Venetian Isles Community Development District

Engineer's Report Infrastructure Improvements

Prepared for
Venetian Isles Community Development District
Board of Supervisors
Miami-Dade County, Florida

Prepared by **Alvarez Engineers, Inc.**

10560 NW 27 Street, Suite 102 Miami, FL 33172 Telephone 305-640-1345 Facsimile 305-640-1346 E-Mail Address: AlvarezEng@aol.com

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I. Introduction.

The Venetian Isles Community Development District (VICDD) was created for the purpose of financing and managing the acquisition, construction and maintenance of the infrastructure of Egret Lakes Estates, a 127.52 gross acre residential development located within the Bird Drive Basin in unincorporated, southwest Miami-Dade County, Florida. The development offers single family dwellings, as well as townhouse residences. The 127.52 acre development is divided in nine sections as follows:

Section	Gross	Approx.	Lake	Approx.	Land
Number	Acreage	Roads Ac.	Tracts Ac.	Lots Ac.	Use
1	33.59	10.99	10.85	11.75	Single family dwellings
2	12.79	2.47	4.23	6.09	Townhouse residences
3	9.17	1.25	2.67	5.25	Single family dwellings
4	15.38	2.89	6.17	6.32	Townhouse residences
5	14.31	1.85	6.08	6.38	Single family dwellings
6	11.26	3.45	0.00	7.81	Single family dwellings
7	12.97	3.00	0.00	9.97	Single family dwellings
8	11.31	3.35	0.00	7.96	Single family dwellings
9	<u>6.74</u>	<u>1.59</u>	<u>1.12</u>	4.03	Single family dwellings
	127.52	30.84	31.12	65.56	- •

See Exhibit I for a graphical representation of the development.

The infrastructure is a network of roadway, stormwater management, water and sanitary sewer systems that will give access and service to about 358 single family dwellings and 216 townhouses.

As of the date of this Engineer's Report, construction of the infrastructure for Sections 1, 2 and 9 is well under way with lakes, roads, drainage, water and sanitary sewer systems being at various stages of completion. The infrastructure for those three sections is estimated to be completed in the winter of 2002. Portions of Sections 3 and 4 have been cleared and grubbed, but construction of the infrastructure within those sections is yet to begin. It is feasible that infrastructure for Sections 3 and 4 could be completed in the summer of 2003. Work within Sections 5, 6, 7 and 8 has not yet begun. It is estimated that construction of the infrastructure within those sections could be completed during the second half of 2003.

II. District Description.

Venetian Isles Community Development District (VICDD) was established under Ordinance No. 02-60 of the County Commission of Miami-Dade on April 23, 2002.

The District is located in Section 16, Township 54S, Range 39E, in Miami-Dade County. It is bounded by theoretical SW 150 Avenue on the east, SW 157 Avenue on the west, theoretical SW 32 Street on the south and SW 26 Street on the north. See Exhibit I.

III. Description of the Infrastructure.

1. Roadways.

For a depiction of the road network, please refer to Exhibit I. For the associated cost of the roadway improvements, refer to Tables 1 and 2.

The District encompasses approximately 30.84 acres of road right of ways. The roads are divided into three main categories: County Public Roads, District Public Roads and Private Gated Roads, The County

public roads are: SW 152 Avenue, SW 26 Street and SW 157 Avenue. The District public roads are: SW 30 Street, Egret Lake Circle, SW 29 Street (within Section 1), SW 153 Court (within Section 1), SW 27 Street (within Section 9), SW 150 Court, SW 26 Terrace (within Section 9) and SW 151 Avenue. The District public roads will be accessible for circulation by the general public, while the private, gated roads will primarily be utilized by the owners of the lots located behind the gates.

The District will finance the construction of the County public roads, and will finance and maintain the District public roads.

An acreage breakdown of the roads within the District follows

Approx. Total Roads Ac.

Approx. County Public Roads Ac. Approx. District Public Roads Ac. Approx. Private, Gated Roads Ac.

30.84

6.72

9.10

8.30

Sections 1 and 2. As of the date of this report, the network of public and private roads is being constructed. The main entrances are located at SW 152 Avenue and at SW 26 Street. In addition to the main entrance, there is a secondary entrance into the northern portion of Section 1 from SW 152 Avenue. From these entrances, a series of streets originate in order to provide access to the townhouse residences and single family dwelling units. The main interior streets within Section 1 consist of divided urban and suburban sections; the County public roads consist of divided (SW 26 Street) and undivided (SW 152 Avenue), urban sections; while the less traveled streets consist of inverted crown sections without curbs or gutters. Within Section 2, the streets consist of inverted crown sections. The typical section for all the interior streets consists of a 12 inch stabilized subgrade, an 8 inch limerock base and a 1 inch asphalt course. The County public streets consist of a 12 inch stabilized subgrade, an 8 inch limerock base and a 2 inch asphalt course. Most of the interior streets within Sections 1 and 2 have been constructed to the point where they are ready to receive the base material. The base, curbs and gutters for SW 152 Avenue have been placed and asphalt paving operations are underway. The curb and gutters for SW 26 Streets are being constructed.

The drainage facilities serving Sections 1 and 2 consist of inlets, manholes, storm pipes and approximately 2,670 Linear Feet (LF) of exfiltration trenches, which have been designed to discharge into the stormwater management lakes. The drainage plans for the development call for the finish floor elevation of the residences to be set at a minimum elevation of 9.50 Ft above the National Geodetic Vertical Datum (NGVD) and the roads, at elevation 8.50 Ft minimum above NGVD. As of the date of this Engineer's Report, the drainage infrastructure for Sections 1 and 2 has been substantially completed. The cost of drainage facilities has been incorporated in the stormwater management system herein.

Sections 3 and 4. The elements of the typical roads within Sections 3 and 4 are similar to those of Sections 1 and 2. As of the date of this Engineer's Report, Section 3 in its entirety had been cleared. grubbed and fill had been placed. Section 4, with the exception of the lake area, had been cleared. grubbed and fill had been placed in the area where townhouse residences will be constructed. No work for roadway, pavement, grading or drainage had begun. It is feasible to complete the infrastructure improvements for Sections 3 and 4 in the summer of 2003.

Sections 5, 6, 7 and 8. The elements of the typical roads within Sections 5, 6, 7 and 8 are similar to those of Sections 1 and 2. As of the date of this Engineer's Report, work within these sections had not yet begun, and the land was in its natural state. It is estimated that construction of the infrastructure within Sections 5, 6, 7 and 8 could be completed during the second half of 2003.

Section 9. Construction of roadway, paving, grading and drainage infrastructure within this section is at the most advanced stage of completion within the development. The drainage system is in place and

such costs have been incorporated in the stormwater management system herein. As of the date of this report, roadway paving operations were being conducted.

The costs for roadway improvements are detailed in tables 1 and 2. The costs of the drainage facilities associated with the roads are detailed in table 3, under the Stormwater Management category. The impact costs for wetlands mitigation were taken at \$29,704 per acre as directed by the Department of Environmental Resources Management (DERM, Class IV Permits Special Conditions). In this Engineer's Report, these impact costs were applied solely to the County and District public road right of ways.

2. Stormwater Management System.

For a depiction of the stormwater management system, please refer to Exhibit II. For the associated costs, refer to Tables 1 and 3.

Within the District boundaries, the stormwater management system consists of 31.12 acres of lake tracts. All the District's storm runoff is routed to the lakes via a system of inlets and pipes. By means of on-site retention, the lakes provide flood protection to the development as well as stormwater quality treatment.

As of the date of this report, construction of the stormwater management lakes within Sections 1, 2 and 9 is well under way with excavation being at different stages of completion. The most completed lake is the one located within Section 9, which as of this date, practically requires only grass stabilization at its side slopes to be completed. The lakes within Sections 1 and 2 are being excavated; their side slopes still need to be graded and stabilized with grass. No excavation work has yet begun for the lakes within Sections 3, 4, and 5. No lakes are located within Sections 6, 7 or 8.

In order to identify the cost of the earthwork operations within the District's jurisdictional zones, the volume of excavation necessary to construct lakes to the minimum depth permitted by Miami-Dade County was estimated (10 Ft below Mean Low Groundwater Elevation). The costs of excavation were then made a part of the stormwater management system that the District will finance. It was assumed that, if the lakes are excavated deeper than the minimum required, the additional fill material obtained would not benefit the District, since the additional material would be used only to elevate and grade the private lots. The cost of excavating the lakes below the 10 foot depth will not be paid by the District.

As noted above, the stormwater management system includes 31.12 acres of lake tracts. It is expected that the District will purchase the lake tracts at a value currently estimated by the District Engineer to be approximately \$1,556,000. The final purchase price will be determined by qualified appraisals.

3. Water Distribution System.

For a depiction of the water distribution system, please refer to Exhibit III. For the associated costs, refer to Tables 1 and 3.

Sections 1 and 2. The water distribution system is composed of variable pipe sizes ranging from 6 to 16 inch diameters for water service and fire protection. The system is connected to existing Miami-Dade Water and Sewer Department (WASD) facilities. In general, the onsite water distribution system is composed of 8 inch ductile iron pipes that run under the network of interior streets and driveways. The 6" ductile iron pipes branch out of the main line to serve the fire hydrants. The water system within Sections 1 and 2 encompasses approximately 100 linear feet of 16 inch pipe, 4,815 linear feet of 8 inch pipe, 325 linear feet of 6 inch pipe and 13 fire hydrants. As of the date of this Engineer's Report, the water distribution infrastructure for Section 1 and 2 was substantially completed.

Sections 3, 4, 5, 6, 7 and 8. As of the date of this Engineer's Report, construction of the water distribution system had not yet begun. The water system within Sections 3, 4, 5, 6, 7 and 8 will encompass approximately 1,977 linear feet of 30 inch pipe, 1,084 linear feet of 16 inch pipe, 13,471 linear feet of 8 inch pipe, 600 linear feet of 6 inch pipe and 22 fire hydrants. It is feasible to complete the infrastructure improvements for Sections 3 and 4 in the summer of 2003. It is estimated that construction of the infrastructure within Sections 5, 6, 7 and 8 could be completed during the second half of 2003.

Section 9. Construction of the water distribution system infrastructure within this section is essentially completed. The system within this section encompasses 1,253 linear feet of 8 inch pipe, 50 linear feet of 6 inch pipe and 2 fire hydrants.

When completed, the water distribution system of the entire development will be dedicated to WASD for operation and maintenance.

4. Sewage Collection System.

For a depiction of the sewage collection system, please refer to Exhibit IV. For the associated costs, refer to Tables 1 and 5.

A lift station centrally located within the development in Section 1 will serve the entire project. The lift station will be connected to existing WASD owned facilities, via 8 inch and 16 inch ductile iron pipe force mains running to the WASD point of connection located on SW 152 Avenue.

Sections 1 and 2. The sewage collection system consists of approximately 12,156 linear feet of gravity and force main pipe that ranges in size from 8 to 16 inches in diameter. There are 172 service laterals, and 43 manholes. At the time of this Engineer's Report the sewage facilities within Sections 1 and 2 were substantially completed. Gravity sewer installations were being conducted in Section 2, just east of the lake.

Sections 3, 4, 5, 6, 7 and 8. As of the date of this Engineer's Report, construction of the sewage collection system within these sections had not yet begun. The sewage collection system within this section will consist of approximately 11,920 linear feet of gravity pipe that ranges in size from 8 to 10 inches in diameter. There will be 353 service laterals and 57 manholes. It is feasible to complete the sewage infrastructure improvements for Sections 3 and 4 in the summer of 2003. It is estimated that construction of the sewage infrastructure within Sections 5, 6, 7 and 8 could be completed during the second half of 2003.

Section 9. Construction of the sewage collection system infrastructure within this section is essentially completed. The system within this section encompasses 1,178 linear feet of 8 inch gravity pipe, 30 service laterals and 7 manholes.

When completed, the sewage collection system, including the lift station and force main, will be dedicated to WASD for operation and maintenance.

IV. Ownership and Maintenance.

The District will acquire the land and finance the construction of the improvements. It will then transfer the land and improvements to the following agencies for ownership and maintenance:

Description
County Public Roads
District Public Roads
Stormwater Management System

Future Ownership Miami-Dade Public Works Venetian Isles CDD Venetian Isles CDD Future Maintenance Miami-Dade Public Works Venetian Isles CDD Venetian Isles CDD **Description**Water Distribution System
Sewage Collection System

Future Ownership Miami-Dade WASD Miami-Dade WASD Future Maintenance Miami-Dade WASD Miami-Dade WASD

V. Permitting Status.

1. Wetlands.

Section 1. Class IV Permit No FW 99-059 issued by DERM on 8-17-01. Expires on 8-17-03. Section 2. Class IV Permit No FW 99-059(B) issued by DERM on 7-5-01. Expires on 7-5-03. Section 3. Section 4. Class IV Permit No FW 99-059(C) issued by DERM on 6-28-02. Expires on 6-28-04. Sections 5, 6, 7 and 8. Not yet issued. Section 9. Class IV Permit No FW 99-059(E) issued by DERM on 11-21-01. Expires 11-21-03.

2. Roadway and Stormwater Management Permits.

Section 1. Approval by DERM Water Control on 6-14-01
Class II Permit No. OF-010814-1 issued by DERM Water Management on 8-01.
Approval by Miami-Dade County Public Works Department on 7-9-01 and 7-11-01.

Section 2. Approval by DERM Water Control on 6-14-01
Class II Permit No. OF-010814-2 issued by DERM Water Management on 8-01.
Approval by Miami-Dade County Public Works Department on 6-20-01 and 7-9-01.

Sections 3, 4, Not yet issued. 5, 6, 7 and 8

Section 9. Class II Permit No. OF-011127-1 issued by DERM Water Management on 2-14-02. Approval by Miami-Dade County Public Works Department on 2-12-02 and 2-13-02.

3. Water Distribution System

Section 1. WASD Water Permit DW 2001-102 issued 8-24-01
Fire Department Water Main Extension Number 01340-00176 issued 9-6-01.
Department of Health Permit Number 125199-422-DS/C issued 10-10-01.

Section 2. WASD Water Permit DW 2001-102 issued 8-24-01
Fire Department Water Main Extension Number 01340-00176 issued 9-6-01.
Department of Health Permit Number 125199-422-DS/C issued 10-10-01.

Section 3. WASD Water Permit DW 2001-171 issued 12-28-01
Fire Department Water Main Extension Number 02340-00007 issued 1-8-02.
Department of Health Permit Number 125199-540-DS/C issued 4-10-02.

Section 4. WASD Water Permit DW 2001-171 issued 12-28-01
Fire Department Water Main Extension Number 02340-00006 issued 1-8-02.
Department of Health Permit Number 125199-658-DS/C issued 6-18-02.

Sections 5,6,7,8Not yet issued.

Section 9. WASD Water Permit DW 2001-171 issued 12-28-01
Fire Department Water Main Extension Number 02340-00004 issued 1-7-02.
Department of Health Permit Number 125199-536-DS/C issued 2-13-02.

4. Sewage Collection System.

Section 1. WASD Sewer Permit DS 2001-570 issued 8-24-01

DERM Sewerage Facilities Serial Number SE 01-139 issued 9-18-01.

Section 2. WASD Sewer Permit DS 2001-570 issued 8-24-01

DERM Sewerage Facilities Serial Number SE 01-139 issued 9-18-01.

Section 3. WASD Sewer Permit DS 2001-614 issued 12-28-01

DERM Sewerage Facilities Serial Number SE 02-012 issued 2-12-02.

Section 4. WASD Sewer Permit DS 2001-614 issued 12-28-01

DERM Sewerage Facilities Serial Number SE 02-012 issued 2-12-02.

Sections 5,6,7,8Not yet issued.

Section 9. WASD Sewer Permit DS 2001-614 issued 12-28-01

DERM Sewerage Facilities Serial Number SE 02-012 issued 2-12-02.

Lift Station WASD Sewer Permit DS 2001-570 issued 8-21-01

DERM Sewerage Facilities Serial Number SE 01-139 issued 9-18-01

VI. Estimate of Capital Improvement Costs.

Sections 1, 2, 3, 4, 5, 6, 7, 8 and 9

Roadway Improvements\$ 1,525,900Stormwater Management System\$ 6,706,000Water Distribution System\$ 1,216,200Sewage Collection System\$ 2,112,300Grand Total\$11,561,000

Tables 1 through 5 show line item estimates for each category.

The costs of the infrastructure will be allocated to each residential unit within the development in the form of special assessments, in accordance with the approved methodology described in the "Special Assessment Methodology Report" prepared for Venetian Isles Community Development District by Special District Services, Inc.

VII. Engineer's Certification.

It is our opinion that the extent of proposed improvements and their estimated costs are fair and reasonable. We believe that the improvements can be permitted, constructed and installed at the costs described in this report. Furthermore, it is our opinion that the proposed improvements as described in this report can be permitted within the current regulations of the governing agencies.

I hereby certify that the foregoing is a true and correct copy of the Engineer's Report for the Venetian Isles Community Development District.

Juan R. Alvarez, PE

Florida Registration No. 38522

October 11, 2002. (Revised November 22, 2002)

TABLES AND EXHIBITS

Venetian Isles CDD Construction Cost Estimates

Table 1 - Summary

Description of Work	Total Estimated Cost
Infrastructure Component Table	
Roadway Improvements 2	\$1,525,900
Stormwater Management System 3	\$6,706,600
Water Distribution System 4	\$1,216,200
Sewage Collection System 5	\$2,112,300
terror meter transfer and trans	
Grand Total (Rounded up to Next 1,000)	\$11,561,000
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Venetian Isles CDD Construction Cost Estimates

Table 2 - Roadway Improvements *

Description of Work	Unit	Unit Price			Qua	ntities by	Develomen	t Section Nu	ımber			
· · · · · · · · · · · · · · · · · · ·	Jine		1	2	3	4	5	6	7	8	9	Total Estimated Cos
12" Subgrade (Roads)	SY	\$0.57	16,630		1,993	2780	159	0 4586	537	7 4312	4785	\$21,025.35
8" Baserock	SY	\$6.22	15,970		1,687	2780	134	5 4023	537			
1" asphaltic concrete	SY	\$3.39	5,015			2500			483			1210,000
2" asphaltic concrete	SY	\$5.65	9,875		1,687		134	5 4023		2750		7 11,0 11,10
4" Concrete Sidewalk	SY	\$20.34	5,700		460	417	37	0 1226	81			
Curb and Gutter	ĹF	\$8.76	5900		1,380	1500	110					
Guardrail	LF	\$13.56	3,120			<u> </u>						\$42,307.20
Finish Soil layer (swales)	SY	\$0.79	11,650	3,51	4,270	7,300	5,64	5 1,825	381	3,409	1,500	
Sod (swales)	SY	\$2.83	11,650	3,51	4,270	7,300						
24" white stripe	LF	\$3.96	70	_		20				20		\$949.20
18" white stripe	LF	\$2.26	147							 	200	\$784.22
12" white stripe	LF	\$1.81	805			130	10	5	 	145		\$2,413.68
18" yellow stripe	LF	\$3.11	145							1-0	200	\$1,072.09
4" yellow stripe	LF	\$1.13	6,150					100			2,500	\$9,887.50
4" white stripe	LF	\$1.13	4,220		_		 		_	 	1,000	\$5,898.60
4" white skip stripe	LF	\$5.65	560		180		130	350	-	260	100	\$8,927.00
Sign, Assembly	AS	\$226.00	18			2		1		200	15	\$8,136.00
Object Markers	EA	\$158.20	16							 -	- '9	\$2,531.20
Densities	EA	\$84.75	29		3	5		2 7	1	7	8	\$5,254.50
Surveying and As-Builts	LS	4%	\$ 18,299	\$ 508	\$ 2,362	\$ 3,044	\$ 2,226	\$ 4,076	\$ 434	\$ 4,237	\$ 4,004	\$39,189.61
Permits	Ac	\$330.18	22.74	8.56		9.21	8.23			11.31	5.62	
Wetland Permits (For Roads)	Ac	\$29,704	8.08		0.79	1.03	0.63		0.20	1.87	1.59	\$31,829.10
-					1	,,,,,	1	1.50	0.20	1.67	1,59	\$469,917.28
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Total (Rounded to Nearest 100)					† i		-	 		 		\$1,525,900.00

^{*} Note: Unit prices, except permit fees, include a 13% factor to account for Engineering and other professional fees (6%) and contingencies (7%)

Venetian Isles CDD Construction Cost Estimates

Table 3 - Stormwater Management System *

Description of Work	Unit	Unit Price			Quar	ntities by D	eveloment	Section Nu	mber			
			1	2	3	4	5	6	7	8	9	Total Estimated Cos
15" CMP	LF	\$31.64	2,566	927	688	1875	780	670	1550	550	421	\$317,254.28
18" CMP	LF	\$35.03	1,676	126	524	78	570	1030		765		\$171,436.82
24" CMP	LF	\$42.94	1,267	204	74	0	75	0				\$69,562.80
Exfiltration Trench w/15" CMP	LF	\$56.50	1,220	600	440	725	450	350	815	850	365	
Exfiltration Trench w/18" CMP	ĻF	\$73.45	50	100							-	\$11,017.50
Exfiltration Trench w/24" CMP	LF	\$84.75	700		150	0	50	350		250	100	
Baffles	EA	\$169.50	21	17	4	14	6	10		12		*
Inlets, Type P-5	EA	\$3,164.00	1							1		\$12,656.00
Inlets, Type P-6	ΕA	\$3,277.00	10				1	2		2	1	\$52,432.00
Inlets, CB	EA	\$1,751.50	25	13	13	26	3	4	7	10	L	
Manhole	EA	\$2,486.00	2			4	2	2	4	2		\$39,776.00
CB Grates & MH Rings	EA	\$180.80	27	13	13	30	5	- 6		12		\$22,780.80
Headwall Struct & Junction box	LS	\$1,243.00	12	3	1.	4	3				3	\$33,561.00
Surveying and As-Builts	LS	4%	\$ 17,371	\$ 4,619	\$ 4,317	\$ 6,851	\$ 3,867	\$ 5,374	\$ 5,134	\$ 5,993	\$ 2,677	\$56,203.49
Stormwater Management Permits	Ac	\$109.82	22.74	8.56	6.50	9.21	8.23	11.26	12.97	11.31	5.62	
Wetland Permits (For Lakes)	Ac	\$29,704	10.85	4.23	2.67	6.17	6.08	0.00	0.00	0.00	1.12	\$10,586.90 \$924,388.48
Lake Excavation (To 10' below WT)	CY	\$4.24	226,623	88,352	55,768	128,872	126,992			0.00	23,393	\$2,754,375.00
Acquisition of Lake Tracts	Ac	\$50,000.00	10.85	4.23	2.67	6.17	6.08	0.00	0.00	0.00	1.12	\$1,556,000.00
	İ							- 0.00	0.00	0.00	1,12	\$1,556,000.00
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Total (Rounded to Nearest 100)		· · · · · · · · · · · · · · · · · · ·										\$6,706,600.00

^{*} Note: Unit prices, except Permit Fees and Acquisition of Lake Tracts Easements, include a 13% factor to account for Engineering and other professional fees (6%) and contingencies (7%)

)122/2002

Venetian Isles CDD Construction Cost Estimates

Table 4 - Water Distribution System *

					Oilan	Onantities by D	aveloment	Daveloment Soction Number	mhor			
Description of Work		Unit Price	-	•					2		,	Total Estimated Cost
Connect to Existing M/ M	0	62 280 00	•	•	,	•	?	9	,	8	S	
COLUMNIC EXISTING VV.IVI.	3 !	\$2,280.00	-									\$2,260.00
6" D.I.P.(Assumed 25/FH Branch)	4	\$22.76	225	100	100	100	75	75	150	100	20	\$22,189,25
8" D.I.P.	F.	\$25.99	2,215	2,600	1,305	3,780	1,379	1,741	3,247	2.019	1.253	\$507.818.61
12" D.I.P.	Ŀ	\$28.75	670									\$19.260.62
16" D.I.P.	T.	\$41.92	100				554	230				\$49 636 83
30" D.I.P.	F	\$50.85						096		1017		\$100 530 45
6" Gate Valve & Box	EA	\$622.86	თ	7	2	4	က	3	9	4	2	\$23,045,67
8" Gate Valve & Box	4	\$778.57	11	10	ဖ	11	4		13	e	2	\$49.049.91
12" Gate Valve & Box	Ð	\$1,485.95	3								1	\$4.457.85
16" Gate Valve	ជ	\$1,980.33	-				-	-				85 940 98
30" Butterfly Valve	Ā	\$2,260.00						-		0		\$6.780.00
Fire Hydrants	Ą	\$1,559.40	O	4	2	4	က	m	9	4	6	\$57.697.80
8*Tee	ā	\$429.40	10	7	2	4	2		5		10	\$13 740 BD
8"x6"Tee	ā	\$429.40	9	4	2	4	2	2			10	\$0.746.00
12" x 6" Tee	ā	\$527.03	2								1	64 054 00
12" x 8" Tee	Æ	\$505.11	-									91,034.00
16" x 12" Tee	Ā	\$734.50	-									\$303.11 \$734.50
16" x 6" Tee	EA	\$702.75	-				•					9/34:30
15" × 0" To	5 5	\$672 40										\$1,405.49
DO 10 10 10 10 10 10 10 10 10 10 10 10 10	5	40/3.40					-					\$673.48
3U X3UX8 166	S	\$791.00								-		\$791.00
30" Cross	ð	\$565.00						1			!	\$565.00
8" Cross	4	\$508.50							ı	-		\$1.017.00
12" x 8" Cross	ā	\$508.50	2									\$1.017.00
12" Fitting	ð	\$452.00	8									\$3,616,00
8" 90 Degree Bend	4	\$429.40				4						\$1.717.60
8" Fitting	Æ	\$429.40	79	5	6	4	9	3	Ø	9	7	857 386 80
8" Plug	EA	\$367.25	1	2		2						\$1 836.25
8" x 2" CAP W/ 2" F.V.O.	EA	\$452.00		က		2				2		\$3.164.00
16" CAP W/ 2" F.V.O.	Ą	\$452.00						-		,		6/52 00
30" CAP W/ 2" F.V.O.	4	\$678.00						-				8679.00
1" Single Service	EA	\$395.50	6	4	2	17	4	m	7	3	0	\$20,120,50
1" Dual Service	Ē	\$395.50	36	83	13	\$	15	24	g	28	1 4	\$104 807 50
Miscellaneous	S	\$5,650.00	1	-	-	-	-	1	-	-	-	\$50.850.00
Densities	รา	\$3,390.00		-	-	-	-	7	-			\$30,510,00
Surveying & As-Builts	လျှ	4%	\$ 7,585	\$ 4,715	\$ 2,270	\$ 6,034	\$ 3,466	\$ 5,732	\$ 5,378	\$ 5,532	\$ 2,027	\$42,737.87
Chlorinating & Testing	<u>5</u>	\$0.28	3,210	2,700	1,405	3,880	2,008	2,346	3,397	2,119	1,303	\$6,318.96
Permit	S	\$180.00	22.74	8.56	6.50	9.21	8.23	11.26	12.97	11.31	5.62	\$17.352.00
Total (Rounded to Nearest 100)												\$1,216,200.00
* Note: Unit prices, except Permit Fees, include a 13% factor to account for Engineering and other professional fees (6%) and continuous (77%)	include a	13% factor to ac	count for Er	aineerina a	and other pro	ressional fe	ne (%9) se	d confindent	~ioc (7%)			

factor to account for Engineering and other professional fees (6%) and contingencies (7%)

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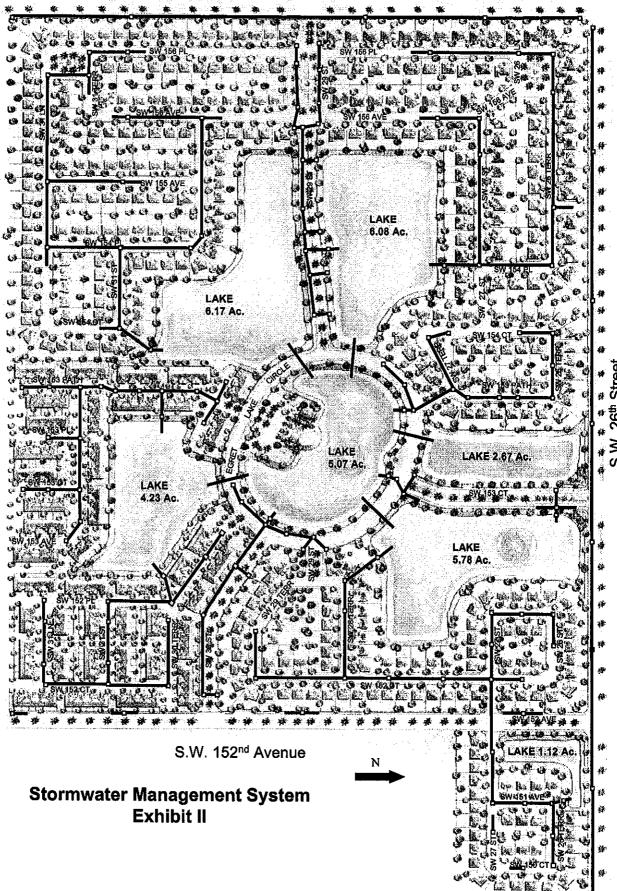
Venetian Isles CDD Construction Cost Estimates

Table 5 - Sewage Collection System *

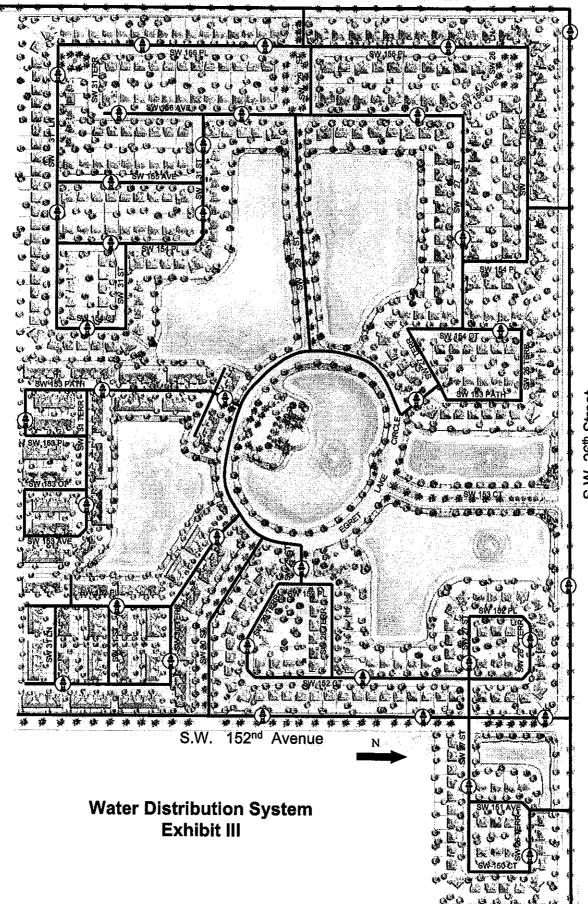
The state of the s	#: <u>"</u>	11-11			Quar	Quantities by D	Develoment Section Number	Section N	ımber			Total Estimated
Descripaton of Work		Onit Price	_	2			9	9	_	•	6	Cost
10" D.I.P. (14'-16')	<u>1</u>	\$90.40	172	L						,	,	\$15.548.80
12" D.I.P. (14'-16')	<u> </u>	\$101.70	4	i								64 OF OO
8" D.I.P.(0'-6')	5	\$39.55	1,484			8		40	69		G.	
8" D.I.P. (6'-8')	4	\$44.07	8	09	9	ĺ	40	İ		2		817 515 00
8" D.I.P. (8'-10')	Ŧ	\$50.85				20			1			\$3.051.00
8" PVC (0'-6')	4	\$22.60	1,081	1,		950		340	1358	320	1118	\$147.284.20
8" PVC (6'-8')	4	\$29.38	666		504		1117					
8"PVC (8'-10')	5	\$33.90	579							749	110	\$135,972.00
8" PVC (10'-12)	<u> </u>	\$42.94	706		10,				3			\$37.49£ £3
8" PVC (12'-14')	5	\$51.98	412						5	1	-	20.04, 400 824, 44E 7E
8" PVC (14'-16')	٣	\$65.54	8									97.014.124
10" PVC (12'-14')	<u>L</u>	\$56.50	254			736						32,030.0U
16" DIP		\$41.92	3.940			3						\$22,930.UO
16" Fittings	ă	\$565.00	4									\$160,1/6.62 60,000,00
2" Fittings	iμ	\$420 AD	42									\$2,260.00
18" Din	5 2	#423.40	2									\$5,582.20
lo riug	១ ខ	0423.40	-									\$429.40
16" Flug Varve	1	\$452.00	-	i								\$452.00
8" Plug Valve	4	\$395.50	1									\$395.50
16" Gate Vaive	EA	\$1,979.76	2									\$3 959 57
MH with 8" Check Valve	Æ	\$3,390.00	1									\$3,390,00
MH (0'-6')	Ą	\$1,469.00	2		2	7	2	4	80		2	\$67,574.00
MH (6'-8')	Ā	\$2,034.00	9	4	3	3	3		i	2		\$48.816.00
MH (8'-10')	ង	\$2,147.00	1		2							\$23,617,00
MH (10'-12)	4	\$2,543.63	4	-		1						\$17.805.41
MH (8'-10') w/ Drop Inlet	2	\$3,616.00	1		-	1						\$14 464 00
MH (10'-12') w/ Drop Inlet	EA	\$3,842.00	-									\$7,684.00
MH (12'-14')	EA	\$3,051.00	7			2						\$27,459.00
MH (14'-16')	EA	\$3,277.00	2									\$6.554.00
MH (14'-16') w/ Drop Inlet	EA	\$3,842.00	1		ļ							\$3.842.00
6" PVC Lateral	ሿ	\$406.80	62	110	28	100	34	51	79	61	30	\$225 774 00
MH Connection	E	\$96.05	17			8						\$2 401 25
MH Inverts & Ring	Ճ	\$265.55	23	13	8	18	5	9	14	9	7	\$28,148.30
Gravei # 5/	Z L	\$9.61	1,450	650	400	006	250	300	00,	8	350	\$50,906,50
Miscellaneous	S	\$5,650.00					-		-	-	-	\$28,250.00
Connect to Existing FM	S :	\$3,390.00	_									\$3,390,00
Air Release	\$ (\$113.00	မွ									\$678.00
Lift Station	S	\$508,500.00	-									\$508,500.00
Kestoration of pavement (FM)	SY	\$16.95	2900									\$49,155.00
Maintenance of Traffic	S	\$11,300.00	1									\$11,300,00
Densities	LS	\$3,390.00		1	1	1	-	-		1	-	\$33,900,00
Cleaning & Lesting	<u></u>	\$0.73	2,743	2,315	1,270	2,072	1,157	1,618	3,112	1,791	1,178	\$12,674.53
Permit	2	\$150.00	Ŋ					11.26	12.97	11.31	5.62	\$14,460.00
Surveying & As-Builts	ន	4%	\$ 21,181	\$ 5,561	\$ 3,234	\$ 7,765	\$ 2,447	\$ 3,232	\$ 6,348	\$ 3,789	\$ 2,214	\$55,770.83
lotal (Rounded to Nearest 100)												\$2,112,300.00
* Note: Unit prince overset Domit Con include		- 430/ 4-4-4-	T - Sec. T		3 -							

^{*} Note: Unit prices, except Permit Fees, include a 13% factor to account for Engineering and other professional fees (6%) and contingencies (7%)

S.W. 26th Street



S.W. 26th Street



S.W. 26th Street

