

MIAMI-DADE WATER AND SEWER DEPARTMENT ENGINEERING DIVISION

PUMP STATION DESIGN PACKAGE

(PSDP-4/96)

Pump station plans cannot be processed if the Engineer of Record does not fully complete all appropriate Pump Station Design information contained herein. This form serves as a cover to the Pump Station Design package.

To be assigned by MD-WASD Operations Personnel							
PUMP STATION NUMBER:	SEWER ATLAS PAGE NO).:					
ADDRESS:							
and the control of the mean of the control of the c							
LEGAL DESCRIPTION OF PROPERTY:		•					
PROJECT TITLE:							
Engineer of Record Certification:							
I, P. I	E. certify that:						
The above pump station design follows all applicable guide	lines published by Miami-Dade Wat	er and Sewer Department					
and is the product of thorough engineering work.		include and the second and the					
When selecting the operating range of the pump, I consider encountered in the system.	lered the maximum and minimum he	ad conditions that may be					
I researched manufacturers published data to find and spe	ecify the equipment that was most su	itable for the application,					
from the points of durability, reliability and energy consu	imption.						
That in order to accomplish this, I selected and specified application.	the optimum combination of pump of	und motor I found for this					
The selected equipment meets all of the above criteria.							
I have files corroborating this in the form of manufacturer.	s data sheets, literature, shop drawii	ngs <mark>and/or othe</mark> r ce <mark>rt</mark> ified					
statements.							
I will be personally responsible for reviewing and approvi	ing shop drawings of equipment to be	e installed in this project.					
ENGINEER OF RECORD CERTIFIES THAT THE	FOLLOWING INFORMATION I	S ATTACHED TO					
THIS FORM FOR REVIEW AND APPROVAL (Che							
Hydraulic Calculations (Signed and Sealed)		 					
System Curve (Max. and Min.)							
Pump Curve							
Pump Selection including Catalog Information (Specific							
Floatation Calculations (Signed and Sealed)							
Electrical Load Calculations and Wiring Sizing (Signed and Sealed)							
Air Change Calculations for Drywell Ventilation System (Signed and Sealed) Generator Sizing Calculations (Signed and Sealed)							
Architectural/Civil/Structural Construction Drawings		···					
Mechanical Construction Drawings	_	·					
Electrical Construction Drawings							
This is to certify that the engineering features of this system have be	een designed by me or by an individual(s) i	under my direct supervision.					
A seed of the seed	The second of th						
Name (Please Print) / Florida Registration Number /	Address and Phone Number /	Signature & Seal /					
PSDP-4/96 Page 1		(Rev. 1/99)					

DESIGN CRITERIA

Station 1	уре	(Dry Well - We	t Well, Submersibl	e)	
Flow Inf	ormation				
	Average Domestic (GPM)		•		•
	I/I (GPM)				
r	Peak Factor		_		
	Peak Flow (GPM)		•——		
•	Baselined Brown Conseils (C	TIDILAN	*		
-	Required Pump Capacity (G			0	
•	Pressure at the Point of Con				
	(Obtained from MD-	WASD) Maximum _.	Mir	imum	
	Max. Static Head (Feet)		Min. Static Head	(Feet)	
	(Obtained from MD- Max. Static Head (Feet) TDH Max. (Feet)		TDH Min. (Feet)		==
-Dimensio	ns				
	Dry Well (H x L x W or H x	Dia, Feet)			
	Wet Well (H x L x W or H x	Die Feet			
Thurston		. Da, Feet)			
Elevation		O.M.	PN 637		
	Pump On & Off, Feet On	Off	1 op of w	et Well, Feet	
	Gravity Sewer Invert, Feet			f Wet Well, Feet 🔃	
	Receiving FM Centerline, Fo	et	Pump Ce	nterline, Feet	
Wet Well	•	,			
	Volume, Gallons	Pm	np Time for Ave. I	low, Min	
	Required Volume, Gallons	Pur	mn Time for Peak	Flow, Min.	
Dumme A	ill in Pump Schedule on Page				
T mmho (t			r Dov	Youte non House	
TP* *	No. of Units Run	umg 1 me, riours pe	1. Tay	orates bet 110ff.	-
Piping					
	Suction Diameter (Inches)	•	Velocity (fps)	to	_
	Discharge Diameter (Inches)		Velocity (fps)	to	_
	Force Main Diameter (Inche	3)	Velocity (fps)	to	_
Valve Va		·= (<u></u> :	and the second of the second		•
	Dimensions, H x L x W (Fee	4)			
	Timing Diameter (Trabes)	*)	····		
	Piping Diameter (Inches)				
Liectrical	Equipment				
	Power Supply (Volts/Phase/I	Hertz)			
	Power Supply (Volts/Phase/I Starters (Full, Soft, Variable	Frequency Drive) _			
	Control Panel Location			·	
Wet Well	Level Water Level Instrumen	ntation	**		
	Туре				
	Manufacturer				
	Manufacturer				
	Model				
Radio Tra	insmitter Characteristics				
	Manufacturer			•	
	Model	No.			
Emergence	y Generator				
	Capacity (KW)				
	Evol Type		(r par)		
	Fuel Type	·			
	Location				
	Fuel Storage Capacity (Gall		· · · - · · · · · · · · · · · · · · · ·		
	Days Available w/ 1 pump d		er		
	Describe Leak Detection Pro	vision:			
Conchuse	on Cost Estimate \$				
COMMUNICA	on cost commute à				
			ring ngagan ni kalang na		
REMARK	S (If any of the above inform	ation is not applicable	e to this project, p	ease explain why.)	
				· · ·	
TOTAL 4 40 4	D 4				

	PUMP DATA						
	FLUID			<u> </u>	:		
	INSTALLATION LOCAT	ION					
	PUMP TYPE	<u> </u>					
		CAPACITY, GPM					
	RATED POINT	TDH,	FEET				
	SHUT OFF HEAD, FT						
,		MAXIMUM TDH, FT					
		CAPACITY, GPM			·· <u>-</u>		
	CONTINUOUS	MINIMUM TDH, FT					
	OPERATING	CAPACITY, GPM					
	RANGE	RUNOUT, FT					
		MAX.	NPSHR				
		MIN. PUMP EFFICIENCY	AT B.E.P., %				
			@ RUNOUT, %				
	· · · · · · · · · · · · · · · · · · ·	CASING					
	·	IMPELLER					
.	PUMP	SHAFT					
	CONSTRUCTION	BEARINGS L-10 LIFE, HRS.					
	. Han ti dinada a ki dina dina dina dia ki da ki da kina mana a ki	MAX. SHAFT DEFLECTION IN OPERATING RANGE, MILS					
		MAX. VEL. OF VIBRATIONS IN OP. RANGE, INCH/SEC.					
	PUMP	SUCTION, INCHES		÷ .			
	CONNECTIONS	DISCHARGE, INCHES					
		RATED HP					
		RPM .					
		S.F.			1.15		
		AMBIENT TEMP. FOR MOTOR RATING; *C					
1	ELECTRIC	MAXIMUM TEMP. RISE, °C			40		
	MOTOR	BEARINGS L-10 LIFE, HRS.		FE, HRS.			
			MAX. VIBRATION AMP., MILS				
		NOISE LEVEL, dB@1 METER		1 METER			
		NEM/	IEMA DESIGN CODE LETTER		В		
		START, CURR, LETTER CODE		TTER CODE	G		
		INSULATION CLASS F					
		MOTOR RATED HP NOT OVERLOADED AT ANY POINT THE SPECIFIED OPERATING RANGE AND BY NO MOR THAN 10% ON THE PUMP PERFORMANCE CURVE.			RANGE AND BY NO MORE		
	MANUFACTURERS	PUMP					
	& MODELS	MOTOR					
-1	Thoras 2			N.C. 0,	(Rev		