	85%	99%	☐ Increasing	☒ Stable	☐ Declining
Seller-(developer, builder, etc.)paid financial assistance prevalent?	☐ Yes ☒ No			☐ Declining	☒ Stable	☐ Increasing

Explain in detail the seller concessions trends for the past 12 months (e.g., seller contributions increased from 3% to 5%, increasing use of buydowns, closing costs, concessions, options, etc.). An analysis was performed on 19 competing sales over the past 12 months. For those sales, a total of 5.3% were reported to have seller concessions. This analysis shows a change of +3.2% per month.

Are foreclosure sales (REO sales) a factor in the market? ☐ Yes ☒ No If yes, explain (including the trends in listings and sales of foreclosed properties).

An analysis was performed on 19 competing sales over the past 12 months. For those sales, a total of 5.3% were reported to be REO.

Cite data sources for above information. Information reported in the StellarMLS system (using an effective date of 09/15/2022) was utilized to arrive at the results noted on this addendum. Any percent change results noted in these comments are based on simple regression.

Summarize the above information as support for your conclusions in the Neighborhood section of the appraisal report form. If you used any additional information, such as an analysis of pending sales and/or expired and withdrawn listings, to formulate your conclusions, provide both an explanation and support for your conclusions. An analysis was performed on 19 competing sales over the past 12 months. The sales within this group had a median sale price of \$103,000. This analysis shows a change of +1% per month. Based on all sales in this same group, there is a 1.3 month supply. This analysis shows a change of -1.5% per month. These sales had a median DOM of 11. This analysis shows a change of -8.5% per month.

If the subject is a unit in a condominium or cooperative project, complete the following:

Subject Project Data	Prior 7-12 Months	Prior 4-6 Months	Current - 3 Months	Overall Trend		
Total # of Comparable Sales (Settled)				☐ Increasing	☐ Stable	☐ Declining
Absorption Rate (Total Sales/Months)				☐ Increasing	☐ Stable	☐ Declining
Total # of Active Comparable Listings				☐ Declining	☐ Stable	☐ Increasing
Months of Unit Supply (Total Listings/Ab.Rate)				☐ Declining	☐ Stable	☐ Increasing

Are foreclosure sales (REO sales) a factor in the project? ☐ Yes ☐ No If yes, indicate the number of REO listings and explain the trends in listings and sales of foreclosed properties.

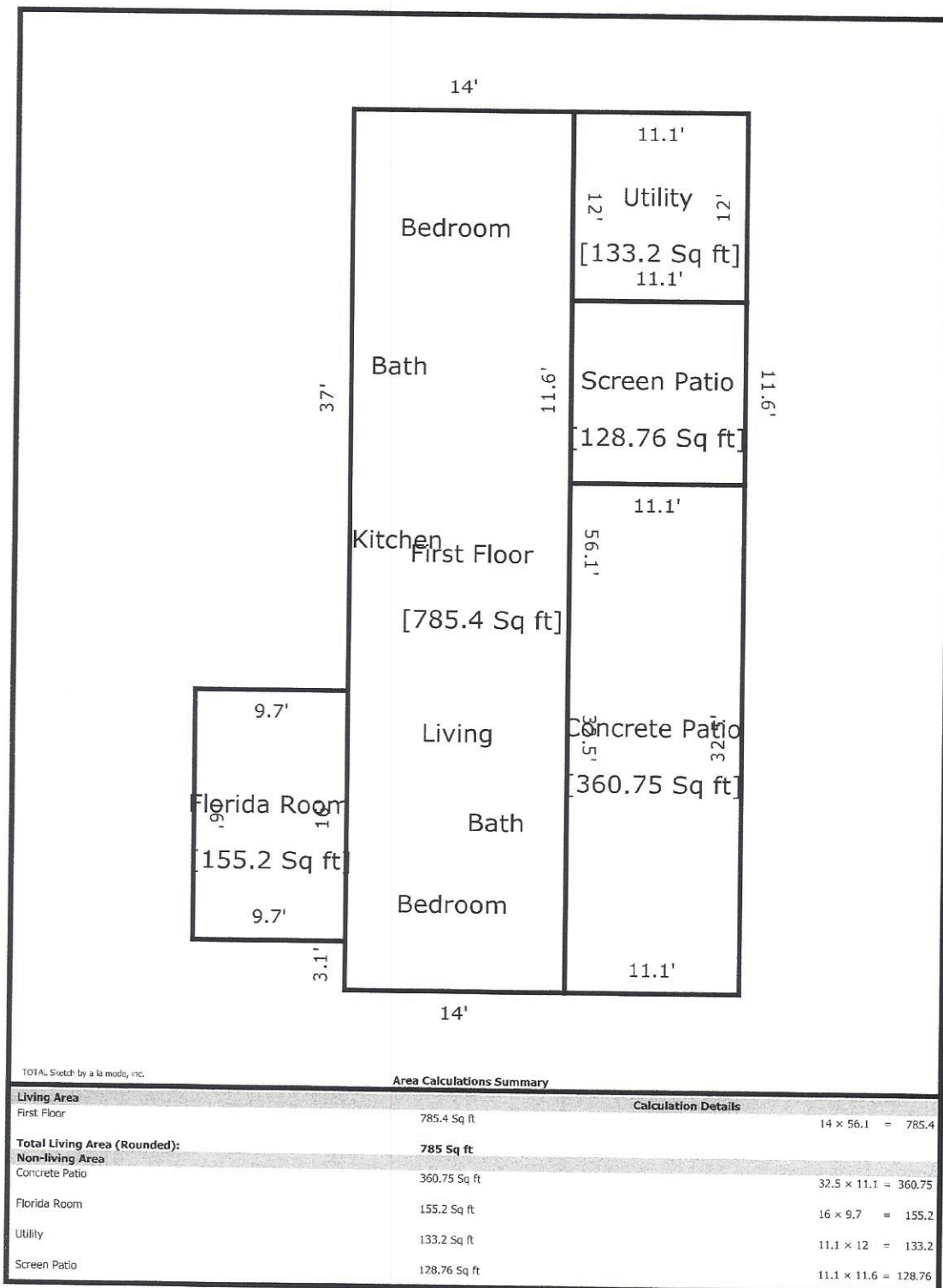
Summarize the above trends and address the impact on the subject unit and project.

Signature
Appraiser Name Jamie Vooten
Company Name Sun Country R.E. Appraisal Services, Inc.
Company Address 36344 Via Marcia, Fruitland Park, FL 34731
State License/Certification # Cert. Res. RD7381 State FL
Email Address suncountryappraisals@gmail.com

Signature
Supervisory Appraiser Name
Company Name
Company Address
State License/Certification # State

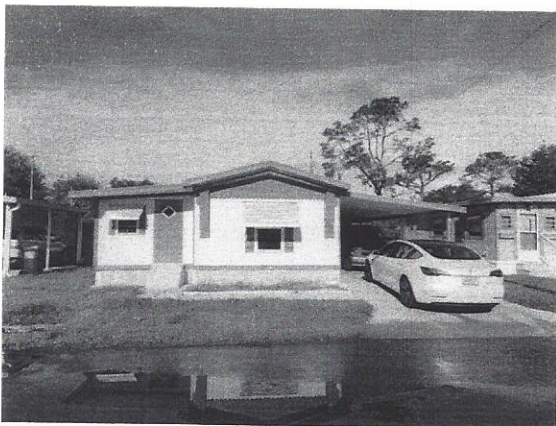
Building Sketch

Borrower/Client	-					
Property Address	923 Village Dr					
City	Wildwood	County	Sumter	State	FL	Zip Code 34785
Lender	United Wholesale Mortgage					



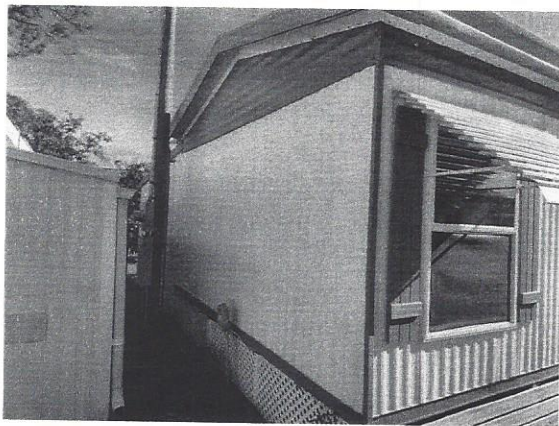
Subject Photo Page

Borrower/Client	-					
Property Address	923 Village Dr					
City	Wildwood	County	Sumter	State	FL	Zip Code 34785
Lender	United Wholesale Mortgage					

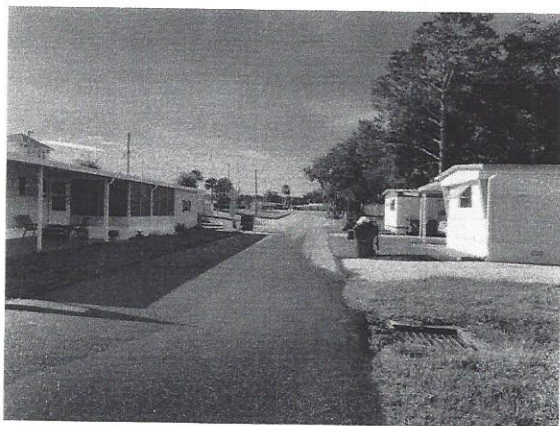


Subject Front

923 Village Dr
Sales Price
Gross Living Area 785
Total Rooms 4
Total Bedrooms 2
Total Bathrooms 2.0
Location Residential
View TYP
Site 4,095 sf
Quality Average
Age 36



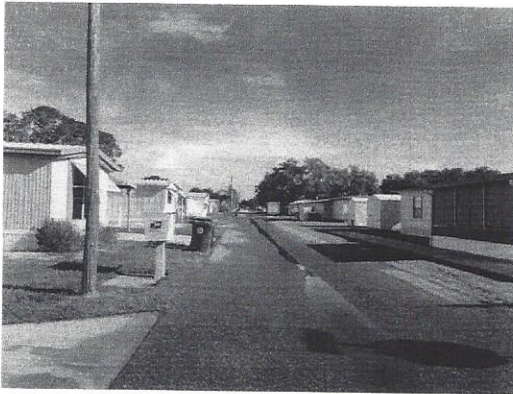
Subject Rear



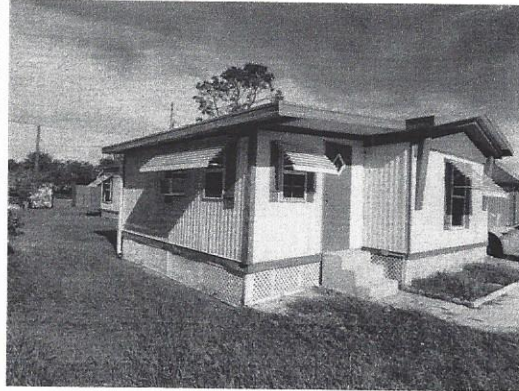
Subject Street

Photograph Addendum

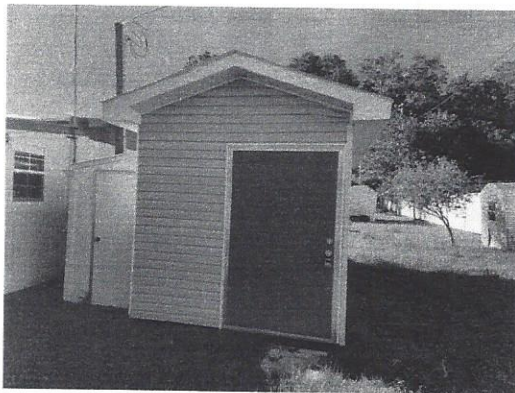
Borrower/Client	-					
Property Address	923 Village Dr					
City	Wildwood	County	Sumter	State	FL	Zip Code 34785
Lender	United Wholesale Mortgage					



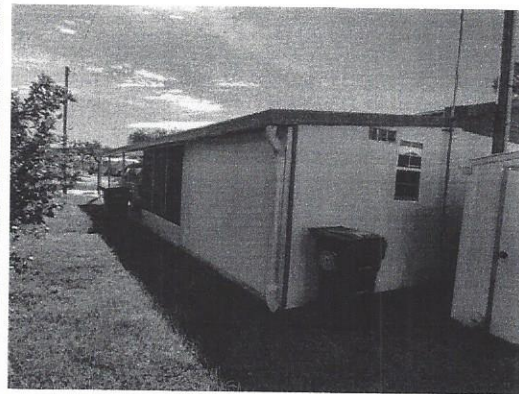
Opposite street view



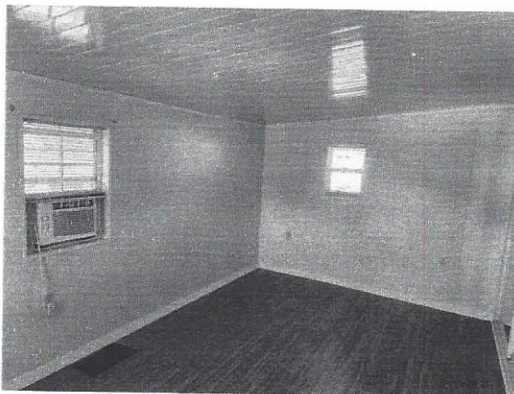
Left side



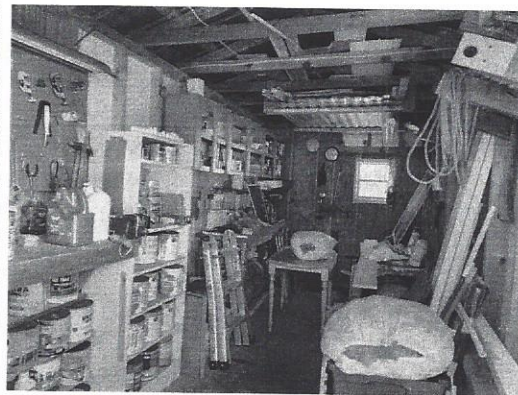
Shed



Right side



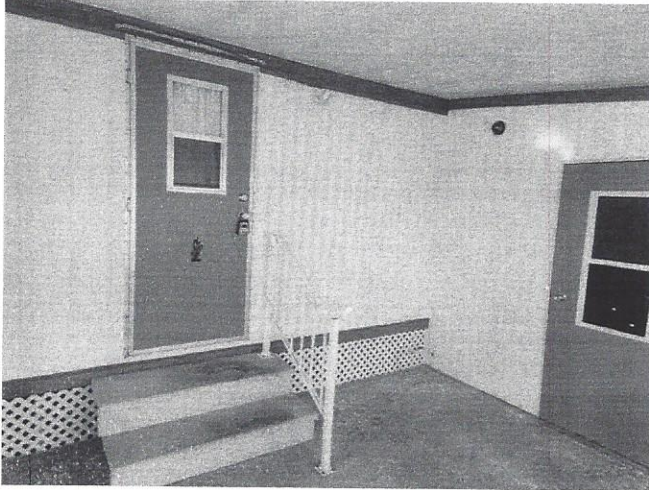
Florida room



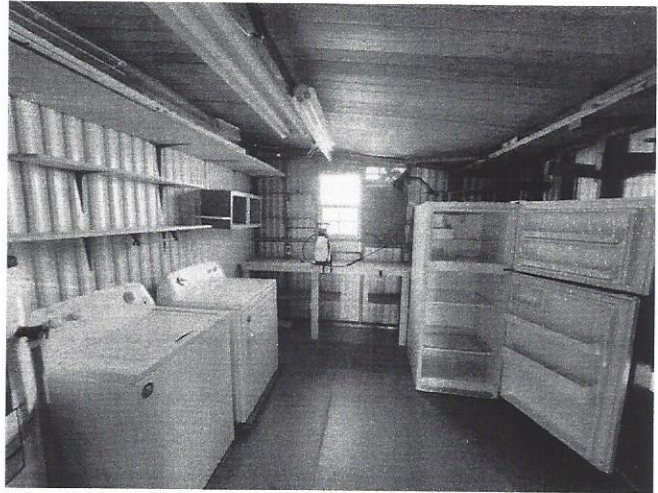
Shed

Photograph Addendum

Borrower/Client	-					
Property Address	923 Village Dr					
City	Wildwood	County	Sumter	State	FL	Zip Code 34785
Lender	United Wholesale Mortgage					



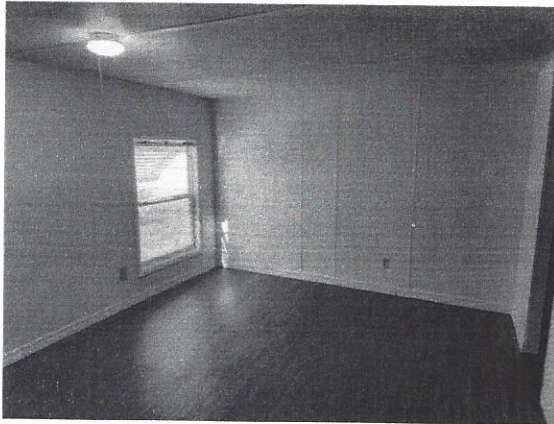
Screen patio



Utility

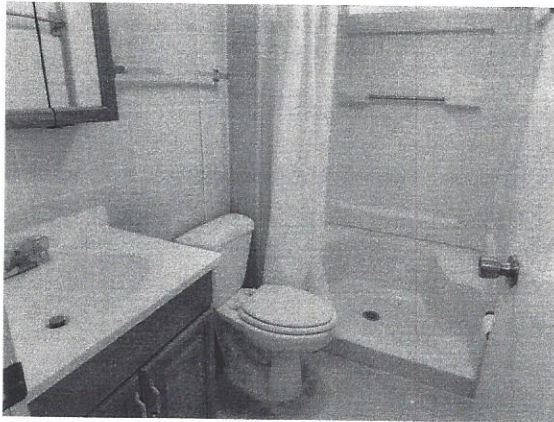
Subject Interior Photo Page

Borrower/Client	-				
Property Address	923 Village Dr				
City	Wildwood	County	Sumter	State	FL Zip Code 34785
Lender	United Wholesale Mortgage				

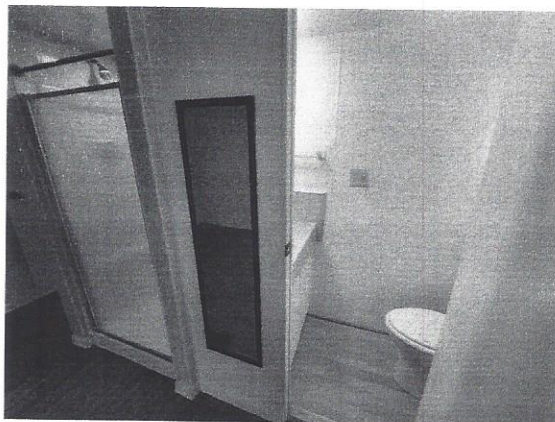


Bedroom

923 Village Dr
 Sales Price
 Gross Living Area 785
 Total Rooms 4
 Total Bedrooms 2
 Total Bathrooms 2.0
 Location Residential
 View TYP
 Site 4,095 sf
 Quality Average
 Age 36



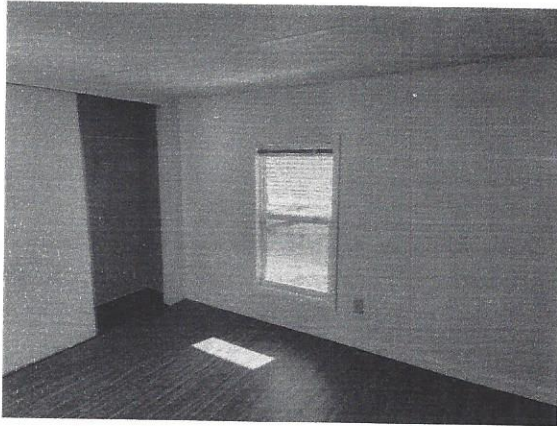
Bath



Bath

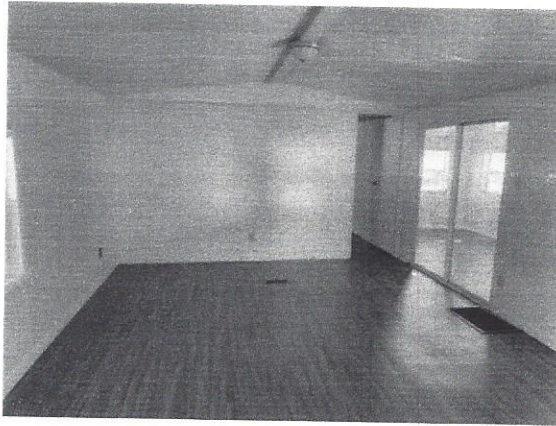
Subject Interior Photo Page

Borrower/Client	-					
Property Address	923 Village Dr					
City	Wildwood	County	Sumter	State	FL	Zip Code 34785
Lender	United Wholesale Mortgage					



Bedroom

923 Village Dr
Sales Price
Gross Living Area 785
Total Rooms 4
Total Bedrooms 2
Total Bathrooms 2.0
Location Residential
View TYP
Site 4,095 sf
Quality Average
Age 36



Living



Kitchen

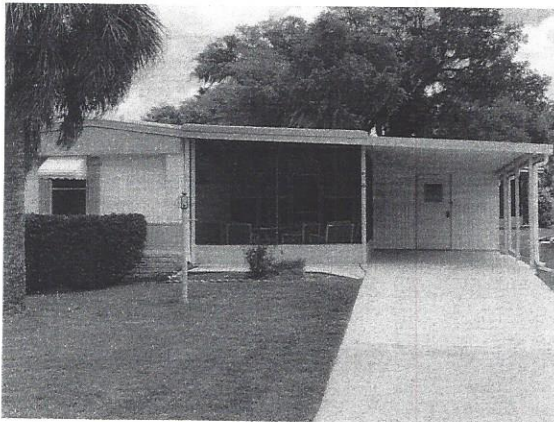
Comparable Photo Page

Borrower/Client	-				
Property Address	923 Village Dr				
City	Wildwood	County	Sumter	State	FL Zip Code 34785
Lender	United Wholesale Mortgage				



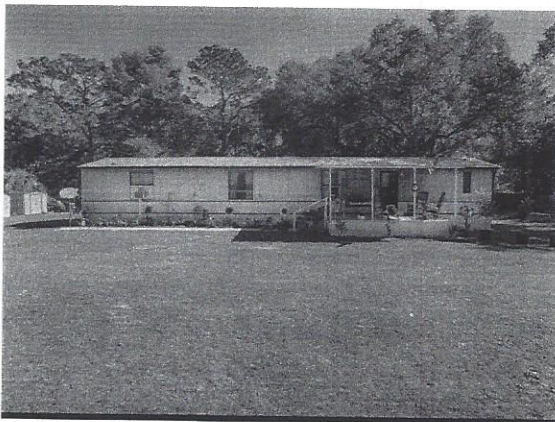
Comparable 1

807 Water Oak St
 Prox. to Subject 0.07 miles NE
 Sale Price 63,900
 Gross Living Area 720
 Total Rooms 4
 Total Bedrooms 2
 Total Bathrooms 1.0
 Location Residential
 View TYP
 Site 4524 sf
 Quality Average
 Age 46



Comparable 2

5561 Williamsburg Ln
 Prox. to Subject 1.45 miles SE
 Sale Price 83,000
 Gross Living Area 840
 Total Rooms 4
 Total Bedrooms 2
 Total Bathrooms 2.0
 Location Residential
 View TYP
 Site 5000 sf
 Quality Average
 Age 39

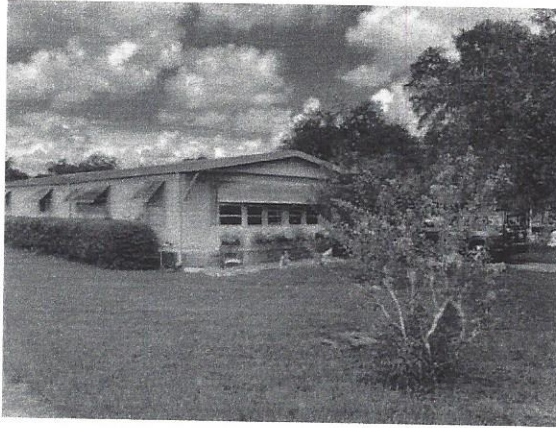


Comparable 3

3395 County Road 510A
 Prox. to Subject 2.92 miles S
 Sale Price 135,000
 Gross Living Area 924
 Total Rooms 5
 Total Bedrooms 2
 Total Bathrooms 2.0
 Location Residential
 View TYP
 Site 39640 sf
 Quality Average
 Age 36

Comparable Photo Page

Borrower/Client	-					
Property Address	923 Village Dr					
City	Wildwood	County	Sumter	State	FL	Zip Code 34785
Lender	United Wholesale Mortgage					



Comparable 4

5508 Lansing Dr
Prox. to Subject 1.54 miles SE
Sale Price 119,000
Gross Living Area 1,392
Total Rooms 5
Total Bedrooms 2
Total Bathrooms 2.0
Location Residential
View TYP
Site 6050 sf
Quality Average
Age 40

Comparable 5

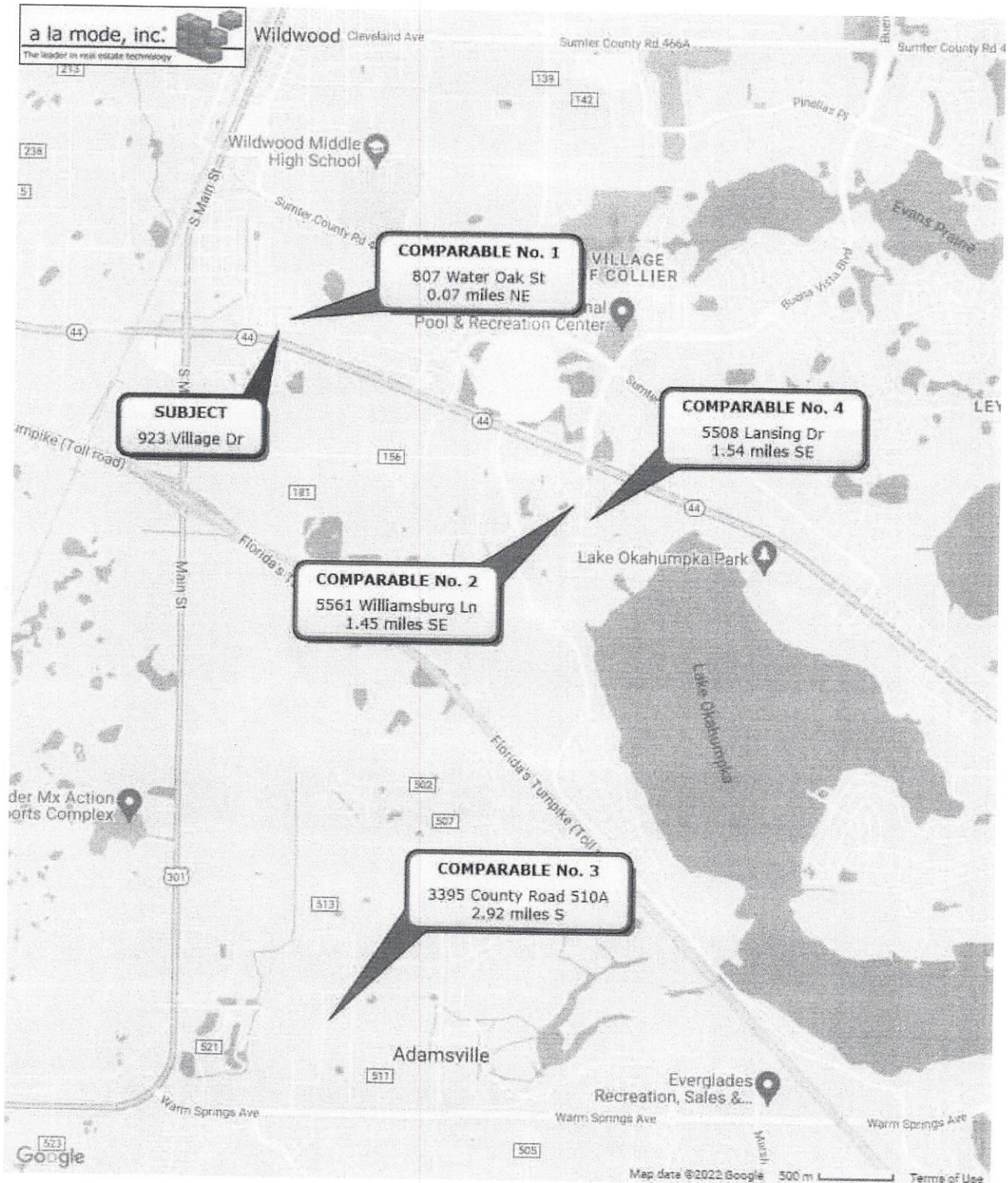
Prox. to Subject
Sale Price
Gross Living Area
Total Rooms
Total Bedrooms
Total Bathrooms
Location
View
Site
Quality
Age

Comparable 6

Prox. to Subject
Sale Price
Gross Living Area
Total Rooms
Total Bedrooms
Total Bathrooms
Location
View
Site
Quality
Age

Comparable Sales Map

Borrower/Client	-				
Property Address	923 Village Dr				
City	Wildwood	County	Sumter	State	FL
Lender	United Wholesale Mortgage		Zip Code	34785	



Aerial Map

Borrower/Client	-				
Property Address	923 Village Dr				
City	Wildwood	County	Sumter	State	FL Zip Code 34785
Lender	United Wholesale Mortgage				



Form MAP LT.LOC - "TOTAL" appraisal software by a la mode, inc. - 1-800-ALAMODE

Plat Map

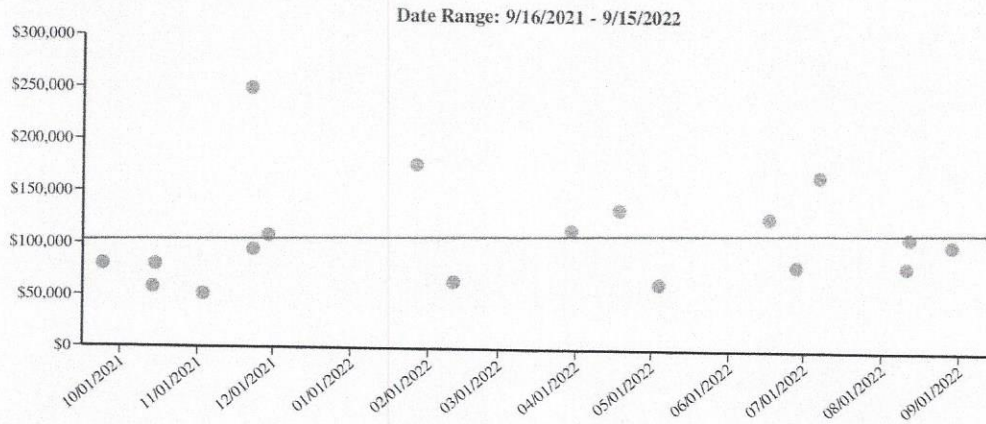


Photograph Addendum

Borrower/Client	-						
Property Address	923 Village Dr						
City	Wildwood	Courty	Sumter	State	FL	Zip Code	34785
Lender	United Wholesale Mortgage						

Competing Med Sale \$

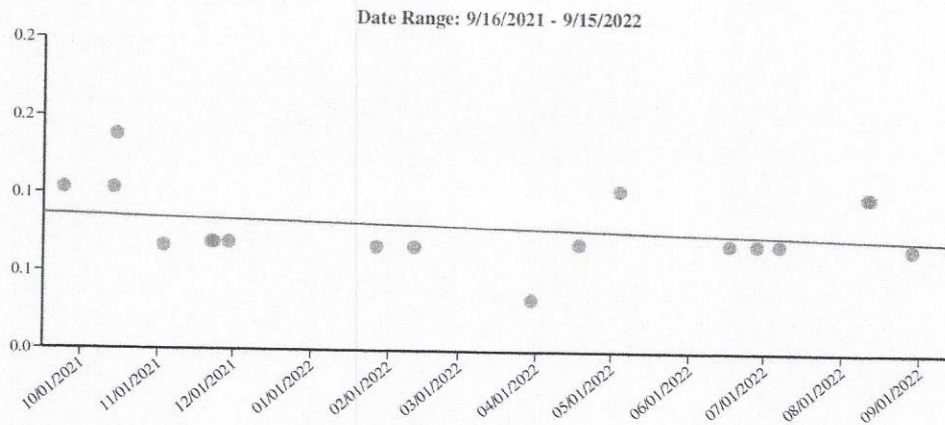
Total: \$103,000 $y = 33.47x + 102720.06$
 Simple Regression Per Month: $\pm 1.0\%$



Median \$

Competing Housing Supply (Months of)

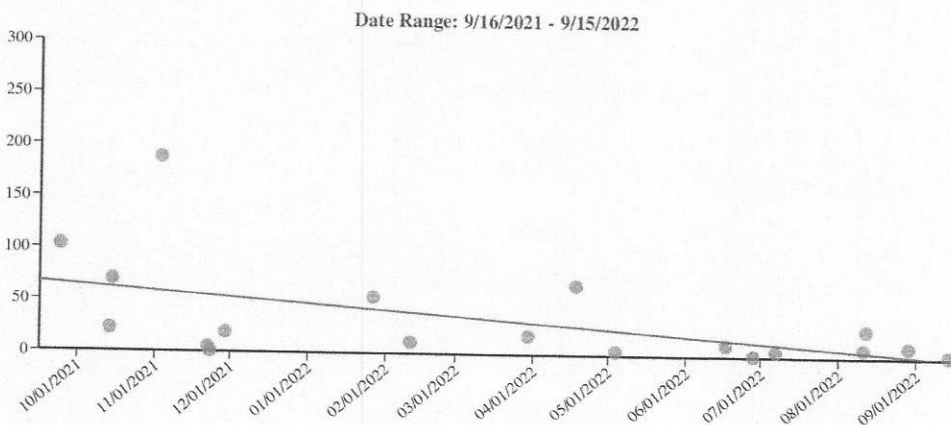
Total: 1.3 $y = -0.0000x + 0.09$
 Simple Regression Per Month: $\sim 1.5\%$



Housing Supply

Competing Med DOM (Sales)

Total: 11 $y = -0.1884x + 67.44$
 Simple Regression Per Month: $\sim 8.5\%$



Sales DOM

Form PIC3W - "TOTAL" appraisal software by a la mode, inc. - 1-800-ALAMODE

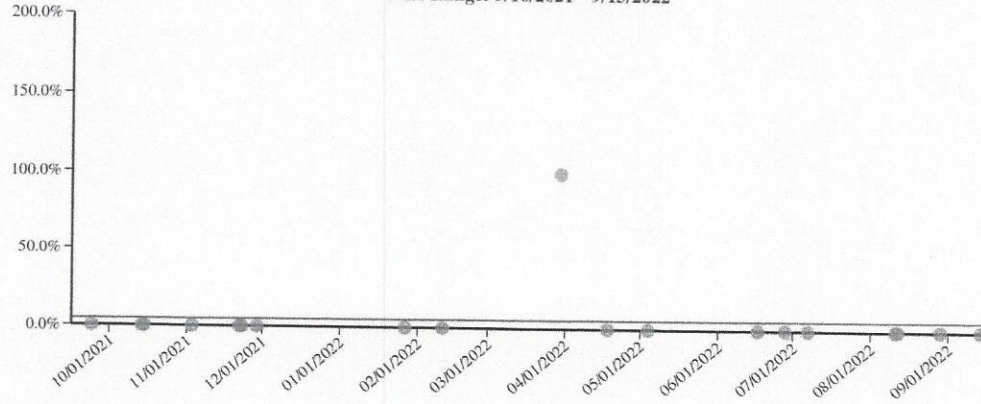
Photograph Addendum

Borrower/Client	-					
Property Address	923 Village Dr					
City	Wildwood	County	Sumter	State	FL	Zip Code 34785
Lender	United Wholesale Mortgage					

● Competing Concession %

Total: 5.3% $y = 0.0046x + 4.42$
Simple Regression Per Month: +3.2%

Date Range: 9/16/2021 - 9/15/2022

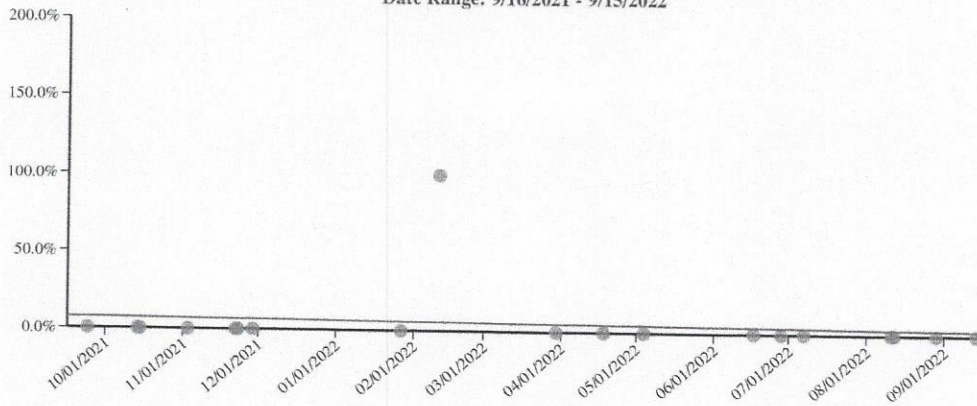


Concession %

● Competing REO % (Sales)

Total: 5.3% $y = -0.0125x + 7.55$
Simple Regression Per Month: -5.0%

Date Range: 9/16/2021 - 9/15/2022

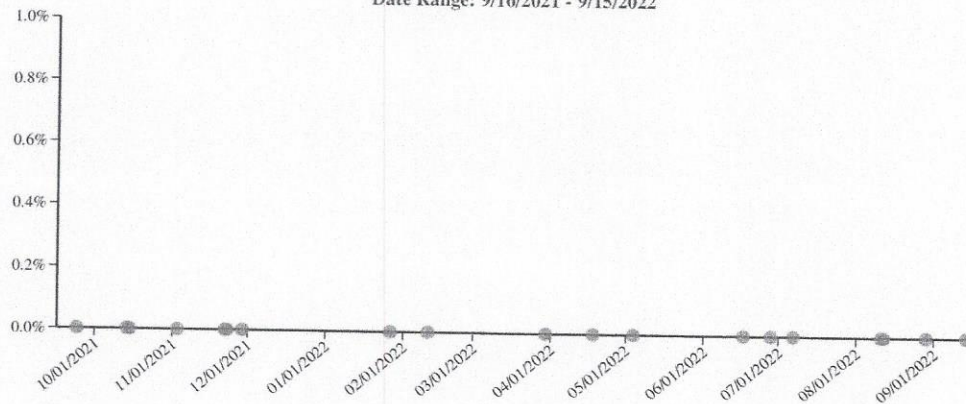


Foreclosure Analysis

● Competing Short % (Sales)

Total: 0.0%
Simple Regression Per Month: N/A

Date Range: 9/16/2021 - 9/15/2022



Short Sale Analysis

Form PIC3W - "TOTAL" appraisal software by a la mode, inc. - 1-800-ALAMODE

Supplemental Addendum

File No. 0001582

Borrower/Client	-				
Property Address	923 Village Dr				
City	Wildwood	County	Sumter	State	FL Zip Code 34785
Lender	United Wholesale Mortgage				

* COMPARABLE 12-MONTH PRIOR TRANSFER HISTORY *
(may include properties that were considered but not utilized as comparables)

807 Water Oak St
-No transfer history.

5561 Williamsburg Ln
-No transfer history.

3395 County Road 510a
-Transferred on 04/18/2022 for \$135,000. It transferred from Arthurs Jerry and Nancy to Perez Patricia M and was a Warranty Deed (Document #4275-337).

5508 Lansing Dr
-No transfer history.

Supplemental Addendum

File No. 0001582

Borrower/Client	-					
Property Address	923 Village Dr					
City	Wildwood	County	Sumter	State	FL	Zip Code 34785
Lender	United Wholesale Mortgage					

* SUBJECT 36-MONTH PRIOR TRANSFER HISTORY *

923 Village Dr

-No transfer history.

Realist Tax - Page 1

923 Village Dr, Wildwood, FL 34785-5372, Sumter County

APN: G07F011 CLIP: 8364290934

	Beds N/A	Full Baths N/A	Half Baths N/A	Sale Price \$45,600	Sale Date 03/16/2018
	Bldg Sq Ft 784	Lot Sq Ft 4,095	Yr Built 1986	Type MBL HM	

OWNER INFORMATION

Owner	Campbell Thomas George	Mailing Zip	34484
Owner 2	Campbell Carol	Mailing ZIP + 4	3741
Mailing Label Owner Name	Thomas George & Carol Campbell	Mailing Carrier Route	R082
Mailing Address	10203 Dory Dr	Owner Occupied	No
Mailing City & State	Oxford, FL		

LOCATION INFORMATION

Neighborhood Code	2272-2272	Census Tract	9113.01
Township	19S	Census Block	02
Range	23E	Census Block Group	3
Section	7	School District Name	Sumter County SD
Property ZIP	34785	Flood Zone Code	X
Property ZIP 4	5372	Flood Zone Date	09/27/2013
Property Carrier Route	R005	Flood Zone Panel	12119C0131D

TAX INFORMATION

Folio/Strap/PID (1)	G07F011	% Improved	79%
Folio/Strap/PID (2)	07-19-23-G07F011	Tax Area	2002
Folio/Strap/PID (3)	G07F011	Total Taxable Value	\$25,620
Account Number	1048604		
Legal Description	BEG 90.18 FT N OF SW COR OF S E 1/4 OF NE 1/4 OF SE 1/4 FOR PO B THENCE E 95 FT N 45.09 FT W 9 5 FT S 45.09 FT TO POB MANULKI N MH ESTATES		

ASSESSMENT & TAX

Assessment Year	2021	2020	2019
Just Value - Total	\$25,620	\$25,620	\$25,620
Just Value - Land	\$5,520	\$5,520	\$5,520
Just Value - Improved	\$20,300	\$20,300	\$20,300
Assessed Value - Total	\$25,620	\$25,620	\$25,620
Assessed Value - Land	\$5,520	\$5,520	\$5,520
Assessed Value - Improved	\$20,300	\$20,300	\$20,300
YOY Assessed Change (\$)	\$0	\$0	
YOY Assessed Change (%)	0%	0%	
Tax Year	Total Tax	Change (\$)	Change (%)
2019	\$532		
2020	\$523	-\$9	-1.7%
2021	\$506	-\$17	-3.21%

CHARACTERISTICS

State Use Description	Mobile Home-02	Living Square Feet	784
Land Use - CoreLogic	Mobile Home	Total Building Sq Ft	784
Style	Square Design	Heated Sq Ft	784
Building Type	Mobile Home	Total Units	1
Year Built	1986	Lot Sq Ft	4,095
Effective Year Built	1986	Lot Acres	0.094

FEATURES

Feature Type	Size/Qty	Year Built
Miscellaneous	1	1987
Building Description	Building Size	
Base Area	784	

Property Details Courtesy of Jamie Wooden, Stellar MLS

The data within this report is compiled by CoreLogic from public and private sources. If desired, the accuracy of the data contained herein can be independently verified by the recipient of this report with the applicable county or municipality.

Generated on: 09/15/22
Page 1/3

Realist Tax - Page 2

SELL SCORE

Rating	High	Value As Of	2022-09-11 05:38:09
Sell Score	711		

LAST MARKET SALE & SALES HISTORY

Last Mkt Sale Date	03/16/2018	Owner	Campbell Thomas George		
Last Mkt Recording Date	03/29/2018	Seller	Neagle Randall E		
Sale Price	\$45,600	Title Company	A&B Title & Escrow Svcs		
Price Per Sq Ft	\$58.16	County Doc Link	3388000548		
Deed Type	Warranty Deed	Document Number	3388-548		
Recording Date	12/13/2018	03/29/2018	02/06/2001	02/18/1994	
Sale Date	12/04/2018	03/16/2018	01/30/2001	02/1994	12/1990
Sale Price	\$100	\$45,600	\$24,000	\$24,000	\$27,500
Nominal	Y				
Document Type	Deed (Reg)	Warranty Deed	Warranty Deed	Grant Deed	Deed (Reg)
Buyer Name	Campbell Family Trust	Campbell Thomas G	Neagle Randall E	Politt John H & Patricia A	
Buyer Name 2				Politt Patricia A	
Seller Name	Campbell Thomas G	Neagle Randall E	Politt John H & Patricia A	Moore Orville W & Edit h C	
Title Company	Attorney Only	A&B Title & Escrow Svcs			
Document Number	3502-350	3388-548	855-532	507-546	419-285
County Doc Link	3502000350	3388000548	855000532	507000546	419000285
Recording Date					
Sale Date		04/01/1985		01/01/1980	
Sale Price		\$4,000		\$3,995	
Nominal					
Document Type		Warranty Deed		Agreement Of Sale	
Buyer Name		Owner Record		Owner Record	
Buyer Name 2					
Seller Name		Owner Record		Owner Record	
Title Company					
Document Number		306-467		226-665	
County Doc Link		306000467		226000665	

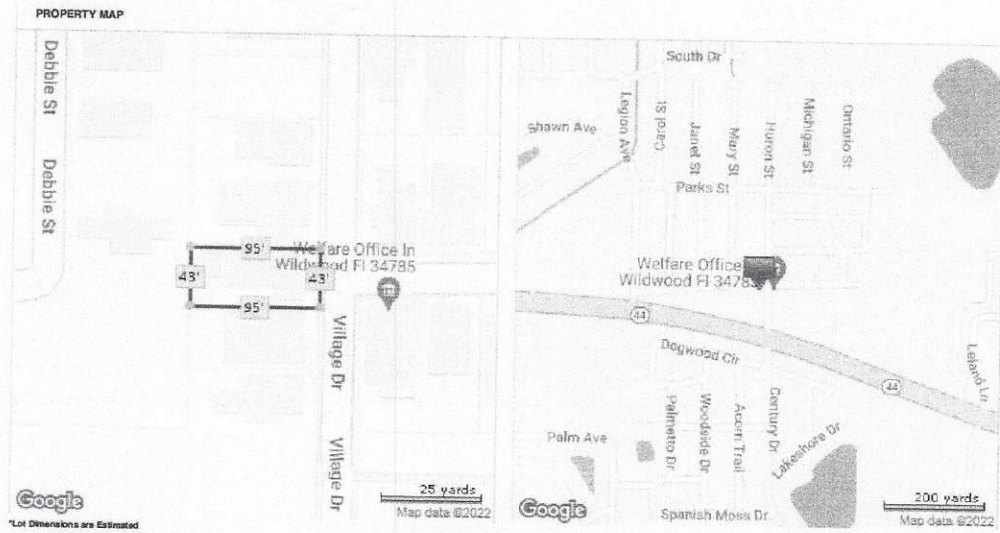
MORTGAGE HISTORY

Mortgage Date	02/06/2001
Mortgage Amount	\$19,200
Mortgage Lender	Citizens First Bk
Mortgage Type	Conventional
Mortgage Purpose	Resale
Mortgage Term	20
Mortgage Term Code	Years
Mortgage Int Rate	7.75
Mortgage Int Rate Type	Adjustable Int Rate Loan
Borrower Name	Neagle Randall E

Property Details

Courtesy of Jamie Wooden, Stellar MLS
The data within this report is compiled by CoreLogic from public and private sources. If desired, the accuracy of the data contained herein can be independently verified by the recipient of this report with the applicable county or municipality.

Generated on: 09/15/22
Page 2/3



Property Details courtesy of Jenie Wooten, Stalter MLS

The data within this report is compiled by CoreLogic from public and private sources. If desired, the accuracy of the data contained herein can be independently verified by the recipient of this report with the applicable county or municipality.

Generated on: 09/15/22

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Appraiser License

	Ron DeSantis, Governor	Melanie S. Griffin, Secretary
STATE OF FLORIDA DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION		
FLORIDA REAL ESTATE APPRAISAL BD		
THE CERTIFIED RESIDENTIAL APPRAISER HEREIN IS CERTIFIED UNDER THE PROVISIONS OF CHAPTER 475, FLORIDA STATUTES		
WOOTEN, JAMIE 40031 E 9TH AVE UMATILLA FL 32784		
LICENSE NUMBER: RD7381		
EXPIRATION DATE: NOVEMBER 30, 2024		
Always verify licenses online at MyFloridaLicense.com		
	Do not alter this document in any form. This is your license. It is unlawful for anyone other than the licensee to use this document.	

**OAK GROVE VILLAGE
WILDWOOD, FLORIDA
OPINION OF PROBABLE CONSTRUCTION COST**

ITEM #	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	Stormwater Pump Station, Controller, and Generator	LS	1	\$ 400,000.00	\$ 400,000.00
2	Stormwater Force Main Modifications	LS	1	\$ 25,000.00	\$ 25,000.00
3	Paving, Grading, and Drainage Improvements	LS	1	\$ 115,000.00	\$ 115,000.00
4	Demolish Existing Structures	LS	1	\$ 50,000.00	\$ 50,000.00
5	Mobilization	LS	1	\$ 20,000.00	\$ 20,000.00
6	Maintenance of Traffic	LS	1	\$ 20,000.00	\$ 20,000.00
7	Erosion Control	LS	1	\$ 10,000.00	\$ 10,000.00
8	Site Fencing	LS	1	\$ 15,000.00	\$ 15,000.00
Total Costs					
CONSTRUCTION SUBTOTAL =					\$ 655,000
SURVEY, ENGINEERING DESIGN SUBTOTAL =					\$ 65,000
SUBTOTAL =					\$ 720,000
CONTINGENCY (20%) =					\$ 144,000
GRAND TOTAL =					\$ 864,000
Disclaimer: The engineer has no control over the cost of labor, materials, equipment, or over the contractor's methods of determining prices or over competitive bidding, or market conditions. Opinions of probable costs provided herein are based on the information known to engineer at this time and represent only the engineer's judgment as a design professional familiar with the construction industry. The engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.					

CITY COMMISSION OF THE CITY OF WILDWOOD
EXECUTIVE SUMMARY

SUBJECT: Local Construction Projects Update

REQUESTED ACTION: For Information Only

CONTRACT:

Vendor/Entity:

Effective Date:

Termination Date:

Managing Division/Department:

BUDGET IMPACT:

HISTORY/FACTS/ISSUES:

Please see the attached local construction projects update.

Local Infrastructure Projects
Construction Update
October 6, 2022

Updates Shown in Red

1. City Water Projects

- a. *CR 209 Water Main Extension – Phase 1 (SR 44 to CR 44A)*
 - i. Bid awarded to Hartman Civil for \$1,347,788
 - a. Notice to Proceed issued on December 6, 2021
 - b. Substantial Completion: June 14, 2022
 - c. Final Completion: July 14, 2022
 - ii. Change Order No. 1 (Deduct) approved January 10, 2022
 - iii. *Pay App No. 3 in the amount of \$111,334.41 approved the September 12, 2022 Commission agenda*
 - iv. Coordinating with contractor on the schedule to complete remaining work. Contractor has experienced significant delays.
 - v. Change order forthcoming
- b. *Ashley Well and Water Use Permit Modification*
 - i. Permitting:
 - a. Finalizing Water Use Permit with SWFWMD
 - ii. Well Construction:
 - a. Awarded to Citrus Well Drilling
 - b. Coordination schedule with contract; dependent upon WUP being issued
 - c. Owner-Direct purchasing of equipment
 - i. *Purchase of Fairbanks pump approved the August 8, 2022 Commission agenda*
- c. *CR 229 Utilities*
 - i. Hartman Civil to complete the relocation activities through Change Order with CR 209 Water Main Extension project
 - ii. Commission approved the Change Order at the March 14, 2022 Commission meeting
 - iii. *Contractor finalizing the work*
- d. *Coleman WTP- Iron Filtration and High Service Pump Upgrades*
 - i. Construction Plans for iron filtration, electrical upgrades, and pump upgrades completed
 - a. *Resurrected. Recommendation forthcoming to move forward with iron filtration component of the project (not the whole project)*

2. City Wastewater Projects

- a. *Wastewater Treatment Facility Renewal and Expansion Activities*
 - i. Expansion to 6 MGD identified in the Facility Planning document
 - a. CPH finalizing conceptual design report
 - i. First expansion of WWTF to 4.3 MGD
 - i. Recommending CMAR construction delivery approach
 - ii. Second expansion of WWTF to 6.0 MGD
 - b. Presentation by CPH at a Special Called Meeting with City Commission on September 19, 2022
 - c. Adoption of Conceptual Design Report on the October 10, 2022 City Commission meeting agenda
 - d. Consideration to enter into contract with CPH for planning, design and permitting activities for the 6.0 MGD expansion on the October 10, 2022 City Commission meeting agenda
 - e. Coleman City Council and Wildwood City Commission approved the Interlocal Agreement concerning utility service areas
- b. *Millennium Park Reclaimed Water Line Extension*
 - i. \$100,000 appropriation awarded in state FY 20 budget
 - a. Grant Agreement with FDEP approved
 - ii. Pump Station design at RIBS site – 80% complete
 - iii. Reclaimed line design – 60% complete
 - a. Coordinating route and tie-in to Millennium Park with CPH and city roadway projects (Broken Oak and St. Claire street)
 - iv. Project identified for American Rescue Plan funds
 - a. ARP Agreement with FDEM (\$3.6 million) approved at the August 23, 2021 Commission meeting
 - i. City has received first installment (50%)
- c. *Switcher Street Lift Station*
 - i. Property acquisition at a standstill
 - ii. Exploring other alternatives
- d. *Chitty Chitty Bridge (Continental Country Club)*
 - i. ~~Coordinating permitting activities with FDEP~~
 - ii. ~~Bid Opening – June 15, 2022~~
 - iii. ~~CCI was the only bidder – \$607,730~~
 - iv. ~~Commission to consider bid award at the July 11, 2022 Commission meeting~~
 - v. Evaluating other alternatives and preparing updated bid specs to remain on existing bridge to lower costs

- e. *SR 44 Forcemain – Decommissioning of the Continental Country Club WWTF*
 - i. Buena Vista Boulevard Forcemain (South of SR 44)
 - a. Included in the Sumter County roadway project for \$307,970
 - b. Contractor – Watson Civil
 - c. Construction ongoing (40% completion)
 - d. Construction to be complete prior to November 2022
 - ii. Buena Vista Boulevard Lift Station
 - a. Agreement to swap properties with The Villages® approved at the September 27, 2021 Commission meeting
 - b. ODP of equipment has been ordered
 - c. Project awarded to Marion Rock of \$519,954
 - i. Under construction; awaiting equipment delivery on some items
 - ii. Pay App Nos. 3 and 4 totaling \$37,418.63 on the October 10th City Commission agenda
 - iii. West SR 44 Component and CCC Lift Station conversion:
 - a. Finalizing 90% plans
 - b. Additional survey work needed due to modified route (easement acquisition issue)
 - c. Need to coordinate with FDOT during permitting; plans may conflict with sidewalk project

3. City Projects (Other)

- a. *Millennium Park Phase 1*
 - i. Design awarded to CPH
 - ii. 60% documents forthcoming
 - iii. Coordination with Parkview for Stormwater/Reuse pond:
 - a. Developer's Agreement approved at the 9/27/2021 Commission meeting
 - b. SWFWMD permit received
 - c. Joint pond under construction
- b. *Dr. Martin Luther King Jr. Park Improvements*
 - i. Splash Pad
 - a. Under construction
 - b. Fencing approved at the July 26, 2022 Commission meeting
 - c. Pay App No. 1 in the amount of \$223,828.54 approved at the September 12, 2022 Commission meeting agenda
 - ii. Concession Stand
 - a. Coordinating delivery schedule with contractor; awaiting state approval (pre-fab concrete building)
- c. ~~*Main Street Parking Lot Improvements (Near Bargains and Blessings)*~~
 - i. ~~Bid award to Marion Rock in the amount of \$154,697~~

ii. Project complete

d. Downtown Master Plan Related

- i. Commission approved the Downtown Master Plan on November 15, 2021*
 - a. CSX property acquisition (Ayres)*
 - i. Coordination ongoing*
 - ii. Acquisition of “Y” property looks promising*
 - b. US 301 Linear Park (Ayres)*
 - i. Arborist site visit next week*
 - ii. Conceptual design underway*
 - iii. Workshop with City Commission for 10/31/2022 to discuss design concept*
 - c. Coordination with Ayres and Tangent Media to implement branding concepts*
 - i. Reviewing concepts*
 - ii. Workshop with City Commission for 10/31/2022 to discuss design concept*
 - d. Coordinating with FDOT on Complete Streets Project*
 - i. Development Services Department working directly with FDOT on Complete Street application*
 - ii. Project is likely going to require a 50% match to move along*
- ii. Main Street Buildings*
 - a. MOU with G3 Development Approved.*
 - b. City advertised notice of intent to enter into Comprehensive Agreement; deadline for additional submittals is September 23, 2022. No submittals received.*
 - c. Coordinating design of commercial buildings*
 - d. Coordinating financing options with G3*
 - e. Reviewing construction budget and lease documents*
 - f. Workshop with City Commission for 10/31/2022 to discuss design concept*

e. Baker House Improvements

- i. Commission selected bathroom design*
- ii. Coordinating delivery schedule*

f. Municipal Services Complex (Old North Sumter Primary School)

- i. Interior, Exterior, and Site Improvements*
 - a. CMAR (Scorpio)*
 - i. GMP - \$3,855,341.11*
 - ii. Substantial Completion – May 6, 2022 (contract extension needed)*

- iii. Pay App No. 14 approved at July 26, 2022 City Commission meeting
- iv. Working on addressing outstanding issues (paving, stucco, equipment delays)
- v. Monument signs installed 2022; landscaping needed

4. City Road and Drainage Projects

~~a. FY 22 Pavement Activities~~

- ~~i. Commission approved projects within the FY 2022 Pavement Management Plan~~
 - ~~a. Non-rejuvenation activities for FY 22 complete~~
- ~~ii. Rejuvenation activities with The Villages:_____~~
 - ~~a. Authorization for funding not to exceed \$300,00 on the March 28, 2022 Commission meeting~~
 - ~~b. First Phase to occur in April/May completed~~
 - ~~c. Second Phase completed~~

b. FY 23 Pavement Activities

- i. Planning and prioritizing underway.

c. Signature Drive and Clay Drain Road

- i. PES adopted by the City Commission on October 11, 2021
- ii. Design activities underway
- iii. Notice to property owners sent out
- iv. Additional groundwater sampling needed. Kimley Horn Work Authorization amendment approved at the September 12, 2022 Commission agenda

d. Pleasantdale Drive Improvements (Road, Utilities, and Drainage)

- i. KHA design contract approved at April 26, 2021 meeting
- ii. Design and permitting wrapping up
- iii. Easement received for stormwater pipe
- iv. Preparing bid specifications and construction schedule

e. Broken Oak Traffic Study

- i. Commission approved one-way consideration (westbound) from St. Claire to Woodlane Avenue (western access)
- ii. Improvement to facilitate two-way travel from Powell Road to Woodlane Ave (western access)
- iii. Project being wrapped into Millennium Park reuse water line extension project due to route
- iv. Public meeting to be scheduled after design completion

- f. Jackson Street (Utilities, Roadway, and Drainage)*
 - i. KHA design work approved at the November 22, 2021 Commission meeting
 - ii. Right-of-Way by Maintenance Survey needed (KHA action item)
 - iii. Slip lining activities (sewer line) complete
- g. St. Claire/Huey/Barwick (Utilities, Roadway, and Drainage)*
 - i. KHA design contract approved at the April 26, 2021 Commission meeting
 - ii. Design underway; geotechnical work ongoing
 - iii. Crafting agreement with the Sumter County School Board for property acquisition
 - a. Sent conceptual agreement to the board for consideration, awaiting feedback*