

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,
Transfer Pump Station, - Project No: N/A; Contract No. S-806

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

Recommendation

This Request to Advertise for Construction Contract No. S-806 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 to the HLD Facility.

Scope

PROJECT NAME: South District Wastewater Treatment Plant, HLD Upgrade to 285 MGD, Transfer Pump Station

PROJECT NO: N/A

CONTRACT NO: S-806

PROJECT DESCRIPTION: The project consists of furnishing all materials, labor, and equipment necessary for the construction of a new pump station capable of lifting and transferring 360 MGD of treated secondary effluent to the new filters, and an electrical building to power the pump motors at the SDWWTP.

The project includes, but is not limited to the following: sheeting, excavation and placement of concrete cast piles for inlet and outlet chambers of the Transfer Pump Station, placement of concrete cast piles to support the Transfer Pump Station structure; reinforcement concrete framework and placement for the pump station multiple level structure; purchase, installation and hydraulic testing of seven (7) screw pumps, each 10 feet in diameter times 60 feet in length, motors and gear boxes; and installation of overhead crane and mechanical systems associated with the pumps and drives.

The electrical building will house switchgear and 4160 voltage motor starters for seven (7) 400 horsepower units, as well as a control room with associated electronic hardware/software to remotely operate and monitor pumps and drives. Power will be delivered through 4160 voltage cables installed in reinforced concrete duct banks from the electrical building to the Transfer Pump Station. The project will also include all foundation, structural and architectural work for the new electrical building; furnishing and installing 108-inch and 120-inch diameter pre-stressed concrete cylinder piping (PCCP) tying into the pump station and yard piping installed under another contract; mechanical work; electrical work; 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>\$25,001,000.00</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>\$25,001,000.00</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: 80 Consecutive Calendar Days

ESTIMATED CONTINGENCY PERIOD: 80

IG FEE INCLUDED IN BASE CONTRACT: Yes

ART IN PUBLIC PLACES: No

BASE ESTIMATE: \$22,175,000.00

CONTINGENCY ALLOWANCE (SECTION 2-8.1 MIAMI DADE COUNTY CODE):	TYPE	PERCENT	AMOUNT	COMMENT
	Infrastructure	10%	\$2,217,500.00	

PERMIT FEES : \$608,500.00 2.70%

TOTAL DEDICATED ALLOWANCE: \$608,500.00

COST ESTIMATE: \$25,001,000.00

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	12.00%	
	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 includes the construction of a new pump station capable of lifting and transferring 360 MGD of treated secondary effluent to the new filters and an electrical building to power the pump motors at the South District Wastewater Treatment Plant. It 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:**

M


OSBM DIRECTOR

5/29/07
DATE

ACCEPTED

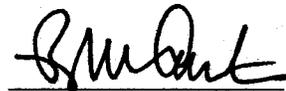


**APPROVED AS TO
LEGAL SUFFICIENCY:**


COUNTY ATTORNEY

5/23/07
DATE

ACCEPTED


ASSISTANT COUNTY
MANAGER

5/30/07
DATE

ACCEPTED

CLERK DATE

DATE

**SOUTH DISTRICT WASTEWATER TREATMENT PLANT, HLD UPGRADE TO
285 MGD, TRANSFER PUMP STATION**

CONTRACT NO: S-806

**BUDGET PROJECT AND
DESCRIPTION:**

96510240-SOUTH DISTRICT WASTEWATER
TREATMENT PLANT - HIGH LEVEL DISINFECTION

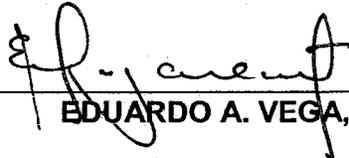
FUNDING SOURCE:

WASD REVENUE BONDS SOLD AND WASTEWATER
CONNECTION CHARGES

INDEX CODES:

S047650

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



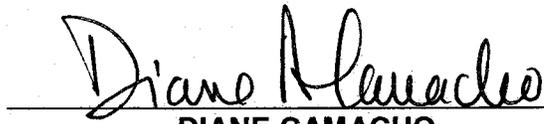
EDUARDO A. VEGA, PE 5/17/07 DATE

**BUDGET AND CAPITAL
FUNDING COORDINATION:**



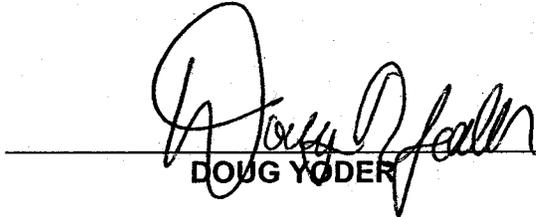
PEDRO VELAR 5/14/07 DATE

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



DIANE CAMACHO 5/14/07 DATE

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



DOUG YODER 5/14/07 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 WETLANDS REHYDRATION	6,600,000	0	6,600,000	1,000,000	1,000,000	5,500,000	0	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	0	1,025,000
		TOTAL - 1036	23,013,980	13,782	23,000,198	277,291	6,237,907	16,435,000	0	0	1,025,000							
1037	101527	SDWWTP - EFFLUENT DISPOSAL WELLS - ONSITE	4,988,553	38,353	4,950,200	50,000	100,000	200,000	0	0	0	0	0	0	0	0	0	23,000,198
	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	0	4,950,200
	101619	SDWWTP - FINAL CLARIFIERS AND INTERIM IMPROVEMENTS	83,905,674	0	83,905,674	0	0	15,802,856	37,315,339	28,940,681	1,846,738	0	0	0	0	0	0	4,950,200
	101620	SDWWTP - PROCESS CONTROLS AND INSTRUMENTATION	1,522,750	0	1,522,750	0	0	286,796	877,213	525,826	33,515	0	0	0	0	0	0	4,950,200
	101621	SDWWTP - DISINFECTION FACILITIES/CHLORINE TANKS	114,266,550	0	114,266,550	0	0	21,421,044	50,817,804	39,412,731	2,514,971	0	0	0	0	0	0	1,522,750
	101622	SDWWTP - YARD PIPING	12,066,162	0	12,066,162	0	0	2,272,550	5,366,188	4,161,851	285,573	0	0	0	0	0	0	114,266,550
	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	0	12,066,162
	101624	SDWWTP - LOW LIFT TRANSFER PUMP STATION	26,300,613	0	26,300,613	0	0	4,953,477	11,656,681	9,071,587	578,868	0	0	0	0	0	0	34,164,129
	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	0	26,300,613
	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	0	2,936,904
	101636	SDWWTP - DESIGN AND ENGINEERING SERVICES	59,803,646	6,029,329	53,774,317	10,484,063	16,209,977	13,428,545	7,514,104	4,746,350	1,392,178	0	0	0	0	0	0	10,475,134
	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	0	53,774,317
	101670	EFFLUENT PUMP SYSTEM	18,490,186	0	18,490,186	0	0	3,482,455	8,223,147	6,377,631	406,963	0	0	0	0	0	0	11,231,183
		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	0	0	18,490,186
		TOTAL - Wastewater	2,159,736,208	122,564,633	2,037,171,575	76,529,885	122,103,644	235,834,145	296,366,522	292,853,251	118,800,613	196,488,908	204,168,757	178,850,809	315,175,142	2,037,171,575	0	4,600,000

SOUTH DISTRICT WASTEWATER TREATMENT PLANT - HIGH LEVEL DISINFECTION

PROJECT # 96510

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 4,600 505,546

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	459,537

TOTAL EXPENDITURES: 16,602 18,515 108,455 197,875 148,952 10,539 0 4,600 505,537

SOUTH DISTRICT WASTEWATER TREATMENT PLANT EXPANSION - PHASE III

PROJECT # 965548

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, TRANSFER PUMP STATION (SIC 16) RC Date: 05/02/2007 3-08
Project/Contract No: S-806
Department: WATER & SEWER DEPARTMENT Funding Source: WASD REV BONDS&WW Item No:
Estimated Cost of Project/Bid: \$25,001,000.00 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 NEW PUMP STATION CAPABLE OF LIFTING AND TRANSFERRING 360 MGD OF TREATED SECONDARY EFFLUENT TO THE NEW FILTERS, AND AN ELECTRICAL BUILDING TO POWER THE PUMP MOTORS, 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

Table with 3 columns: Measure, Program, Goal Percent. Row 1: Goal, CSBE, 11.66%

Reasons for Recommendation

An analysis of the factors contained in Section VI C of Administrative Order 3-22 indicate that a 12% goal is appropriate for this project.
FIRST TIER = 5.2%: Drainage/Manhole/Piping (.82%), Backfill (.56%), Dewatering (1.84%), Concrete Driveway (.36%), Plumbing, Mechanical/HVAC (1.3%), Pavement (.32%).
2nd, 3rd, & 4th TIER = 6.5%: Electrical (6.5%)
CWP Not Applicable: Not in DTA

Analysis for Recommendation of a Goal

Table with 5 columns: Subtrade, Cat., Estimated Value, % of Items to Base Bid, Availability. Includes rows for Concrete Contractors, All Other Special Trade Contractors, Water, Sewer, and Pipeline Construction, All Other Heavy Construction, Plumbing, Heating, and Air-Conditioning Contractors, Electrical Contractors, Highway and Street Construction, and a Total row.

Living Wages: YES [] NO [X] Highway: YES [] NO [X] Heavy Construction: YES [X] NO []
Responsible Wages: YES [X] NO [] Building: YES [] NO [X]

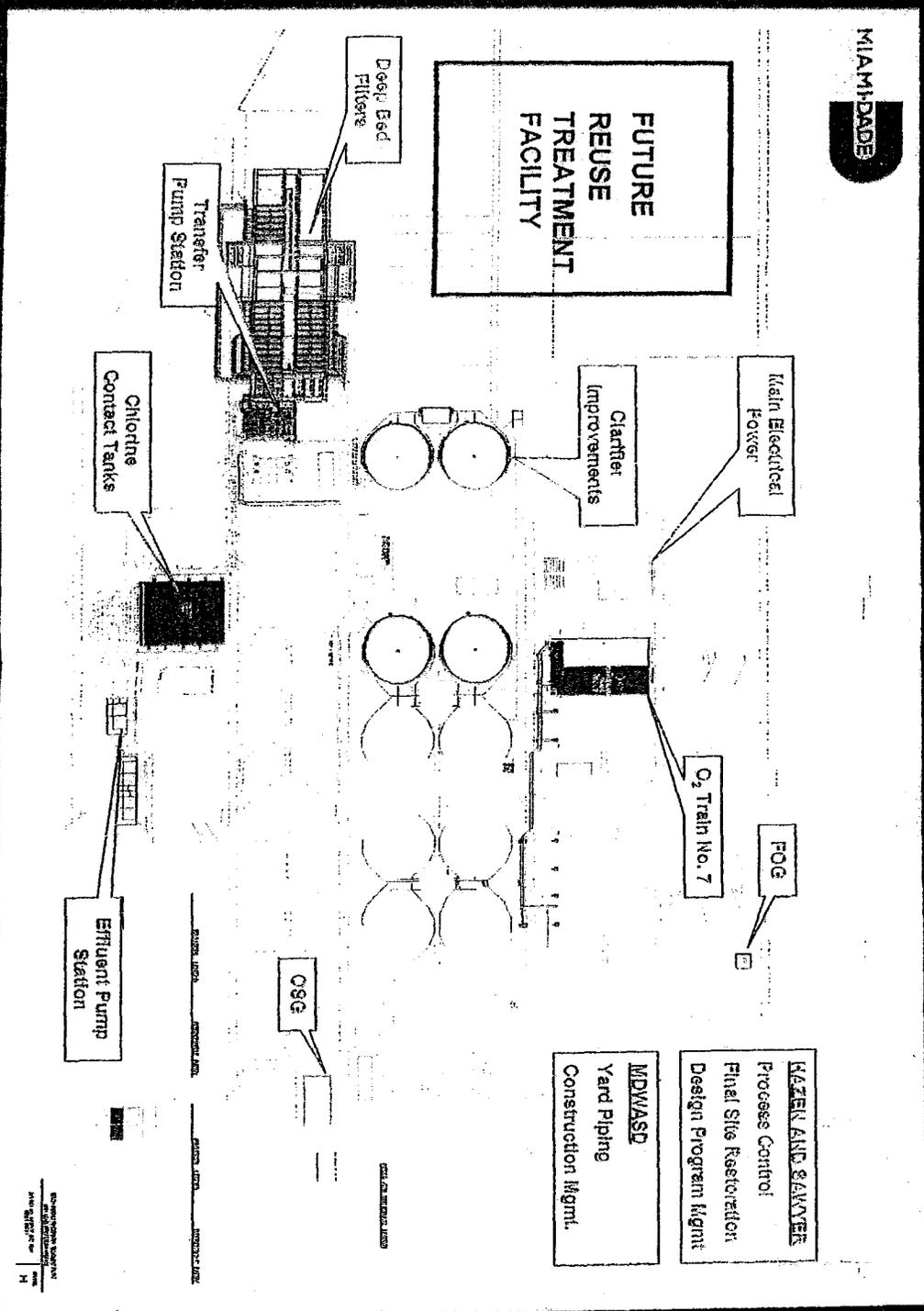
Ordinance 90-143 is applicable to all construction projects over \$100,000 that do not utilize Federal Funds

REVIEW COMMITTEE RECOMMENDATION

Form with fields for Tier 1 Set Aside, Set Aside (Level 1, 2, 3), Trade Set Aside (MCC), Goal (12% CSBE), Bid Preference, No Measure, Deferred, Selection Factor, and signature lines for Chairperson, Review Committee, County Manager, and Date (5/2/07).

Handwritten number 8

SDWWTP High Level Disinfection (HLD) 235 mgd - Bid Packages



HAZEN AND SAWYER
Process Control
Final Site Restoration
Design Program Mgmt

MDWASD
Yard Piping
Construction Mgmt.

DATE: 08/12/2014
TIME: 10:00 AM
PAGE: 11