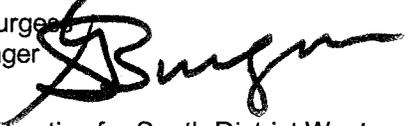


MEMORANDUM



Date: June 26, 2007

To: Honorable Chairman Bruno A. Barreiro
and Members, Board of County Commissioners

From: George M. Burgess
County Manager 

Subject: Request to Advertise for South District Wastewater Treatment Plant, HLD Upgrade to 285 MGD, Filter System, - Project No: N/A; Contract No. S-805

Agenda Item No. 8(R)3(J)

Recommendation

This Request to Advertise for Construction Contract No. S-805 has been prepared by the Miami-Dade Water and Sewer Department (MDWASD) and is recommended for approval pursuant to Sections 2-8.1 of the Code of Miami-Dade County. This project is one in a series of projects under the High Level Disinfection (HLD) Program to comply with Consent Order No. 03-1376 negotiated by Miami-Dade County and the Florida Department of Environmental Protection (FDEP) and to meet regulatory requirements resulting from a rule change implemented by the US Environmental Protection Agency (USEPA) to meet effluent quality standards for deep well disposal. Upon the completion of the entire project, the South District Wastewater Treatment Plant (SDWWTP) will be rated at 285 million gallons per day (MGD), a chart is attached showing the different upgrades that make-up the HLD Facility.

Scope

PROJECT NAME: South District Wastewater Treatment Plant, HLD Upgrade to 285 MGD, Filter System

PROJECT NO: N/A

CONTRACT NO: S-805

PROJECT DESCRIPTION: The work consists of furnishing all materials, labor, and equipment necessary for the construction of a deep bed filter system for further treatment of effluent from the existing secondary wastewater treatment facility at the SDWWTP.

The project includes, but is not limited to the following: furnishing all materials, labor, and equipment necessary to construct flocculation tanks with flash mixing equipment followed by slow mixing equipment for enhancement of solids removal by the filters; thirty (30) deep bed sand, mono-media wastewater filter systems, including reinforced concrete tanks, sub-drain piping, filter under-drain system, sand media, influent flow control weirs and related work; a filter backwash supply system including eight (8) backwash supply pumps, piping, and three (3) backwash supply storage tanks; a backwash air scour system, including seven (7) centrifugal blowers, piping, air filters, and silencers; a filter backwash waste system, including eight (8) backwash waste pumps, piping, and three (3) backwash waste storage tanks; filter system channels; piping systems in various sizes up to 108-inch diameter; gates, valves and appurtenances; North and South Filter Buildings including structural, architectural, electrical, HVAC, and plumbing; polymer system, including Polymer Building, polymer mixing systems, dry and liquid polymer storage, dilution tanks, and polymer pumps and related systems; complete electrical systems for all filter facilities, including transformers,

switchgear, duct banks, conduits and miscellaneous, with connection to primary service; complete instrumentation and control systems, remote terminal units with all accessories to ensure local control and future connection by others to plant wide data highway; drainage systems, roadways, and site work around the filter system; testing, startup, training, and warranties of equipment; coordination with multiple ongoing construction contracts; coordination with plant personnel to avoid interruption of service; complying with security restrictions; and all other appurtenant and miscellaneous items and work for a complete installation.

It is MDWASD's intent to obtain a complete functional, and satisfactory installation under this project, and any items of labor, equipment or materials which may be reasonably assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the plans or stated in the specifications. The Contractor shall provide all sheeting, shoring, bracing and all other labor, material or equipment required to preclude damage to, or loss of functionality of, any existing facility or system.

PROJECT LOCATION: 23300 SW 88th Avenue, in Miami-Dade County, Florida.

PRIMARY COMMISSION DISTRICT: District 8 Katy Sorenson

APPROVAL PATH: Board of County Commissioners

USING DEPARTMENT: Miami-Dade Water and Sewer Department

MANAGING DEPARTMENT: Miami-Dade Water and Sewer Department

Fiscal Impact / Funding Source

FUNDING SOURCE:	<u>SOURCE</u>	<u>AMOUNT</u>
	WASD Revenue Bonds Sold and Wastewater Connection Charges	<u>\$130,000,000.00</u>

PTP FUNDING: No

GOB FUNDING: No

CAPITAL BUDGET PROJECT:	<u>BUDGET PROJECT / DESCRIPTION</u>	<u>RTA ESTIMATE</u>
	96510240-SOUTH DISTRICT WASTEWATER TREATMENT PLANT - HIGH LEVEL DISINFECTION Book Page: 310, Volume 3 Funding Year: 2006-2007	<u>\$130,000,000.00</u>

PROJECT TECHNICAL CERTIFICATION REQUIREMENTS: One of the following licenses is required: General Engineering, General Contractor, Mechanical Contractor, and/or other categories as applicable by Chapter 489 of the Florida Statutes or Chapter 10 of Miami-Dade County Code.

ESTIMATED CONTRACT PERIOD: 1825 Consecutive Calendar Days

ESTIMATED CONTINGENCY PERIOD: 183

IG FEE INCLUDED IN BASE CONTRACT: Yes

ART IN PUBLIC PLACES: No

BASE ESTIMATE: \$115,494,000.00

CONTINGENCY ALLOWANCE (SECTION 2-8.1 MIAMI DADE COUNTY CODE):	TYPE	PERCENT	AMOUNT	COMMENT
	Infrastructure	10%	\$11,549,400.00	

PERMIT FEES : \$2,956,600.00 2.60%

TOTAL DEDICATED ALLOWANCE: \$2,956,600.00

COST ESTIMATE: \$130,000,000.00

Track Record / Monitor

EXPLANATION: Upgrade the South District Wastewater Treatment Plant to 285 MGD.

MINIMUM QUALIFICATIONS EXCEED LEGAL REQUIREMENTS: No

REVIEW COMMITTEE: **MEETING DATE:** 5/2/2007 **SIGNOFF DATE:**

RESPONSIBLE WAGES: Yes

REVIEW COMMITTEE ASSIGNED CONTRACT MEASURES:	MEASURE	GOAL	COMMENT
	CSBE	11.00%	
	CWF	0.00%	Not Applicable

MANDATORY CLEARING HOUSE: Yes

CONTRACT MANAGER NAME/PHONE/EMAIL: John W. Chorlog, Jr. (786) 552-8102 jwcho01@miamidade.gov

PROJECT MANAGER NAME/PHONE/EMAIL: Alma M. Santiago, P.E. (786)552-8243 AS1@miamidade.gov

Background

BACKGROUND: This project consists of the construction of a deep bed filter system for further treatment of effluent from the existing secondary wastewater treatment facility at the SDWWTP. This is one in a series of projects under the HLD Program to comply with Consent Order No. 03-1376 negotiated by Miami-Dade County and FDEP and to meet regulatory requirements resulting from a rule change implemented by the USEPA to meet effluent quality standards for deep well disposal. Upon the completion of the entire project, the SDWWTP will be rated as a 285 MGD plant.

BUDGET APPROVAL
FUNDS AVAILABLE:

h


OSBM DIRECTOR

5/29/07
DATE

95

APPROVED AS TO
LEGAL SUFFICIENCY:


COUNTY ATTORNEY

5/23/07
DATE


ASSISTANT COUNTY
MANAGER

5/30/07
DATE

CLERK DATE

DATE

**SOUTH DISTRICT WASTEWATER TREATMENT PLANT, HLD UPGRADE TO
285 MGD, FILTER SYSTEM**

CONTRACT NO: S-805

**BUDGET PROJECT AND
DESCRIPTION:**

96510240-SOUTH DISTRICT WASTEWATER
TREATMENT PLANT - HIGH LEVEL DISINFECTION

FUNDING SOURCE:

WASD REVENUE BONDS SOLD AND WASTEWATER
CONNECTION CHARGES

INDEX CODES:

S047650

**ASSISTANT DIRECTOR,
ENGINEERING AND CAPITAL
IMPROVEMENTS:**

 5/14/07

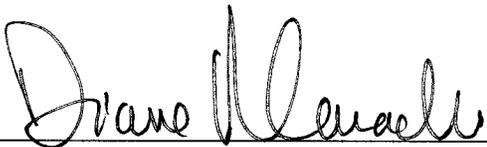
EDUARDO A. VEGA, PE DATE

**BUDGET AND CAPITAL
FUNDING COORDINATION:**

 5/14/07

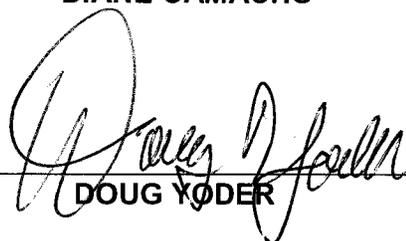
PEDRO VELAR DATE

**ASSISTANT DIRECTOR,
FINANCE AND INFORMATION
TECHNOLOGY:**

 5/14/07

DIANE CAMACHO DATE

**DEPUTY DIRECTOR,
REGULATORY COMPLIANCE AND
CAPITAL IMPROVEMENTS:**

 5/14/07

DOUG YODER DATE

MIAMI-DADE WATER AND SEWER DEPARTMENT
 Projection by Project Sub-project by Year - Wastewater
 As of: 9/30/2005

Proj	Sub-Proj	Sub-Proj Description	Current Bond/Fund Allocation	Expenditures Remaining As of 9/30/2005	Bond/Fund Allocation	PROJECTIONS										Total	
						2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015		
1036	101665	SDWWTP - 1 MGD COASTAL WEILANDS REHYDRATION	6,600,000	0	6,600,000	100,000	1,000,000	5,500,000	0	0	0	0	0	0	0	0	6,600,000
	101671	20,000 GPD WELLFIELD RECHARGE	1,025,000	0	1,025,000	0	90,000	935,000	0	0	0	0	0	0	0	0	1,025,000
		TOTAL - 1036	23,013,980	13,782	23,000,198	277,291	6,287,907	16,435,000	0	0	0	0	0	0	0	0	23,000,198
1037	101527	SDWWTP - EFFLUENT DISPOSAL WELLS - ONSITE	4,988,353	38,353	4,950,000	50,000	100,000	200,000	0	0	0	0	0	0	0	4,600,000	4,950,000
	101618	SDWWTP - DEEP BED SAND FILTERS	125,386,725	0	125,386,725	0	2,205,662	35,431,865	50,111,670	35,431,865	2,205,663	0	0	0	0	0	125,386,725
	101619	SDWWTP - FINAL CLARIFIERS AND INTERIM IMPROVEMENTS	83,905,674	0	83,905,674	0	0	15,802,856	37,315,399	28,940,681	1,846,738	0	0	0	0	0	83,905,674
	101620	SDWWTP - PROCESS CONTROLS AND INSTRUMENTATION	1,522,750	0	1,522,750	0	0	286,796	677,213	525,226	33,515	0	0	0	0	0	1,522,750
	101621	SDWWTP - DISINFECTION FACILITIES/CHLORINE TANKS	114,266,550	0	114,266,550	0	0	21,521,044	50,817,804	39,412,731	2,514,971	0	0	0	0	0	114,266,550
	101622	SDWWTP - YARD PIPING	12,066,162	0	12,066,162	0	0	2,272,550	5,366,188	4,161,851	265,573	0	0	0	0	0	12,066,162
	101623	SDWWTP - ELECTRICAL SERVICE/GENERATORS	34,164,129	0	34,164,129	0	0	6,434,497	15,193,825	11,783,865	751,942	0	0	0	0	0	34,164,129
	101624	SDWWTP - LOW LIFT TRANSFER PUMP STATION	26,300,613	0	26,300,613	0	0	4,953,477	11,696,681	9,071,587	578,868	0	0	0	0	0	26,300,613
	101625	SDWWTP - FINAL SITE PAVING, GRADING AND DRAINAGE	2,936,904	0	2,936,904	0	0	553,139	1,306,130	1,012,995	64,640	0	0	0	0	0	2,936,904
	101627	SDWWTP - SLUDGE HANDLING IMPROVEMENTS	10,475,134	0	10,475,134	0	0	1,972,895	4,658,610	3,613,075	230,554	0	0	0	0	0	10,475,134
	101636	SDWWTP - DESIGN AND ENGINEERING SERVICES	59,803,646	6,029,329	53,774,317	10,484,063	16,209,077	13,428,545	7,514,104	4,746,350	1,392,178	0	0	0	0	0	53,774,317
	101669	OXYGENATION PROCESS TRAIN 7	11,231,183	0	11,231,183	0	0	2,115,289	4,994,848	3,873,851	247,195	0	0	0	0	0	11,231,183
	101670	EFFLUENT PUMP SYSTEM	18,490,186	0	18,490,186	0	0	3,482,455	8,223,147	6,377,621	406,963	0	0	0	0	0	18,490,186
		TOTAL - 1037	505,538,009	6,067,682	499,470,327	10,534,063	18,514,739	108,455,408	197,875,619	148,951,698	10,538,800	0	0	0	0	4,600,000	499,470,327
		TOTAL - Wastewater	2,159,736,208	122,564,633	2,037,171,575	76,529,885	122,103,544	235,834,145	296,366,522	292,853,251	118,800,613	196,488,908	204,168,757	178,850,809	315,175,142	2,037,171,576	

SOUTH DISTRICT WASTEWATER TREATMENT PLANT - HIGH LEVEL DISINFECTION

PROJECT # 96510244

DESCRIPTION: Construct treatment facilities for high level disinfection to meet regulatory requirements

LOCATION: 8950 SW 232 St
 Unincorporated Miami-Dade County

DISTRICT LOCATED: 8
 DISTRICT(S) SERVED: Systemwide

ESTIMATED ANNUAL OPERATING IMPACT: Minimal

REVENUE SCHEDULE:	PRIOR	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	FUTURE	TOTAL
Wastewater Connection Charges	28,220	3,838	19,883	16,902	11,361	2,570	0	0	82,774
State Revolving Loan Wastewater Program	0	0	0	55,000	45,000	0	0	0	100,000
WASD Revenue Bonds Sold	94,462	0	0	0	0	0	0	0	94,462
Future WASD Revenue Bonds	0	0	0	223,702	0	0	0	4,600	228,302

TOTAL REVENUE: 122,682 3,838 19,883 295,604 56,361 2,570 0 4,600 505,538

EXPENDITURE SCHEDULE:	PRIOR	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	FUTURE	TOTAL
Planning and Design	1,511	1,685	9,868	18,005	13,553	959	0	419	46,000
Construction	15,091	16,830	98,587	179,870	135,399	9,580	0	4,181	459,538

TOTAL EXPENDITURES: 16,602 18,515 108,455 197,875 148,952 10,539 0 4,600 505,538

SOUTH DISTRICT WASTEWATER TREATMENT PLANT EXPANSION - PHASE III

PROJECT # 9655481

DESCRIPTION: Expand the South District Wastewater Plant and injection wells; and install emergency generators

LOCATION: 8950 SW 232 St
 Unincorporated Miami-Dade County

DISTRICT LOCATED: 8
 DISTRICT(S) SERVED: Systemwide

ESTIMATED ANNUAL OPERATING IMPACT: Minimal

REVENUE SCHEDULE:	PRIOR	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	FUTURE	TOTAL
Wastewater Connection Charges	7,000	0	0	1,000	1,000	3,000	2,000	0	14,000
Future WASD Revenue Bonds	0	0	0	0	0	0	60,000	21,000	81,000

TOTAL REVENUE: 7,000 0 0 1,000 1,000 3,000 62,000 21,000 95,000

EXPENDITURE SCHEDULE:	PRIOR	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	FUTURE	TOTAL
Planning and Design	0	0	0	136	318	637	2,912	4,641	8,644
Construction	0	0	0	1,364	3,182	6,363	29,088	46,359	86,356

TOTAL EXPENDITURES: 0 0 0 1,500 3,500 7,000 32,000 51,000 95,000



Dept. of Business Development
Project Worksheet

Project/Contract Title: SOUTH DISTRICT WASTEWATER TREATMENT PLANT, HLD UPGRADE TO 285 MGD, FILTER SYSTEM (SIC 16) **RC Date:** 05/02/2007
Project/Contract No: S-805 **Funding Source:** **Item No:** 3-07
Department: WATER & SEWER DEPARTMENT **WASD REV BONDS&WW**
Estimated Cost of Project/Bid: \$130,000,000.00 **CONN. CHARGE** **Resubmittal Date(s):**
Description of Project/Bid: TO ESTABLISH A CONTRACT THAT CONSISTS OF FURNISHING ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY FOR THE CONSTRUCTION OF A DEEP BED FILTER SYSTEM FOR FURTHER TREATMENT OF EFFLUENT FROM THE EXISTING SECONDARY WASTEWATER TREATMENT FACILITY, AT THE SOUTH DISTRICT WASTEWATER TREATMENT PLANT, LOCATED AT 23300 SW 88th AVENUE, IN MIAMI-DADE COUNTY, FLORIDA. THIS PROJECT IS ONE IN A SERIES OF PROJECTS UNDER THE HIGH LEVEL DISINFECTION (HLD) PROGRAM.

Contract Measures Recommendation

<u>Measure</u>	<u>Program</u>	<u>Goal Percent</u>
Goal	CSBE	11.01%

Reasons for Recommendation

An analysis of the factors contained in Section VI C of Administrative Order 3-22 indicate that a goal is appropriate for this project.

FIRST TIER = 1.19%: Plumbing (.27%), Built-Up Roofing (.10%), Doors and Exterior Windows (.20%), Stucco (.10%), Stairs and Toilet/Bathroom Accessories (.04%), Handrails/Miscellaneous Metals (.48%)
 2nd, 3rd, & 4th TIER = 9.81%: Electrical (5.38%) and Coatings (4.43%)
 CWP Not Applicable: Not in DTA

Analysis for Recommendation of a Goal

<u>Subtrade</u>	<u>Cat.</u>	<u>Estimated Value</u>	<u>% of Items to Base Bid</u>	<u>Availability</u>
Carpentry Contractors	CSBE	\$262,990.00	0.20%	16
Roofing, Siding, and Sheet Metal Contractors	CSBE	\$124,800.00	0.10%	15
Concrete Contractors	CSBE	\$135,980.00	0.10%	16
Structural Steel Erection Contractors	CSBE	\$624,910.00	0.48%	9
Plumbing, Heating, and Air-Conditioning Contractors	CSBE	\$349,960.00	0.27%	23
Painting and Wall Covering Contractors	CSBE	\$5,759,000.00	4.43%	34
Electrical Contractors	CSBE	\$6,999,200.00	5.38%	43
Commercial and Institutional Building Construction	CSBE	\$52,000.00	0.04%	95
Total		\$14,308,840.00	11.01%	

Living Wages: YES NO **Highway:** YES NO **Heavy Construction:** YES NO
Responsible Wages: YES NO **Building:** YES NO

Ordinance 90-143 is applicable to all construction projects over \$100,000 that do not utilize Federal Funds

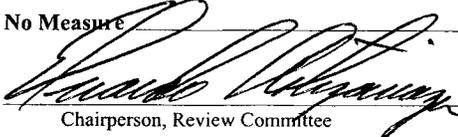
REVIEW COMMITTEE RECOMMENDATION

Tier 1 Set Aside _____

Set Aside _____ Level 1 _____ Level 2 _____ Level 3 _____

Trade Set Aside (MCC) _____ Goal 11% CSBE Bid Preference _____

No Measure _____ Deferred _____ Selection Factor _____

 _____ Date 5/2/07 _____
 Chairperson, Review Committee _____ County Manager _____ Date _____

SDWWTP High Level Disinfection (HLD) 285 mgd- Bid Packages



FUTURE REUSE TREATMENT FACILITY

