Coronado Community Development District

Engineer's Report Infrastructure Improvements

Prepared for

Coronado 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: Info@AlvarezEng.com

Approved April 18, 2006

TABLE OF CONTENTS

Narrative

I. Introduction	3
1. Location and General Description	3
2. District Purpose and Scope	3
3. Description of Land Use	
II. Governmental Actions	3
III. Infrastructure Benefit	4
IV. Infrastructure Improvements	5
V. Description of the Infrastructure	6
1. Roadway Improvements	.6
2. Stormwater Management	6
3. Water Distribution System	.6
4. Sanitary Sewer System	.7
5. Recreational Amenities	7
6. Construction Schedule	7
VI. Ownership and Maintenance	
VII. Road R/W, Water Management Lake & Other Open Spaces	
VIII. Estimate of Capital Improvement Costs	
IX. Conclusions and Summary Opinion	8
Appendix	
Location Map	Exhibit 1
Vicinity Map and Legal Description	Exhibit 2
District Boundary Map	
Roadway Improvements Map	Exhibit 4
Stormwater Management Map	Exhibit 5
Water Distribution System Map	Exhibit 6
Sanitary Sewer System Map	Exhibit 7
District Land Use Map	Exhibit 8
Construction Cost Estimates	Exhibit 9
Summary Table	Table 1
Roadway Improvements	Table 2
Stormwater Management	Table 3
Water Distribution System	Table 4
Sanitary Sewer System	

I. Introduction

1. Location and General Description. The Coronado at Doral is a land development project (the "Development") located within the City of Doral in Miami-Dade County, Florida, Zip Code 33178. The development measures approximately 18.57 Acres of which 17.28 Acres are contained within the limits of the Coronado Community Development District (the "District") and 1.29 Acres of the 18.57 are to be dedicated to Miami-Dade County and the City of Doral for offsite road right of way. The District is located in Section 7, Township 53S, Range 40E.

The District is situated approximately ¾ of a mile east of State Road 821 (Homestead Extension of Florida's Turnpike), 3 miles west of State Road 826 (Palmetto Expressway) and 3 miles north of NW 41 Street. (See Exhibit 1, Location Map). The District is bounded by NW 109 Avenue on the west, NW 90 Street on the north, NW 107 Avenue on the east and NW 88 Street on the south. (See Exhibit 2, Vicinity Map).

2. District Purpose and Scope. The District was established for the purpose of financing, acquiring or constructing, maintaining and operating a portion of the infrastructure necessary for the community development within the District. The purpose of this report is to provide a description of the infrastructure improvements to be financed by the District. The District will finance, acquire and/or, construct, operate, and maintain certain of the infrastructure improvements that are needed to serve the Development. Included as part of the infrastructure improvement program is the acquisition of certain real estate interests in the storm water management system and easement related to the onsite road rights-of-way. A portion of these infrastructure improvements will be completed by D.R. Horton, Inc., the primary developer of the Development (the "Developer"), and may be acquired by the District with proceeds of bonds issued by the District. The Developer will finance and construct the balance of the infrastructure needed for the Development that is not financed by the District.

The proposed infrastructure improvements, as outlined herein, are necessary for the functional development of the District as required by the applicable independent unit of local government.

3. Description of Land Use. The lands within the District encompass approximately 17.28 acres. The District is planned to construct 327 condominium dwelling units. The table below illustrates the current land use plan. (See Exhibit 8, Land Use Map)

Proposed Land Use	Approximate Acres	Units
Residential Tracts*	14.28	327
Lake	3.00	
Total	17.28	327

^{*} Includes approximately 2.85 Acres of easements for the District roads.

II. Governmental Actions

The District was established pursuant to Miami-Dade County Ordinance No. 06-22 effective March 4, 2006 and by City of Doral Resolution No. Z05-38.

The current plan of development is expected to include 327 condominium dwelling units and various recreational uses. The Development is governed by a development agreement with the City of Doral which (i) establishes the availability and means for public utilities to serve the Development; (ii) provides for the construction of certain transportation improvements conferring an area-wide benefit on the transportation network; (iii) reserves certain sites within the Development for certain future, potential

public purpose facilities; (iv) ensures the developer(s) of the Development that it may proceed with annexation and development consistent with the level of entitlements and on the terms and condition set forth in the Development Agreement; and (v) meets the concurrency requirements for the Development pursuant to applicable laws, regulations and ordinances.

In addition to the Development Agreement that governs the entire Development, the Development received zoning approval from Miami-Dade County under Resolution No. CZAB9-8.03. All conditions of the zoning Resolution and the Development Agreement are currently being complied with.

An interlocal agreement by and between the District, Miami-Dade County and the City of Doral will need to be obtained before offsite improvements can be funded by the District.

An amendment to include the District in current Agreement Number 19117 between the Developer and Miami-Dade County Water and Sewer Department (WASD) must be negotiated and finalized before the District can fund water and sewer improvements.

Planning and engineering is underway with permits applied for or received. The following permits will be required for the Development:

- a. South Florida Water Management District (SFWMD):
 - Environmental Resource Permit
- b. U.S. Army Corps of Engineers (USACOE):
 - Dredge and Fill Permit or Exception Freshwater Wetlands
- Miami-Dade County Department of Environmental Resources Management (DERM)
 - Wetlands Division Freshwater Wetlands Class IV Dredge and Fill Permit
 - Water Control and Coastal Engineering Division Stormwater Drainage Class II Permit
 - Sewerage Facilities Division Sanitary Sewer Permit
- d. Miami-Dade County Water and Sewer Department (WASD)
 - Water Permit Potable Water Mains
 - Sewer Permit Sanitary Sewer Mains and Facilities
- e. State of Florida Department of Environmental Protection (DEP) / Miami-Dade County Department of Health
 - Health Permit Potable Water Supply Facilities
- f. Miami-Dade County Fire Department
 - Fire Protection Permit Water Main Extension and Fire Hydrants
- g. Miami-Dade County Public Works Department
 - Traffic Division Traffic Permit
 - Paving and Drainage Division Paving and Drainage Permit
- h. City of Doral
 - Public Works Department Water and Sewer Permit
 - Public Works Department Lake Excavation Permit
 - Overall Engineering and Construction Permit

Please see Exhibit 10 for a detailed description of the permit status. It is our opinion that there are no technical reasons existing at this time which would prohibit the implementation of the plans for the Development as presented herein and that all permits not heretofore issued and which are necessary to effect the improvements described herein will be obtained during the ordinary course of development.

III. Infrastructure Benefit

The District will fund, maintain and operate two types of public benefits. These benefits include:

1. Project wide public benefits

2. Incidental public benefits

The project-wide public benefits are provided by infrastructure improvements that serve all residents in the District equally. These public infrastructure improvements include roadways, stormwater management, open space areas, potable water and sanitary sewer system improvements to serve the entire District.

Incidental public benefits include those benefits received by the general public who do not necessarily reside within the District. These benefits occur for two reasons in the case of the District. First, the general public will be using some of the external improvements provided by the District. Second, the proposed infrastructure improvements are required under the Development's development order or agreement, which includes not only the District but also additional facilities outside the District, which will also benefit from District improvements.

The proposed infrastructure improvements identified in this Report are intended to provide specific benefit to the assessable real property within the boundaries of the District. As the property is currently unused, the construction and maintenance of the proposed infrastructure improvements are necessary and will benefit the property for the intended use as a residential subdivision. As noted, the District can construct, acquire, own, and operate any or the entire proposed infrastructure. As noted earlier, the Developer will construct the infrastructure not constructed by the District.

IV. Infrastructure Improvements

The Land Section within which the District is located, is rapidly being developed. There are four other Community Development Districts adjacent to the District which have their infrastructure either substantially completed, such as in the case of Islands at Doral (SW) CDD and Islands at Doral (NE) CDD, well advanced, as in the case of Islands at Doral III CDD, or about to begin, as in the case of Islands at Doral Townhomes (See Exhibit 2, Vicinity Map).

The Coronado CDD infrastructure will connect and interact with the adjacent, recently constructed offsite roads, lakes, and water and sewer systems.

The proposed infrastructure improvements addressed by this report include: (1) master infrastructure elements that will serve the common areas throughout the vicinity and (2) subdivision infrastructure elements that are internal to the Development. The infrastructure elements include the cost of earthwork/grading of public property, roadways, stormwater management and drainage systems, water and sewer systems, pavement markings and signage. The costs for engineering design and inspection of these elements as well as the anticipated cost for professional service fees and permitting fees have been included and allocated across each infrastructure category mentioned above. An allocated cost for land acquisition of the storm water management lake, and acquisition of easement for District road rights-of-way are part of the overall infrastructure program of the District and have been included in the estimate herein. The proposed infrastructure improvements to serve the Development's needs are listed in the following categories:

- 1. Roadway Improvements
- 2. Stormwater Management System
- 3. Water Distribution System
- 4. Sanitary Sewer System

Detailed descriptions of the above proposed infrastructure improvements are provided in the following section. Exhibit 9 (Tables 1 through 5) in the Appendix shows an estimated cost for the proposed infrastructure improvements.

V. Description of the Infrastructure.

Construction of the infrastructure described below will partially be funded from the current bond issue:

1. Roadway Improvements. A network of interior roads is proposed to provide circulation to the residents as well as to the general public.

The Development may be accessed through NW 107 Avenue at San Marcos Terrace. From this entrance a series of streets originate in order to provide access to the dwelling units.

The interior streets consist of crowned and inverted crown sections with curbs and sidewalks on the sides. The typical section for the interior streets consists of a 12 inch stabilized subgrade, an 8 inch limerock base and a 1 ½ inch asphalt course. The major streets, NW 109 Avenue, NW 90 Street, NW 107 Avenue and NW 88 Street will be constructed with a 12 inch stabilized subgrade, an 8 inch limerock base and a 2 inch asphalt course placed in two layers, or lifts.

All roads within this development will be open to the general public. NW 109 Avenue, NW 90 Street and NW 88 Street will be owned and maintained by the City of Doral; NW 107 Avenue will be owned and maintained by Miami-Dade County. The onsite roads will be owned and maintained by the District.

See Exhibit 4, Roadway Improvements for a graphical representation of the roads to be improved.

2. Stormwater Management. The stormwater management facilities consist of inlets, manholes, storm pipes and approximately 1,395 Linear Feet (LF) of exfiltration trenches, which, in combination with a lake measuring approximately 3.00 acres, have been designed to manage the storm runoff within the development. The lake will be interconnected with an existing lake located south and offsite of the District and thus will become part of the master stormwater management system that provides flood protection to the area.

In accordance with the Federal Emergency Management Agency (FEMA, Map Number 12025C0075 J, Dated March 2, 1994), this Development falls within Zone AH, Elevation 6.0 Ft above the National Geodetic Vertical Datum (NGVD). The paving and drainage plans for the Development call for the finish floor elevation of the residences to be set at a minimum elevation of 9.25 Ft above NGVD, and the lowest catch basin elevation at 6.83 Ft above NGVD.

The excavated material obtained from the 3.00 Acre lake is anticipated to remain within the Development for use in public road sub-base, perimeter berms, filling of lake side slopes and grading of property within the public domain. Grading of the private pads will be financed by the Developer.

See Exhibit 5, Stormwater Management for a graphical representation of the facilities.

3. Water Distribution System. The water distribution system is composed of variable pipe sizes ranging from 4 to 8 inch diameters for water service. The system will be connected to existing or approved 24 inch and 8 inch water mains located on NW 109 Avenue and NW 90 Street and NW 88 Street respectively. The water system encompasses approximately 3,812 linear feet of 8 inch pipe, 1,190 linear feet of 6 inch pipe, 973 of 4 inch pipe and 14 fire hydrants. WASD will be the utility company to provide water service. Water supply capacity has been confirmed by WASD by issuing a permit in November of 2005 to construct the water system.

When completed, the water distribution system will be donated by the District to WASD for operation and maintenance in accordance with Agreement No. 19117 between the Developer and WASD.

See Exhibit 6 for a graphical representation of the water distribution system.

4. Sanitary Sewer System. The sanitary sewer collection system consists of approximately 3,021 linear feet of 8 inch diameter gravity pipe and 22 manholes. WASD will provide sanitary sewer services to the development. Sanitary sewer treatment capacity has been confirmed by WASD by issuing a permit in November of 2005 to construct the sanitary sewer system.

When completed, the sanitary sewer will be donated by the District to WASD for operation and maintenance in accordance with Agreement No. 19117 between the Developer and WASD.

See Exhibit 7 for a graphical representation of the sanitary sewer system.

- **5. Recreational Amenities.** Construction costs related to the recreational amenities will be funded by the Developer and are not included in the District's improvement plans.
- **6. Construction Schedule.** As of the date of this report, construction of the development has begun with clearing, grubbing and land filling operations. It is estimated that the infrastructure will be constructed in approximately 18 months upon receiving all the regulatory permits. An estimated schedule follows:

Earthwork: Begin on January, 2006. End on June, 2007

Sanitary Sewer System: Begin on June, 2006 End on January, 2007. Water Distribution System: Begin on June, 2006. End on January, 2007. Stormwater Management: Begin on January, 2006. End on June, 2007. Roadway Improvements: Begin on January, 2007. End on June, 2007.

VI. Ownership and Maintenance.

The ownership and maintenance responsibilities of the proposed infrastructure improvements are set forth below

Proposed Infrastructure Improvements	<u>Ownership</u>	Maintenance
Offsite Roads & Drainage - NW 109 Ave; 90 St & 88 St	City of Doral	City of Doral
Offsite Road & Drainage - NW 107 Av	County	County
Onsite Streets	District	District
Onsite Stormwater Management System	District	District
Water Distribution System	WASD	WASD
Sanitary Sewer System	WASD	WASD

VII. Road Right-of-Way, Water Management Lake and other Open Spaces.

Real property interests for lands within the District needed for construction, operation and maintenance of District facilities will be dedicated by the Developer to the District.

VIII. Estimate of Capital Improvement Costs.

Total

Improvement Costs Roadway Improvements \$ 2,589,147.24(Includes \$1,241,920.57 of offsite road improvements) Stormwater Management \$ 1,361,615.11(Includes \$228,707.42 of offsite drainage improvements) Water Distribution System \$ 574,552.01 Sanitary Sewer System \$ 296,749.70

Please refer to Exhibit 9, Tables 1 through 7 for a detail of the estimated costs above.

\$ 4,822,064.06

IX. Conclusions and Summary Opinion

The infrastructure improvements as detailed herein are necessary for the functional development of the District as required by the applicable independent unit of local government. The planning and design of the infrastructure is in accordance with current governmental regulatory requirements. The infrastructure will provide the intended function so long as the construction is in substantial compliance with the design and permits. The District will need funding to acquire a portion of the improvements included in this report. The Engineer recommends that in addition to the annual non-ad valorem assessments to be levied and collected to pay debt service on the proposed bonds, the District should levy and collect an annual "Operating and Maintenance" to be determined, assessed and levied by the District's Board of Supervisors upon the assessable real property within the District for the purpose of defraying the cost and expenses of maintaining District-owned improvements.

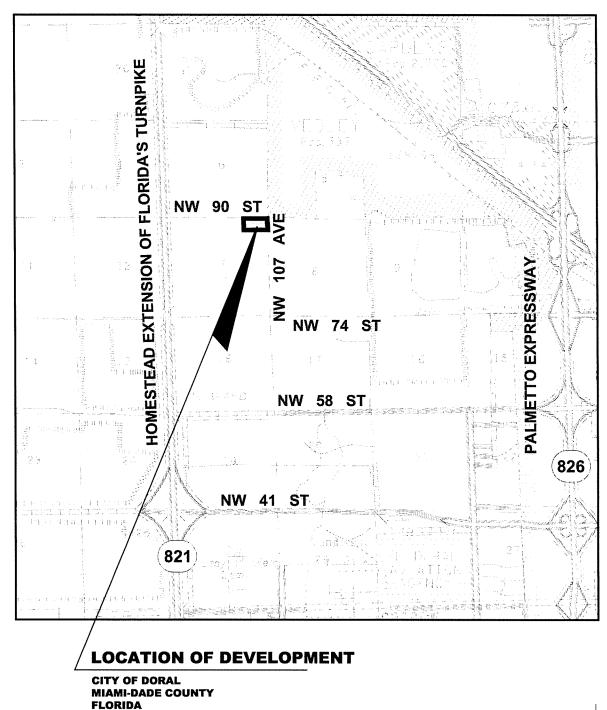
It is my professional opinion that the costs provided herein for the District's proposed infrastructure improvements are reasonable to complete the construction of the proposed infrastructure improvements described herein and that these infrastructure improvements will benefit and add value to the District as more fully detailed in the Assessment Methodology Report. All such proposed infrastructure costs are public improvements or community facilities as set forth in Section 190-012(1) and (2) of the Florida Statutes.

The estimate of infrastructure construction costs is only an estimate and not a guarantee maximum price. Where necessary, historical costs and information from other professionals or utility consultants and contractors have been used in the preparation of this report. Consultants and contractors who have contributed in providing the cost data included in this report are reputable entities within the area. It is therefore our opinion that the construction of the proposed Development can be completed at the costs as stated.

The labor market, future costs of equipment and materials, increased regulatory actions and the actual construction process are all beyond control. Due to this inherent opportunity for fluctuation in cost, the total final cost may be more or less than this estimate.

Juan R. Alvarez, PE Florida Engineer License No. 38522 Alvarez Engineers, Inc. Date April 18, 2006.

APPENDIX



ALVAREZ ENGINEERS, INC.

CORONADO C.D.D.

LOCATION MAP



1 MILE

NW TB ST

SLANDS AT DORAL (SW) CDD

ISLANDS AT DORAL III CDD (PHASE 2)

W

AVE

LOCATION OF DEVELOPMENT

ST

IBIS VILLAS

NW 88

NW 90

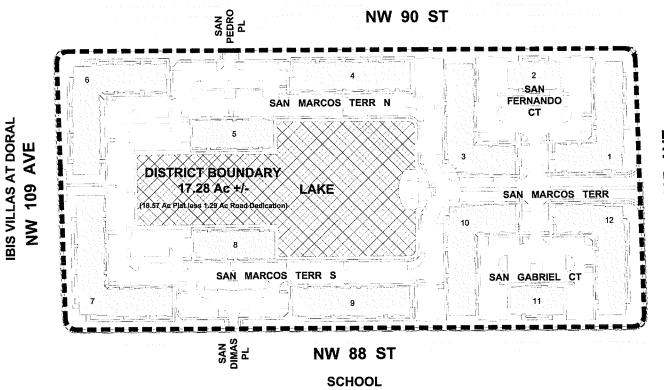
NW 74 ST

PLAT LEGAL DESCRIPTION: TRACT 1 OF FLORIDA FRUIT LANDS COMPANY'S SUBDIVISION No. 1, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 2, AT PAGE 17 OF THE PUBLIC RECORDS OF DADE COUNTY, FLORIDA, BEING IN SECTION 7, TOWNSHIP 53 SOUTH, RANGE 40 EAST, LESS THE NORTH AND EAST 35.00 FEET FOR RIGHT OF WAY PURPOSES AS MEASURED AT RIGHT ANGLES FROM THE NORTH AND EAST LINES OF SAID SECTION 7 AND TRACT 2 OF FLORIDA FRUIT LANDS COMPANY'S SUBDIVISION No. 1, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 2, AT PAGE 17 OF THE PUBLIC RECORDS OF DADE COUNTY, FLORIDA, BEING IN SECTION 7, TOWNSHIP 53 SOUTH, RANGE 40 EAST. CONTAINING 18.576 Ac +/-.

ALVAREZ ENGINEERS, INC.

CORONADO C.D.D.
VICINITY MAP

800' =



LEGEND

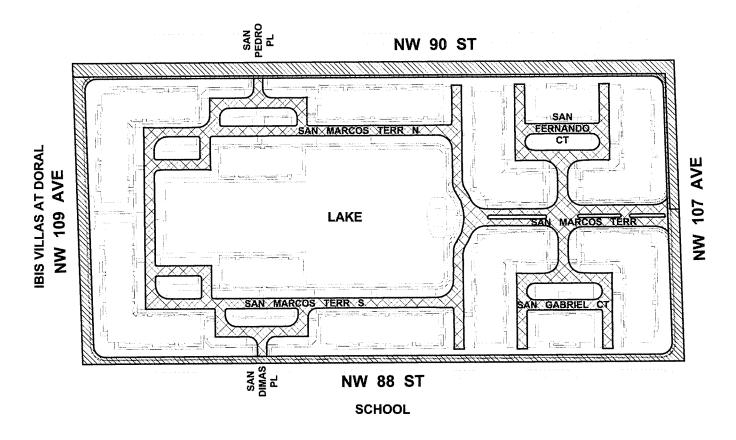
DISTRICT BOUNDARY

RESIDENTIAL BUILDINGS WITH NUMBERS

ALVAREZ ENGINEERS, INC. MASTER PLAN COPYRIGHT SUPERIOR CONSULTANTS, INC. CORONADO C.D.D. DISTRICT BOUNDARY



200'



LEGEND

CDD

CDD ROADS

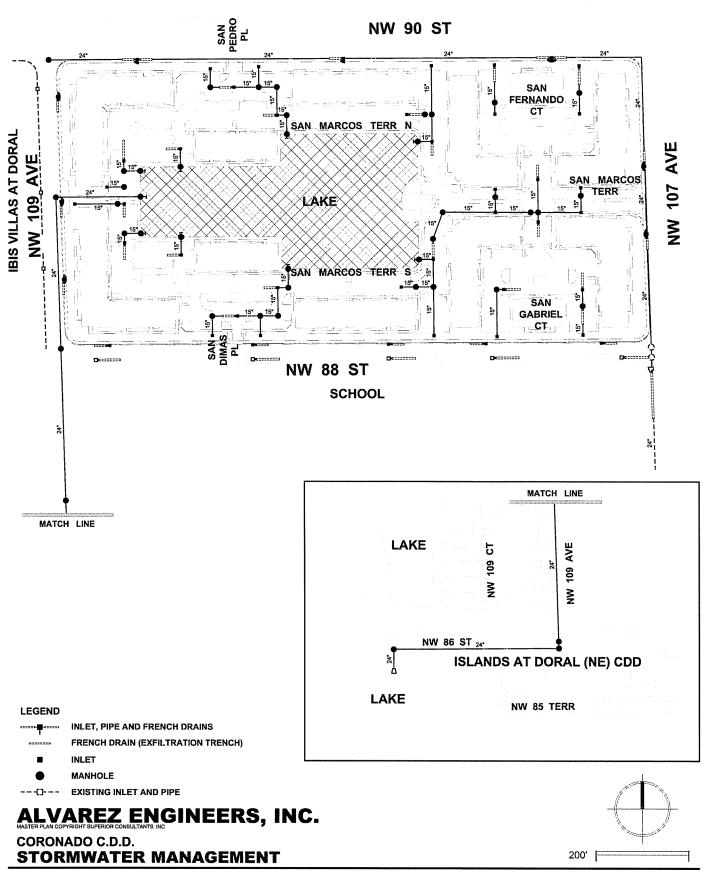
COUNTY / CITY ROADS

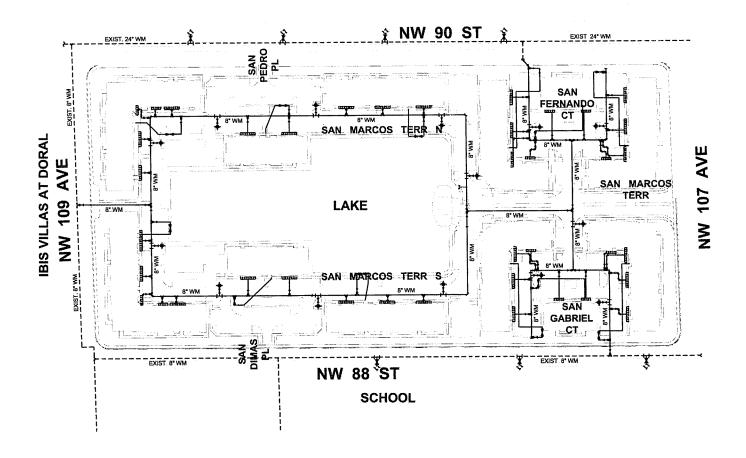
ALVAREZ ENGINEERS, INC.

CORONADO C.D.D.
ROADWAY IMPROVEMENTS



EXHIBIT 4





LEGEND

PROPOSED WATERMAIN

PROPOSED FIRE HYDRANT WITH VALVE

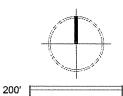
WATER METER BANK

---- EXISTING / APPROVED WATERMAIN

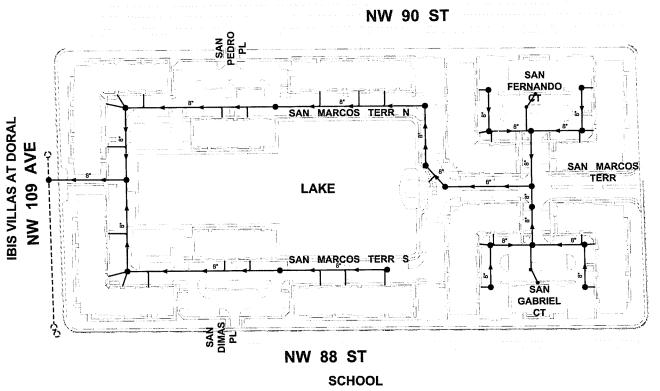
ALVAREZ ENGINEERS, INC.

CORONADO C.D.D.

WATER DISTRIBUTION SYSTEM









PROPOSED 8" GRAVITY SANITARY SEWER PIPE WITH SERVICE LATERAL

MANHOLE

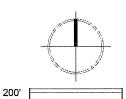
► FLOW DIRECTION

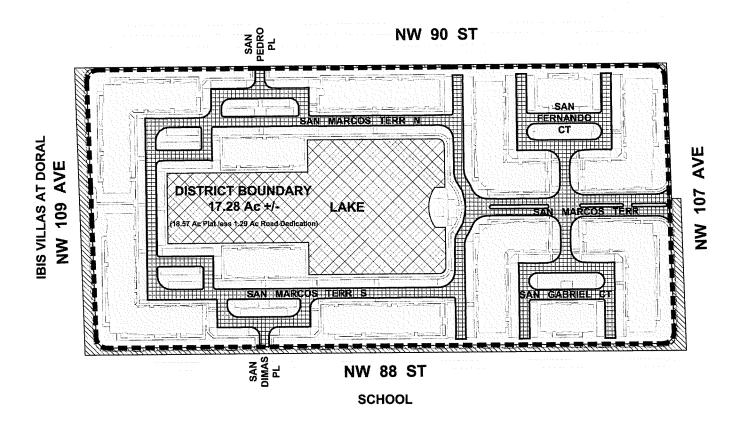
----- EXISTING / APPROVED SANITARY SEWER SYSTEM

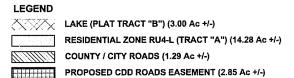
EXISTING / APPROVED MANHOLE

ALVAREZ ENGINEERS, INC.

CORONADO C.D.D.
SANITARY SEWER SYSTEM







ALVAREZ ENGINEERS, INC. MASTER PLAN COPYRIGHT SUPERIOR CONSULTANTS, INC. CORONADO C.D.D. LAND USE MAP

200'

CORONADO CDD Construction Cost Estimate Summary Table

Description of Work		Total Estimated Cost (\$)		
Infrastructure Component				
Roadway Improvements	Table 2	2,589,147.24		
Stormwater Management System	Table 3	1,361,615.11		
Water Distribution System	Table 4	574,552.0°		
Sanitary Sewer System	Tables 5	296,749.70		
Total		4,822,064.00		

CORONADO CDD Construction Cost Estimate Roadway Improvements

Description of Work	Quantity	Unit	Unit Price (\$/Unit)	Total Estimated Cost (\$)
ONSITE				
Clearing & Grubbing	4.81	AC	4,500.00	21,645.00
Demuck	34,901	CY	2.50	87,252.50
Import Fill	23,059	TN	17.00	392,003.00
Subgrade	15,024	SY	0.50	7,512.00
8" Baserock	15,024	SY	8.25	123,948.00
3/4" A.C.S.C (First Lift)	12,712	SY	4.00	50,848.00
3/4" A.C.S.C.(Second Lift)	12,712	SY	3.75	47,670.00
Road Brick Pavers	1,597	SY	25.00	39,925.00
Type "D" Curb (6"X12")	12,249	LF	9.25	113,303.25
Sidewalk (4")	47,592	SF	3.05	145,155.60
Guardrail	1,176	LF	44.00	51,744.00
Landscape	2,955	SY	3.25	9,603.75
Survey & As-built	2.0%	LS	1,090,610.10	21,812.20
Miscellaneous	1.00	LS	1,000.00	1,000.00
Traffic Control (First Lift)	1.00	LS	2,500.00	2,500.00
M.O.T.	1.00	LS	2,500.00	2,500.00
Traffic Control (Second Lift)	1.00	LS	2,500.00	2,500.00
Densities	20.00	EA	60.00	1,200.00
Signing and Pavement Marking	12,712	SY	2.50	31,780.00
Permits	1	LS	7,500.00	7,500.00
Soft Costs (Eng and Prof. Fees)	6.0%	LS	1,161,402.30	69,684.14
Contingency	10.0%	LS	1,161,402.30	116,140.23
Sub-total Onsite				1,347,226.67
OFFSITE				
Clearing & Grubbing	2.62	AC	4,500.00	11,790.00
Demuck	19032	CY	2.50	47,580.00
Import Fill	43,107	TN	17.00	732,819.00
Sowcut Exist Asphalt	700	LF	2.50	1,750.00
Remove & Dispose Exist Curb	700	L.F	7.00	4,900.00
Subgrade	7,307	SY	0.50	3,653.50
8" Baserock	7,307	SY	8.25	60,282.75
2" A.C.S.C.	6,959	SY	7.40	51,496.60
Median Concrete (4")	779	SF	3.55	2,765.45
Type "F" Curb & Gutter	3,232	LF	10.25	33,128.00
Sidewalk (4")	20,493	SF	3.05	62,503.65
Landscape	3,017	SY	3.25	9,805.25
Survey & As-built	2.0%	LS	1,022,474.20	20,449.48
Traffic Control (First Lift)	1 00	LS	2,500.00	2,500.00
M.O.T.	1.00	LS	2,500.00	2,500.00
Traffic Control (Second Lift)	1.00	LS	2,500.00	2,500.00
Densities	5.00	EA	60.00	300.00
Signing and Pavement Marking	6,959	SY	2.50	17,397.50
Permits	1	LS	2,500.00	2,500.00
Soft Costs (Eng and Prof. Fees)	6.0%	LS	1,070,621.18	64,237.27
Contingency	10.0%	LS	1,070,621.18	107,062.12
Sub-total Offsite				1,241,920.57
Total		·	L	\$2,589,147.24

CORONADO CDD Construction Cost Estimate Stormwater Management System

Description of Work	Quantity	Unit	Unit Price (\$/Unit)	Total Estimated Cost (\$)
ONSITE				
Clearing & Grubbing	3.00	AC	4,500.00	13,500.00
Lake Excavation	66,907	CY	10.00	669,070.00
Landscape	3,904	SY	3.25	12,688.00
Exf. Trench w/15" HDPE	545	LF	84.05	45,807.25
15" PVC	291	LF	20.00	5,820.00
15" HDPE	2,210	LF	20.00	44,200.00
24" CMP	186	LF	32.20	5,989.20
CB (42")	33	EA	1,855.00	61,215.00
CB (60")	1	EA	2,697.60	2,697.60
MH (42")	31	EA	1,855.00	57,505.00
15" Dia. Headwall	8	EA	1,300.00	10,400.00
24" Dia. Headwall	1	EA	1,573.20	1,573.20
Baffles	35	EA	160.00	5,600.00
Apron	10	EA	150.00	1,500.00
Miscellaneous	1	LS	1,000.00	1,000.00
CB & MH Grates to Grade	65	EA	160.00	10,400.00
Surveying & As-builts	2.0%	LS	948,965.25	18,979.31
Densities	20	EA	60.00	1,200.00
Permits	1	LS	7,500.00	7,500.00
Soft Costs (Eng and Prof. Fees)	6.0%	LS	976,644.56	58,598.67
Contingency	10.0%	LS	976,644.56	97,664.46
Sub-total Onsite				\$1,132,907.68
OFFSITE				
Exf. Trench w/18" HDPE	850	LF	87.10	74,035.00
18" HDPE	760	LF	22.80	17,328.00
24" CMP	1,411	LF	32.20	45,434.20
CB (42")	5	EA	1,855.00	9,275.00
CB (60")	2	EA	2,697.60	5,395.20
P6 (60")	4	EA	3,707.00	14,828.00
MH (42")	6	EA	1,855.00	11,130.00
24" Dia Headwall	1	EA	1,573.20	1,573.20
Baffles	18	EA	160.00	2,880.00
Apron	7	EA	150.00	1,050.00
CB & MH Grates to Grade	17	EA	160.00	2,720.00
Surveying & As-builts	2.0%	LS	185,648.60	3,712.97
M.O.T.	1.00	LS	5,000.00	5,000.00
Densities	5	EA	60.00	300.00
Permits	1	LS	2,500.00	2,500.00
Soft Costs (Eng and Prof. Fees)	6.0%	LS	197,161.57	11,829.69
Contingency	10.0%	LS	197,161.57	19,716.16
Sub-total Offsite				\$228,707.42
Total				\$1,361,615.11

CORONADO CDD Construction Cost Estimate Water Distribution System

Description of Work	Quantity	Unit	Unit Price (\$/Unit)	Total Estimated Cost (\$)
Connect to Exist 8" WM	1	EA	700.00	700.00
8"X8" Tapping Sleeve w/8" Tapping Valve	2	EΑ	3,715.00	7,430.00
8" D.LP.	3,812	LF	25.30	96,438.29
6" D.I.P.	1,190	LF	19.50	23,195.25
4" D.I.P.	973	LF	19.40	18,876.20
8" Gate Valve	10	EA	1,230.00	12,300.00
6" Gate Valve	22	EA	732.00	16,104.00
4" Gate Valve	43	EA	634.00	27,262.00
Fire Hydrant	14	EA	2,155.00	30,170.00
8" Tee	5	EA	322.75	1,613.75
8"/6" Tee	22	EA	307.00	6,754.00
8"/4" Tee	40	EA	290.00	11,600.00
8"/4" Cross	3	EA	310.00	930.00
8"X90 Degree Bend	8	EA	262.00	2,096.00
8"X45 Degree Bend	2	EA	245.60	491.20
6"X90 Degree Bend	6	EA	184.20	1,105.20
4"X90 Degree Bend	14	EA	142.70	1,997.80
8" Plug w/2" F.V.O.	8	EA	800.00	6,400.00
1" Single Service	1	EA	595.00	595.00
MB (6 Units)	12	EA	3,570.00	42,840.00
MB (9 Units)	27	EA	5,355.00	144,585.00
MB (12 Units)	1	EA	7,140.00	7,140.00
Pavement Restoration	25	SY	22.00	550.00
Surveying & As-builts	2.0%	LS	461,173.69	9,223.47
M.O.T.	1	LS	2,500.00	2,500.00
Densities	25	EA	60.00	1,500.00
Chlorination & Testing	5,974	LF	1.70	10,156.29
HRS	1	LS	750.00	750.00
Permits	1	LS	10,000.00	10,000.00
Soft Costs (Eng and Prof. Fees)	6.0%	LS	495,303.45	29,718.21
Contingency	10.0%	LS	495,303.45	49,530 35
Total				\$574,552.01

CORONADO CDD Construction Cost Estimate Sanitary Sewer (Gravity System)

Description of Work	Quantity	Unit	Unit Price (\$/Unit)	Total Estimated Cost (\$)
8" D.I.P. (0'-6')	287	LF	44.20	12,685.40
8" PVC (0'-6')	1,208	LF	27.30	32,978.40
8" PVC (6'-8')	775	LF	33.30	25,807.50
8" PVC (8'-10')	539	LF	37.30	20,104.70
8" PVC (10'-12')	212	LF	44.30	9,391.60
MH (0'-6')	14	EA	1,738.00	24,332.00
MH (6'-8')	4	EA	2,004.00	8,016.00
MH (8'-10')	2	EA	2,248.00	4,496.00
MH (10'-12')	1	EA	2,731.00	2,731.00
MH (18'-20') Drop	1	EA	5,500.00	5,500.00
6" Lateral (SS1.0)	31	EA	687.60	21,315.60
6" Cleanout	31	EA	468.30	14,517.30
MH Connection	44	EA	298.40	13,129.60
MH Inverts & Rings	22	EA	185.00	4,070.00
Chimney Seal, Insert, Paint & Ramnek	22	EA	625.00	13,750.00
Surveying & As-builts	4.0%	LS	212,825.10	8,513.00
Gravel # 57	1,319	TN	13.00	17,147.00
Miscellaneous	1	LS	1,000.00	1,000.00
Cleaning & Testing	3,021	LF	1.60	4,833.60
Densities	25	EA	60.00	1,500.00
Permit	1	LS	10,000.00	10,000.00
Soft Costs (Eng and Prof. Fees)	6.0%	LS	255,818.70	15,349.12
Contingency	10.0%	LS	255,818.70	25,581 87
Sub-total Gravity System				\$296,749.7

PERMIT STATUS

			Expected
Agency	Permit & No.	Approval Date	Approval Date
South FL Water Management	Environmental Resource	10/12/05	N/A
District (SFWMD)	Permit No. 13-02648		
U.S. Army Corps of Engineers	Letter of exemption received	9/2/05	N/A
(USCOE)			
Miami-Dade County DERM	Freshwaters Wetlands Class	12/23/05	N/A
Wetlands Division	IV Permit No. FW04-048		
Miami-Dade County DERM	Stormwater Drainage Class	2/28/06	N/A
Division of Water Control and	II Permit No. OF-06013		
Coastal Engineering			
Miami-Dade County DERM	Sanitary Sewer Permit No.	12/20/05	N/A
Sewerage Facilities Division	SE05-221		
Miami-Dade County Water and	Water Permit No. DW2005-	11/28/05	N/A
Sewer Department (WASD)	175		
Miami-Dade County Water and	Sewer Permit No. DS2005-	11/28/05	N/A
Sewer Department (WASD)	597		
Dept. of Environmental	Potable Water Supply Permit	1/19/06	N/A
Protection / M-D Dept of	No. 216896-740-DSGP		
Health			
Miami-Dade County Fire	Water Main Extension No.	12/19/05	N/A
Department	05340-00317		
Miami-Dade County Public	Traffic Permit T-	N/A	
Works Department Traffic Div.			
Miami-Dade County Public	Paving and Drainage Permit	N/A	
Works Dept. Paving/Drainage	T-		
City of Doral Public Works	Water and Sewer Permit No.	4/3/06	N/A
Department	PW2006-0031		
City of Doral Public Works	Lake Excavation Permit No.	1/30/06	N/A
Department	PW2006-0250		