

PROJECT AREA		LAND USE SUMMARY																											TOTAL AREA		
		BASIN 1						BASIN 2														SUB-TOTAL	TOTAL	% TOTAL							
		SUB-BASIN AREA					SUB-TOTAL	SUB-BASIN AREA																							
LAND USE	DESCRIPTION	1-1	1-2	1-3	1-4	1-5		2-1	2-2	2-3	2-4	2-5	2-6	2-7	2-8	2-9	2-10	2-11	2-12	2-13	2-14	2-15	2-16	2-17	2-18	2-19	2-20				
LAKE	LAKE AREA AT CONTROL	2.72	9.54	1.40	1.45	5.32	20.43	1.18	10.06	2.88	12.73	2.68	1.60	16.07	5.38	6.02	5.02	7.28	6.82	1.74	6.95	16.41	3.81	2.07	4.06	10.44	1.59	124.79	145.22	23.5%	
GOLF COURSE	PERVIOUS (100%)	0.75	11.56	4.25	4.67	8.69	29.92	4.69	5.78	0.00	10.13	0.00	4.31	16.89	10.96	5.46	10.03	0.30	6.64	0.00	0.00	0.00	0.00	2.50	0.00	6.71	2.10	86.50	116.42	18.8%	
OPEN SPACE	PERVIOUS (100%)	3.92	2.93	4.53	0.77	2.23	14.38	0.81	6.89	2.14	6.07	2.21	2.68	7.30	2.26	3.80	4.70	2.14	3.18	1.47	0.97	5.38	1.04	1.79	0.00	4.28	1.87	60.86	75.24	12.2%	
RESIDENTIAL	PAVEMENT (20%)	0.00	1.74	0.49	2.41	0.33	4.97	0.25	2.84	0.00	2.35	0.61	0.75	0.56	2.42	0.77	3.63	2.68	2.32	0.90	2.60	3.49	0.54	0.71	2.87	2.42	2.42	35.33	40.30	6.5%	
	ROOF (50%)	0.00	4.34	1.22	6.02	0.84	12.42	0.62	7.09	0.00	5.89	1.52	1.87	1.40	6.06	1.91	9.07	6.71	5.81	2.26	6.49	8.74	1.34	1.77	7.16	6.06	6.55	88.32	100.74	16.3%	
	OPEN (30%)	0.00	2.60	0.73	3.61	0.50	7.44	0.36	4.25	0.00	3.53	0.92	1.13	0.84	3.64	1.15	5.45	4.03	3.49	1.36	3.89	5.24	0.81	1.06	4.30	3.63	3.93	53.01	60.45	9.8%	
	SUB-TOTAL	0	8.68	2.44	12.04	1.67	24.83	1.23	14.18	0.00	11.77	3.05	3.75	2.80	12.12	3.83	18.15	13.42	2.69	4.52	12.98	17.47	2.69	3.54	14.33	12.11	13.10	176.66	201.49	32.5%	
	LAKE BANK	0.00	0.48	0.00	0.32	0.27	1.07	0.06	0.35	0.00	0.80	0.05	0.13	0.00	0.33	0.11	0.32	0.46	0.33	0.18	0.68	1.43	0.16	0.14	0.61	0.67	0.38	7.19	8.26	1.3%	
	TOTAL	0.00	9.16	2.44	12.36	1.94	25.90	1.29	14.53	0.00	12.57	3.10	3.88	2.90	12.45	3.94	18.47	13.88	11.95	4.70	13.66	18.90	2.85	3.68	14.94	12.78	13.48	183.85	209.75	33.9%	
RIGHT OF WAY	PERVIOUS	0.84	0.00	0.52	0.00	0.28	1.64	0.00	0.56	0.47	1.08	0.31	0.40	0.24	0.00	0.14	0.12	0.32	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	3.80	5.44	0.9%	
	IMPERVIOUS	2.51	0.00	1.57	0.00	0.82	4.90	0.00	1.70	1.43	3.26	0.84	1.20	0.72	0.00	0.44	0.35	0.96	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	11.47	16.37	2.6%	
	TOTAL	3.35	0.00	2.09	0.00	1.10	6.54	0.00	2.26	1.90	4.34	1.25	1.60	0.96	0.00	0.58	0.47	1.28	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	15.27	21.81	3.5%		
MULTIFAMILY & NON-RESIDENTIAL	PAVEMENT (40%)	0.55	0.00	0.00	0.00	3.08	3.63	0.00	0.85	1.73	0.00	0.00	0.00	1.19	0.00	1.93	0.00	0.00	0.00	0.00	0.00	3.18	0.00	1.84	0.00	6.13	0.00	16.65	20.28	3.3%	
	ROOF (40%)	0.56	0.00	0.00	0.00	3.08	3.64	0.00	0.85	1.74	0.00	0.00	0.00	1.19	0.00	1.94	0.00	0.00	0.00	0.00	3.18	0.00	1.65	0.00	6.13	0.00	16.68	20.32	3.3%		
	OPEN (20%)	0.28	0.00	0.00	0.00	1.54	1.82	0.00	0.43	0.87	0.00	0.00	0.00	0.60	0.00	0.97	0.00	0.00	0.00	0.00	1.59	0.00	0.82	0.00	3.06	0.00	8.34	10.16	1.6%		
	TOTAL	1.39	0.00	0.00	0.00	7.70	9.09	0.00	2.13	4.34	0.00	0.00	0.00	2.98	0.00	4.84	0.00	0.00	0.00	0.00	7.95	0.00	4.11	0.00	15.32	0.00	41.67	50.76	8.2%		
	BASIN TOTAL	12.13	33.19	14.71	19.25	26.98	106.26	7.97	41.65	11.26	45.84	9.24	14.07	46.90	31.05	24.64	38.69	24.88	28.59	7.91	21.58	49.11	7.70	14.31	19.00	49.51	19.04	512.94	619.20	100%	

PROJECT SUMMARY			
TOTAL SUMMARY	PARCEL DESCRIPTION	AREA (AC)	% TOTAL
		CONSERVATION PRESERVE (OUTSIDE DEVELOPMENT)	1088.56
	DEVELOPMENT AREA	709.80	39.47
	TOTAL PROJECT AREA	1798.36	100.00

INSIDE SURFACE WATER MANAGEMENT SYSTEM (SWM)	WATER MANAGEMENT LAKES	AREA (AC)	% TOTAL
		SINGLE-FAMILY RESIDENTIAL	209.75
	MULTIFAMILY AND NON-RESIDENTIAL TRACTS	50.76	7.15
	RIGHT OF WAY	21.81	3.07
	GOLF COURSE	116.42	16.40
	OPEN SPACE	75.24	10.60
	SUB-TOTAL AREA INSIDE WATER MANAGEMENT SYSTEM	619.20	87.24

OUTSIDE SWM	ONSITE PRESERVES	AREA (AC)	% TOTAL
		MIRASOL BY-PASS CANAL	33.62
	PERIMETER BERMS, BUFFERS, AND SPREADER SWALE	20.14	2.84
	SUB-TOTAL AREA OUTSIDE SWM / INSIDE DEVELOPMENT	90.60	12.76
	TOTAL DEVELOPMENT AREA	709.80	100.00

- ### GENERAL NOTES
- PERIMETER BERMS WITH A TOP BERM SET AT THE MINIMUM 25-YEAR, 3-DAY STORM EVENT ELEVATIONS WILL BE CONSTRUCTED ALONG ALL DRAINAGE AREA BOUNDARIES. IN SOME AREAS, THE PROPOSED ROADWAYS, OR RESIDENTIAL AREAS WILL ACT AS THE PERIMETER BERM IF THESE USES ARE AT OR ABOVE THE MINIMUM 25-YEAR, 3-DAY STORM EVENT ELEVATIONS.
 - ALL INVERTS AND ELEVATIONS ARE IN FEET (NGVD).
 - ALL LAKES SHALL HAVE A 20 FOOT MAINTENANCE AND OPERATION EASEMENT, AN ACCESS EASEMENT TO EACH 20 FOOT MAINTENANCE AND OPERATION EASEMENT WILL ALSO BE GRANTED WHERE NECESSARY.
 - THE LOCATION OF LITTORAL ZONES ARE APPROXIMATE AND MAY BE RELOCATED AT THE TIME OF CONSTRUCTION.
 - PRIOR TO COMMENCEMENT OF CONSTRUCTION APPROPRIATE EROSION CONTROL DEVICES SHALL BE INSTALLED TO CONTROL AND REDUCE SOIL EROSION AND SEDIMENT TRANSPORT TO OFF-SITE AREAS. THE CONTROL STRUCTURES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION. ALL DEVICES SHALL REMAIN IN PLACE UNTIL THE SURROUNDING AREAS ARE ESTABLISHED.
 - PRIOR TO CONSTRUCTION NEAR CONSERVATION AREAS, EROSION CONTROL DEVICES WILL BE INSTALLED ALONG THE CONSERVATION AREA BOUNDARY. THESE DEVICES WILL BE SIX (6) FEET SCREENS AND, IF NECESSARY, STAKED HAY BALES. THESE DEVICES WILL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND THE ADJACENT CONSTRUCTION ZONES ARE ESTABLISHED.
 - ALL GRATE AND RIM ELEVATIONS EQUAL THE MINIMUM RECOMMENDED ROAD CROWN ELEVATIONS UNLESS OTHERWISE NOTED ON PLANS.
 - THE DEPTHS OF THE LAKES MAY BE REDUCED AT THE TIME OF CONSTRUCTION BASED UPON FIELD CONDITIONS. THE MINIMUM LAKE DEPTH WILL BE PER THE SFVMD REQUIREMENTS.

DRY PRE-TREATMENT AREA CALCULATIONS DISCOVERY CENTER

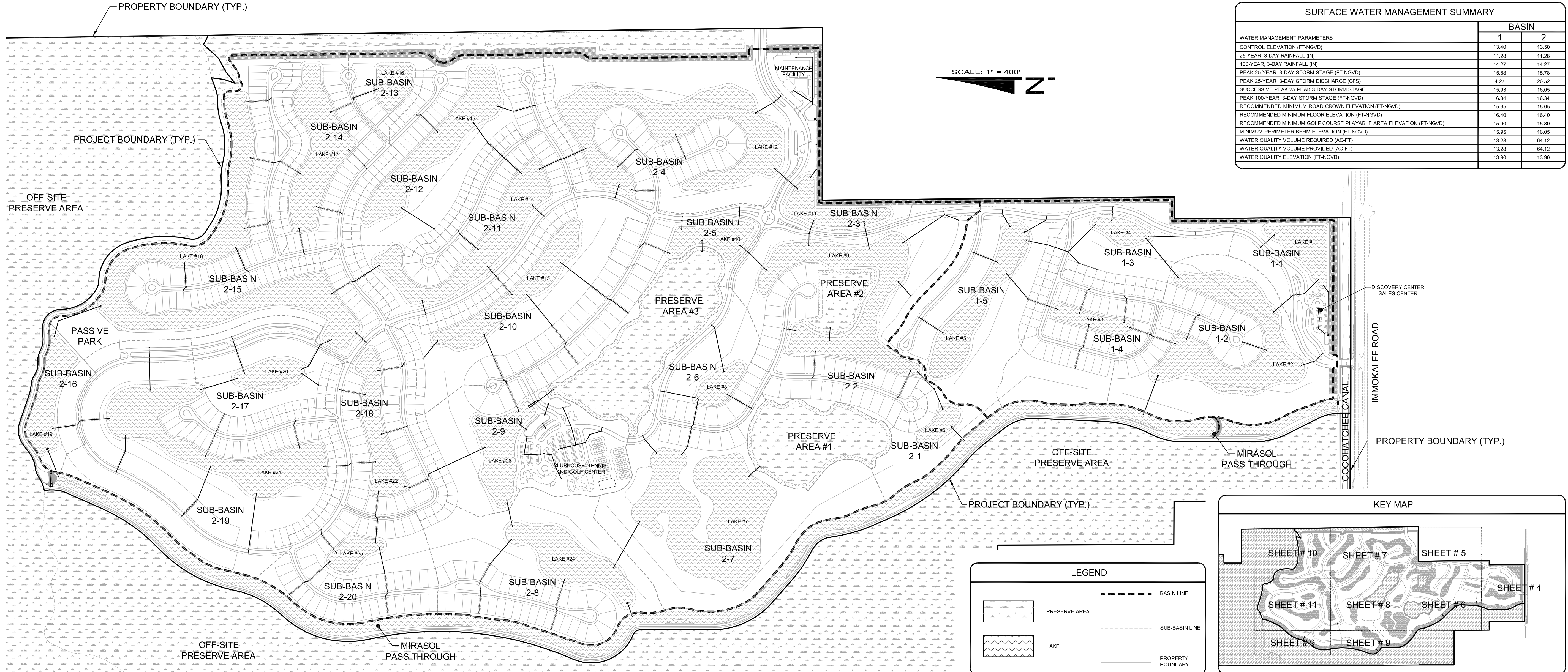
REQUIRED DRY PRE-TREATMENT			CALCULATION INFORMATION		
TOTAL DPT	TREATMENT VOLUME CALCULATIONS	VOLUME (CF)	1/2" DRY PRE-TREATMENT REQUIRED FOR COMMERCIAL AREAS ONLY		
	1/2" x (1712') x 60,548 SF	2,523	PRE-TREATMENT AREA = 1.39 AC. (60,548 SF)		
PROVIDED DRY PRE-TREATMENT			DRY PRE-TREATMENT BOTTOM = 1' ABOVE C.E. = 14.4 FT-NGVD		
DPT AREA #1	BOTTOM AREA (SF)	TOP AREA (SF)	VOLUME (CF)		
	2,616	3,321	3,069		

DRY PRE-TREATMENT AREA CALCULATIONS MAINTENANCE FACILITY

REQUIRED DRY PRE-TREATMENT			CALCULATION INFORMATION		
TOTAL DPT	TREATMENT VOLUME CALCULATIONS	VOLUME (CF)	1/2" DRY PRE-TREATMENT REQUIRED FOR COMMERCIAL AREAS ONLY		
	1/2" x (1712') x 189,050 SF	7,878	PRE-TREATMENT AREA = 4.34 AC. (189,050 SF)		
PROVIDED DRY PRE-TREATMENT			DRY PRE-TREATMENT BOTTOM = 1' ABOVE C.E. = 14.5 FT-NGVD		
DPT AREA #1	BOTTOM AREA (SF)	TOP AREA (SF)	VOLUME (CF)		
	7,891	9,289	8,590		

DRY PRE-TREATMENT AREA CALCULATIONS CLUBHOUSE, TENNIS, AND GOLF CENTER

REQUIRED DRY PRE-TREATMENT			CALCULATION INFORMATION		
TOTAL DPT	TREATMENT VOLUME CALCULATIONS	VOLUME (CF)	1/2" DRY PRE-TREATMENT REQUIRED FOR COMMERCIAL AREAS ONLY		
	1/2" x (1712') x 542,060 SF	22,579	PRE-TREATMENT AREA = 12.44 AC. (542,060 SF)		
PROVIDED DRY PRE-TREATMENT			DRY PRE-TREATMENT BOTTOM = 1' ABOVE C.E. = 13.5 FT-NGVD		
DPT AREA #1	BOTTOM AREA (SF)	TOP AREA (SF)	VOLUME (CF)		
	13,340	15,742	14,541		
DPT AREA #2	12,922	15,146	14,034		
TOTAL DPT	26,262	30,888	28,575		



SURFACE WATER MANAGEMENT SUMMARY

WATER MANAGEMENT PARAMETERS	BASIN	
	1	2
CONTROL ELEVATION (FT-NGVD)	13.40	13.50
25-YEAR, 3-DAY RAINFALL (IN)	11.28	11.28
100-YEAR, 3-DAY RAINFALL (IN)	14.27	14.27
PEAK 25-YEAR, 3-DAY STORM STAGE (FT-NGVD)	15.88	15.78
PEAK 25-YEAR, 3-DAY STORM DISCHARGE (CFS)	4.27	20.52
SUCCESSIVE PEAK 25-YEAR, 3-DAY STORM STAGE	16.93	16.05
PEAK 100-YEAR, 3-DAY STORM STAGE (FT-NGVD)	16.34	16.34
RECOMMENDED MINIMUM ROAD CROWN ELEVATION (FT-NGVD)	15.95	16.05
RECOMMENDED MINIMUM FLOOR ELEVATION (FT-NGVD)	16.40	16.40
RECOMMENDED MINIMUM GOLF COURSE PLAYABLE AREA ELEVATION (FT-NGVD)	15.80	15.80
MINIMUM PERIMETER BERM ELEVATION (FT-NGVD)	15.95	16.05
WATER QUALITY VOLUME REQUIRED (AC-FE)	13.28	64.12
WATER QUALITY VOLUME PROVIDED (AC-FE)	13.28	64.12
WATER QUALITY ELEVATION (FT-NGVD)	13.90	13.90

WALDROP ENGINEERING

CIVIL ENGINEERS & LAND DEVELOPMENT CONSULTANTS

25100 MONTE GRANDE DRIVE - SUITE 205 BONTA SPRINGS, FL 34135
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MIRASOL

CLIENT: IM COLLIER JOINT VENTURE

MASTER SITE PLAN

PLAN REVISIONS

NO.	DATE	DESCRIPTION

FLORIDA CERTIFICATE OF AUTHORIZATION #8836

JEREMY H. ARNOLD, P.E.
FL LICENSE NO. 66421

SET NUMBER: 276-00-01

SHEET: 3

J:\276-01 (Mirasol) SFWMD ERP\AutoCAD\276-01-01 (Rev.02)276000103.dwg
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