### **MEMORANDUM**

To:

All Interested Bidders

Date:

September 2, 2014

Invitation for Bid #14-1713-0V, Southwest Water

Subject:

Reclamation Facility (SWWRF) Rehabilitation Main Plant and Belt Filter Press Drain Station / Project Nos:

Main Plant: 5128184 and Belt Filter Press Drain Station:

5128183

**ADDENDUM #1** 

Bidders are hereby notified that this Addendum shall be acknowledged on page <u>00300-1</u> of the Bid Form and made a part of the above named bidding and contract documents. Bids submitted without acknowledgement of the Addendum will be considered incomplete.

The following items are issued to add to, modify, and clarify the bid and contract documents. These items shall have the same force and effect as the original bidding document, and cost involved shall be included in the bid prices. Bids to be submitted on the specified bid date, shall conform to the additions and revisions listed herein.

The deadline to submit all inquiries concerning interpretation, clarification or additional information pertaining to this bid was August 15, 2014 at 5:00 PM. This deadline has been established to maintain fair treatment for all potential bidders, while maintaining the expedited nature of the Economic Stimulus that the contracting of this work may achieve.

Bidders Note: A Public Record's request has been received requesting the Engineer's Estimate for this project.

The Engineer's Opinion of Probable Construction Cost is \$600,836.00, dated March 3, 2014. This construction cost estimate is based on the original specifications and drawings issued. Changes to the specifications subsequent to the original documents by addenda to this bid may not be accounted in this construction cost estimate.

#### **Bidders Note #1:**

Article C.02 Minimum Qualifications of Bidders has been revised to read "Bidder who has continuously held the certification of a General Contractor and / or an Underground Utility Contractor pursuant to Florida Statutes, Chapter 489 for a two (2) consecutive year period" may be qualified to bid on this Project. (WAS: Three (3) consecutive years).

<u>Bidders:</u> Bid Forms, eighteen (18) revised Bid Forms (Bid A & B) for both the Main Plant Drain Station Rehab and Belt Press Filter Drain Station Rehab are made a part of this Addendum #1. (18 pages)

Engineering has advised Flyght pumps are acceptable for use in the project.

### The Manatee County Utility Standards may be downloaded as follows:

http://www.mymanatee.org/dms/departments/public-works/engineering-standards/Manatee-County-Utility-Standards-PDF/Manatee%20County%20Utility%20Standards%20PDF.pdf.

The latest Manatee County Utility Standards is dated May, 2011.

Financial Management Purchasing Division 1112 Manatee Ave W Suite 803, Bradenton, FL 34205 Phone number: (941)749-3014



Invitation for Bid #14-1713-OV, Southwest Water Reclamation Facility (SWWRF) Rehabilitation Main Plant and Belt Filter Press Drain Station / Project No. Main Plant: 5128184 and Belt Filter Press Drain Station, Project No. 5128183

#### Addendum #1

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<u>Bidders Note #1 (Continued)</u>: One (1) PDF of Control Panel(s) and five (5) PDFs of Pump Data are attached. (6 total pages)

**Bidders Note #2:** Questions received from Bidders through August 15,2014 at 5:00 PM:

- **Q1.** There is no reference to duty points for the individual stations. GPM and TDH would be required to properly size the temporary bypass system. Existing electric submersible curves could be supplied as reference.
- **R1.** See attached performance curve and flow data. The Headworks 12" ductile is piped to approximately 20 feet high.
- Q2. What would the duration of each bypass be?
- **R2.** Means, methods and scheduling are to be determined by the Successful Bidder. The duration is from start of the rehabilitation to when the Lift Station may be placed back into service.
- Q3. Would electric or diesel drive be preferred?
- **R3**. Electric or diesel drive may be used. If diesel is used, it should have a hospital grade sound control. The Successful Bidder is responsible for all costs.
- Q4. Are sound attenuated pumps required for the bypass?
- **R4.** See response no. 3.
- Q5. Is there data of peak flow hours vs. average daily flow at each station?
- R5. Yes, this information is being provided via attached pdf.

Invitation for Bid #14-1713-OV, Southwest Water Reclamation Facility (SWWRF) Rehabilitation Main Plant and Belt Filter Press Drain Station / Project No. Main Plant: 5128184 and Belt Filter Press Drain Station, Project No. 5128183

#### Addendum #1

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- Q6. Specs read for ductile iron force main / pump station: fittings are to be fusion bond epoxy. Recent discussions with County personnel advised they no longer want fusion bond epoxy and now require p401 epoxy lining. Please confirm fusion bond epoxy ductile iron fittings are approved for this project.
- **R6**. P401 Epoxy Lining shall be used for this project.
- **Q7**. Can the new submersible pumps be brought on line one at a time, with the performance testing and official start up taking place once all improvements are completed?
- **R7**. The normal operation of the pumps will be to start them up one at a time as the wet well level rises and then all pumps are off at the same time when the level drops to the "off" position.

#### OR

All pumps will official be placed into service after the start-up has been completed and passed. By-pass pumping will be in place until then.

- Q8. Can an auto-dialer be used in place of a pump watch person?
- **R8.** No, an auto-dialer may not be used in lieu of a pump watch person.
- **Q9**. Are there specific permits anticipated for this project? If so, can you confirm what they will be and the cost?
- **R9.** The Successful Bidder is responsible for all permitting and permitting fees. Bidders may contact the Building Department for verification of permitting requirements and fees.
- **Q10**. The pipe support Measurement and Payment is for brick and mortar VF (bid item #33), however, the specs require stainless steel.
- **R10**. Adjustable stainless valve supports are to be installed. However, if the distance between the valves and the valve vault bottom is 8" or less, brick and mortar are acceptable.

Invitation for Bid #14-1713-OV, Southwest Water Reclamation Facility (SWWRF) Rehabilitation Main Plant and Belt Filter Press Drain Station / Project No. Main Plant: 5128184 and Belt Filter Press Drain Station, Project No. 5128183

#### Addendum #1

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- **Q.11.** There does not appear to be a specification for the disconnect switches.
- **R11**. Please refer to Section 13 of the Manatee County Public Works Utility Standards which may be Downloaded from the County website. The web link has been provided as part of this Addendum #1.
- **Q12**. The Measurement and Payment for conduit (bid item #27) is listed in LF with a 1' qty. Should this be a lump sum?
- **R12.** The quantity for bid item #27 (Bid A and Bid B) for the <u>Main Plant Drain Station Rehab</u>, <u>Project No.:5128184</u>, has been revised from 1 LF to 50 LF. Revised bid forms are made a part of this Addendum #1.
- **Q13.** Will the County consider changing the unit of measure for bid items 4 and 15 (Main Plant Drain Station Rehab and Belt Press Filter Drain Station), for the HDPE Fittings and Ductile Iron Fittings from LB to LS? This becomes difficult to substantiate at bid time and weight is not often included with the supplier's proposals.
- **R13.** Bid items 4 and 15 (Main Plant Drain Station Rehab and Belt Press Filter Drain Station), shall be bid as shown on the bid forms.

#### **MAIN PLANT DRAIN STATION REHAB:**

- **Q14**. What is the existing SCADA connection, wired or radio?
- R14. The existing SCADA connection is wired.
- Q15. Is the existing SCADA connection to be reused?
- R15. The existing conduit may be reused. Wastewater Plant Maintenance will supply the Successful Bidder with the 225 ft of SCADA connection which will be 14 gauge, 18 conductor.

Invitation for Bid #14-1713-OV, Southwest Water Reclamation Facility (SWWRF) Rehabilitation Main Plant and Belt Filter Press Drain Station / Project No. Main Plant: 5128184 and Belt Filter Press Drain Station, Project No. 5128183

#### Addendum #1

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- **Q16**. Is the existing feeder to the Plant Drain Pump Station to be reused to feed the new control panel?
- **R16.** Use existing 200 amp, 480 vac breaker and conductors. Care must be exercised in panel selection to reuse feeder conductors to prevent damage and splices.
- Q17. Is the new Control Panel to be floor mounted or will a rack be required?
- **R17.** A structural mounting rack shall be required. In general, the control panels (bid item #26) for each Drain Station will be constructed in accordance with the Manatee County Public Works Utility Standards, detail US-22 through US-24.

#### **BELT FILTER PRESS DRAIN STATION:**

- **Q18.** There are only three (3) existing disconnects on existing rack. What is the fourth disconnect indicated on the drawings to be connected to?
- **R18.** The fourth disconnect is the Stainless Steel Junction Box for Float Ball Terminations.
- **Q19**. Are the existing controls to operate the new station?
- R19. Yes. No motor RTDs are necessary.
- **Q20.** Is the existing disconnect feeders to be reused for new pumps?
- **R20**. Yes. Care must be exercised in disconnection selection to reuse feeder conductors to prevent damage and splices.
- **Q21.** If new feeders are required to the disconnects, where are they to be services from?
- **R21.** New feeders are not required.

Invitation for Bid #14-1713-OV, Southwest Water Reclamation Facility (SWWRF) Rehabilitation Main Plant and Belt Filter Press Drain Station / Project No. Main Plant: 5128184 and Belt Filter Press Drain Station, Project No. 5128183

#### Addendum #1

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**Q22** and **Q23**. Proposed drawings indicate 50' +/- new conduit. What is the conduit for? What size conduit is required?

**R22** and **R23**. The new conduit is required from the disconnect to the wet well, (if required). Please refer to the Manatee County Utility Standards, 2011. Schedule 80 PVC 2" (min) electrical conduit is required. Bid Item #27 has been added to the bid form.

Q24. What size conductors are required?

R24. Conductors for the pump motors vary and are supplied with the submersible motor/pump for a given horsepower/voltage. Additionally, control wire for the float ball is supplied as part of the submersible motor / pump with termination at the control box.

Q25. How many conduits are required?

R25. Please refer to the Manatee County Utility Standards, 2011. Conduits are required as follows: one per pump and one for the float balls; i.e. three pumps, four conduits are required.

#### End of Addendum #1

Bids will be received at the Manatee County Purchasing Division, 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205 on <u>September 11, 2014 at 3:00 PM.</u>

Sincerely,

Melissa M. Wendel, CPPO, Purchasing Official

Manatee County Purchasing Division

Ov (24 total pdfs attached)

(Submit in triplicate)

## IFB #14-1713-OV/ ADDENDUM #1

For: Bid Form "A" - SWWRF REHABILITATION - Main Plant and Belt Filter Press Drain Station

Total Offer Bid "A" Main Plant Drain Station Rehab: \$(Based on a completion time of 180 calendar days)
Total Offer Bid "A" Belt Press Filter Drain Station Rehab: \$ (Based on a completion time of 180 calendar days)
GRAND TOTAL BID "A" <u>SWWRF REHABILITATION – Main Plant and</u> Belt Filter Press Drain Station \$
*Only one Award shall be made. County has sole authority to select the Bid based on completion time which is in the best interest of the County.
BIDDER:
AUTHORIZED SIGNATURE:

(Submit in triplicate)

## IFB #14-1713-OV /ADDENDUM #1

For: Bid Form "B" - SWWRF REHABILITATION - Main Plant and Belt Filter Press Drain Station

Total Offer Bid "B" Main Plant Drain Station Rehab: \$
(Based on a completion time of 120 calendar days)
Total Offer Bid "B" Belt Press Filter Drain Station Rehab: \$ (Based on a completion time of 120 calendar days)
GRAND TOTAL BID "B" SWWRF REHABILITATION – Main Plant and
Belt Filter Press Drain Station \$
*Only one Award shall be made. County has sole authority to select the Bid based on completion time which is in the best interest of the County.
BIDDER:
AUTHORIZED SIGNATURE:

## BID FORM / ADDENDUM #1 (Submit in triplicate)

For: Southwest Water Reclamation Facility (SWWRF), Main Plant Drain Station Rehabilitation (IFB#14-1713-OV) Project #5128184

Rehab	ilitation (IFB#14-1713-OV) Project #5128184	
Total Offer (Bid "A"): _		
Based on a completion	time of 180 calendar days	
Total Offer (Bid "B"):		
Based on a completion	time of 120 calendar days	
specified stated time shall be	on of the Work shall be considered. Each Bid for e offered as a separate "total offer". County has the completion time which is in the best interest of Count	ne sole authority to
full knowledge and understan	y declare that we have carefully reviewed the Bid D nding of the aforementioned herewith submit this Bid I condition contained in the Invitation for Bid package	, meeting each and
Specifications, terms, and on Manatee County and the Silvereupon, the defaulting Codamages, and attorney fees a	itation for Bid package, in its entirety, including but conditions shall be made a part of any resulting uccessful Bidder. Failure to comply shall result in ontractor shall be required to pay for any and all reas incurred by County, and agrees to forfeit his/her But this Bid shall be addressed as follows: (Complete a	contract between n Contract default, procurement costs, id Bond.
Communications concerning	ulis bid shall be addressed as follows. (Complete a	ii lielus)
Bidder's Name:		
	Fax: _( )	
,		attest that I have
,	•	
, visited the Work site(s) to fami	on [date(s)] iliarize myself with the full Scope of work required for	attest that I have
Acknowledge Addendum No	Dated: Acknowledge Addendum No	Dated:
Acknowledge Addendum No	Dated: Acknowledge Addendum No Dated: Acknowledge Addendum No	Dated:
Authorized Signatu	ure(s):	
Name and Title of Above Sig	ner(s):	
	Date:	

Southwest Water Reclamation Facility (SWWRF), Main Plant Drain Station Rehab Project No.: 5128184 / Location: 5101 65th Street West, Bradenton, FL 34210

ITEM				BID PRICE	TOTAL BID
#	DESCRIPTION	U/M	QTY.	PER UNIT	PRICE
1	Wetwell Cleaning	SF	605	\$	\$
2	8" DR-11 HDPE Piping	LF	57	\$	\$
3	8" HDPE Flange Adapters w/ Backup Ring	EA	6	\$	\$
4	8" HDPE Fittings	LB	120	\$	\$
5_	Pump Base Ells, BPIU.16	EA	3	\$	\$
6	Pump Base Ell Mounting Plate	EA	3	\$	\$
7	S.S. Pipe Bracing, 10 Ft. Dia.	EA	2	\$	\$
8	2" S.S. Pump Guide Rail System	LF	45	\$	\$
9	Resilient (Link) Seals w/Carrier Pipe	EA	9	\$	\$
10	INTENTIONALLY LEFT BLANK				
11	Remove & Replace Ex. PVC Drain Line & P-Trap	EA	1	\$	\$
12	8" Flanged Plug Valve	EA	3	\$	\$
13	8" Flanged Swing Check Valve	EA	3	\$	\$
14	  12" D.I. Pipe	LF	6	\$	\$

	Bid Form - 4
	Main Plant Drain Sta. Rehab. Proj.#5128184
Bidder:	Bid "A", Based on
	180 Calendar Day Completion Time
Authorized	Addendum #1
Signature:	

## Southwest Water Reclamation Facility (SWWRF), Main Plant Drain Station Rehab Project No.: 5128184 / Location: 5101 65th Street West, Bradenton, FL 34210

ITEM				BID PRICE	TOTAL BID
#	DESCRIPTION	U/M	QTY.	PER UNIT	PRICE
15	Ductile Iron Fittings	LB	1,390	\$	\$
16	12" D.I. Flanged Adapters	EA	1	\$	\$
3.0	8" Male Aluminum Quick Coupler				
17	Adapter	EA	1	\$	\$
18	S.S. Adjustable Valve Supports	EA	3	\$	\$
550,520					wa
19	12" Gate Valve, MJ	EA	2	\$	\$
20	8" & Less Influent Line Plug	EA	5	\$	\$
21	12" Influent Line Plug	EA	3	\$	\$
22	18" Influent Line Plug	EA	1	\$	\$
23	By-Pass Pumping	LS	1	\$	\$
24	24-Hour By-Pass Pump Operator	LS	1	\$	\$
25	INTENTIONALLY LEFT BLANK				
26	Remove & Replace Control Panel	EA	1	\$	\$
	Remove & Replace Sch 80 PVC				
*27	Conduit (Addendum #1)	LF	50	\$	\$
	Remove & Replace Electrical		500 P. C.		
28	Mounting Structure	EA	1	\$	\$

	Bid Form - 5
	Main Plant Drain Sta. Rehab. Proj.#5128184
Bidder:	Bid "A", Based or
	180 Calendar Day Completion Time
Authorized	Addendum #1
Signature:	

Southwest Water Reclamation Facility (SWWRF), Main Plant Drain Station Rehab Project No.: 5128184 / Location: 5101 65th Street West, Bradenton, FL 34210

ITEM				BID PRICE	TOTAL BID
#	DESCRIPTION	U/M	QTY.	PER UNIT	PRICE
29	Install New Float Switches	EA	6	\$	\$
30	Pumps, Hydromatic S6A3000M3-4, 30 HP, 1750 RPM	EA_	3	\$	\$
31	Concrete Fillet, 3,000 psi, Type II, No Reinf., Remove & Replace	CY	2	\$	\$
32	New Concrete Wet Well Floor, 4,000 psi, Type II, with Reinf.	CY	3	\$	\$
33_	Brick & Mortor Valve Supports, Max 8" High	VF	3	\$	\$
	SUBTOTAL CONSTRUCTION COST		N E		\$
34	Mobilization	LS_	1		\$
35	Miscellaneous Work & Clean Up	LS	1		\$
36	Record Drawings	LS	1		\$
	TOTAL BASE BID "A" BASED ON A COMPLETION TIME OF <u>180</u> CALENDAR DAYS				\$
	CONTRACT CONTINGENCY WORK (Used only with County Approval)	%	10		\$
	TOTAL CONTRACT AWARD WITH on Bid "A", <u>180</u> Calendar Day Com Station Rehab) (Addendum #1)	\$			

	Bid Form - 6
	Main Plant Drain Sta. Rehab. Proj.#5128184
Bidder:	Bid "A", Based on
	180 Calendar Day Completion Time
Authorized	Addendum #1
Signature:	

## Southwest Water Reclamation Facility (SWWRF), Main Plant Drain Station Rehab Project No.: 5128184 / Location: 5101 65th Street West, Bradenton, FL 34210

ITEM				BID PRICE	TOTAL BID
#	DESCRIPTION	U/M	QTY.	PER UNIT	PRICE
1	Wetwell Cleaning	SF	605	\$	\$
2	8" DR-11 HDPE Piping	LF	57	\$	\$
3	8" HDPE Flange Adapters w/ Backup Ring	EA	6	\$	\$
4	8" HDPE Fittings	LB	120	\$	\$
5	Pump Base Ells, BPIU.16	EA	3	\$	\$
6	Pump Base Ell Mounting Plate	EA	3	\$	\$
7	S.S. Pipe Bracing, 10 Ft. Dia.	EA	2	\$	\$
8	2" S.S. Pump Guide Rail System	LF	45	\$	\$
9	Resilient (Link) Seals w/Carrier Pipe	EA	9	\$	\$
10	INTENTIONALLY LEFT BLANK				
11	Remove & Replace Ex. PVC Drain Line & P-Trap	EA	1	\$	\$
12	8" Flanged Plug Valve	EA	3	\$	\$
13	8" Flanged Swing Check Valve	EA	3	\$	\$
14	12" D.I. Pipe	LF	6	\$	\$

	Bld Form - /
	Main Plant Drain Sta. Rehab. Proj.#5128184
	Bid "B"
Bidder:	Based on 120 Calendar Day
	Completion Time
Authorized	Addendum #1
Signature:	

Southwest Water Reclamation Facility (SWWRF), Main Plant Drain Station Rehab Project No.: 5128184 / Location: 5101 65th Street West, Bradenton, FL 34210

ITEM				BID PRICE	TOTAL BID
#	DESCRIPTION	U/M	QTY.	PER UNIT	PRICE
15	Ductile Iron Fittings	LB	1,390	\$	\$
16	12" D.I. Flanged Adapters	EA	1	\$	\$
17	8" Male Aluminum Quick Coupler Adapter	EA	1	\$	\$
18	S.S. Adjustable Valve Supports	EA	3	\$	\$
19	12" Gate Valve, MJ	EA	2	\$	\$
20	8" & Less Influent Line Plug	EA	5	\$	\$
21	12" Influent Line Plug	EA	3	\$	\$
22	18" Influent Line Plug	EA	1	\$	\$
23	By-Pass Pumping	LS	1	\$	\$
24	24-Hour By-Pass Pump Operator	LS	1	\$	\$
25	INTENTIONALLY LEFT BLANK				
26	Remove & Replace Control Panel	EA	1	\$	\$
*27	Remove & Replace Sch 80 PVC Conduit (Addendum #1)	LF	50	\$	\$
28	Remove & Replace Electrical Mounting Structure	EA	1	\$	\$

	Bid Form - 8
	Main Plant Drain Sta. Rehab. Proj.#5128184
	Bid "B"
Bidder:	Based on 120 Calendar Day
ALC 12 12-35130-30 100 300 100 100 100 100 100 100 100 1	Completion Time
Authorized	Addendum #1
Signature:	

Southwest Water Reclamation Facility (SWWRF), Main Plant Drain Station Rehab Project No.: 5128184 / Location: 5101 65th Street West, Bradenton, FL 34210

ITEM		1		BID PRICE	TOTAL BID
#	DESCRIPTION	U/M	QTY.	PER UNIT	PRICE
29	Install New Float Switches	EA	6	\$	\$
30	Pumps, Hydromatic S6A3000M3-4, 30 HP, 1750 RPM	EA	3	\$	\$
31	Concrete Fillet, 3,000 psi, Type II, No Reinf., Remove & Replace	CY	2	\$	\$
32	New Concrete Wet Well Floor, 4,000 psi, Type II, with Reinf.	CY	3	\$	\$
33	Brick & Mortor Valve Supports, Max 8" High	VF	3	\$	\$
	SUBTOTAL CONSTRUCTION COST	Part of the second			\$
34	Mobilization	LS	11		\$
35	Miscellaneous Work & Clean Up	LS	11		\$
36	Record Drawings	LS	1		\$
	TOTAL BASE BID "B" BASED ON A COMPLETION TIME OF <u>120</u> CALENDAR DAYS				\$
	CONTRACT CONTINGENCY WORK (Used only with County Approval)	%	10		\$
	TOTAL CONTRACT AWARD WITH on Bid "B", <u>120</u> Calendar Day Con Station Rehab) (Addendum #1)	\$			

	Bid Form - 9
	Main Plant Drain Sta. Rehab. Proj.#5128184
	Bid "B'
Bidder:	Based on 120 Calendar Day
	Completion Time
Authorized	Addendum #1
Signature:	

## BID FORM / ADDENDUM #1 (Submit in triplicate)

For: Southwest Water Reclamation Facility (SWWRF), Belt Filter Press Drain Station Rehabilitation (IFB#14-1713-OV) Project #5128183

Renabilitation (IFB#14-1/13-OV) Project #5128183	
Total Offer (Bid "A"):	70-70
Based on a completion time of 180 calendar days	
Total Offer (Bid "B"):	3.979 OM
Based on a completion time of 120 calendar days	<u> </u>
Two schedules for completion of the Work shall be considered. Each Bid for specified stated time shall be offered as a separate "total offer". County has t select the Bid based on the completion time which is in the best interest of Counshall be made.	he sole authority to
We, the undersigned, hereby declare that we have carefully reviewed the Bid D full knowledge and understanding of the aforementioned herewith submit this Bid every specification, term, and condition contained in the Invitation for Bid package	l, meeting each and
We understand that the Invitation for Bid package, in its entirety, including bu Specifications, terms, and conditions shall be made a part of any resulting Manatee County and the Successful Bidder. Failure to comply shall result i whereupon, the defaulting Contractor shall be required to pay for any and all re- damages, and attorney fees as incurred by County, and agrees to forfeit his/her E	g contract between in Contract default, -procurement costs,
Communications concerning this Bid shall be addressed as follows: (Complete a	all fields)
Bidder's Name:	
Mailing Address:	
Telephone: _( Fax: _()	
Email Address:	
l,	attest that I have
read, understand, and agree to the Local Preference policy of Manatee County.	~:
on [date(s)]	attest that I have
l, on [date(s)] visited the Work site(s) to familiarize myself with the full Scope of work required for	the Bid.
Acknowledge Addendum No Dated: Acknowledge Addendum No Acknowledge Addendum No Dated: Acknowledge Addendum No	Dated:
Acknowledge Addendum No. Dated: Acknowledge Addendum No.	Dated:
Authorized Signature(s):	
Name and Title of Above Signer(s):	
Date:	

(Submit in Triplicate) / IFB#14-1713-OV / Addendum #1

Southwest Water Reclamation Facility (SWWRF), Belt Press Filter Drain Station Rehab.

Project No.: 5128183/ Location: 5101 65th Street West, Bradenton, FL 34210

BID "A" Based on Completion time of 180 Calendar Days

	BID "A" Based on	COMDI	etion tir	ue or 180 cateuo	lar Days
ITEM				BID PRICE	TOTAL BID
#	DESCRIPTION	U/M	QTY.	PER UNIT	PRICE
_1	Wetwell Cleaning	SF	605	\$	\$
2	8" DR-11 HDPE Piping	LF	69	\$	\$
3	8" HDPE Flange Adapters w/ Backup Ring	EA	6	\$	\$
4	8" HDPE Fittings	LB	120	\$	\$
5	Pump Base Ells, BPIU.16	EA	3	\$	\$
6	Pump Base Ell Mounting Plate	EA	3	\$	\$
7	S.S. Pipe Bracing, 10 Ft. Dia.	EA	2	\$	\$
8	2" S.S. Pump Guide Rail System	LF	45	\$	\$
9	Resilient (Link) Seals w/Carrier Pipe	EA	6	\$	\$
10	Repair Ex. Liner, (Excl. Bid Items 9 & 11)	SF	20	\$	\$
11	Remove & Replace Ex. PVC Drain Line & P-Trap	EA	1	\$	\$
12	8" Flanged Plug Valve	EA	3	\$	\$

	Big Form - 11
	Belt Press Filter Drain Station Proj.#5128183
	Bid "A"
	Based on 180 Calendar Day
Bidder:	Completion Time
	Addendum #1
Authorized	

Signature:\_

(Submit in Triplicate) / IFB#14-1713-OV / Addendum #1

Southwest Water Reclamation Facility (SWWRF), Belt Press Filter Drain Station Rehab.

Project No.: 5128183/ Location: 5101 65th Street West, Bradenton, FL 34210

	BID "A" Based on	COMPT	etion ti	me or 180 careno	dar Days
ITEM				BID PRICE	TOTAL BID
#	DESCRIPTION	U/M	QTY.	PER UNIT	PRICE
13	8" Flanged Swing Check Valve	EA	3	\$	\$
14	INTENTIONALLY LEFT BLANK				
15	Ductile Iron Fittings	LB	225_	\$	\$
16	INTENTIONALLY LEFT BLANK				
17	8" Male Aluminum Quick Coupler Adapter	EA	1	\$	\$
18	S.S. Adjustable Valve Supports	EA	3	\$	\$
19	10" Gate Valve (MJ)	EA	1	\$	\$
20	8" & Less Influent Line Plug	EA	2	\$	\$
21	12" Influent Line Plug	EA	1	\$	\$
22	INTENTIONALLY LEFT BLANK				
23	By-Pass Pumping	LS	1	\$	\$
24	24-Hour By-Pass Pump Operator	LS	1	\$	\$

	Bid Form - 12
	Belt Press Filter Drain Station Proj.#5128183
	Bid "A"
	Based on 180 Calendar Day
Bidder:	Completion Time
	Addendum #1
Authorized	
Signature:	

Southwest Water Reclamation Facility (SWWRF), Belt Press Filter Drain Station Rehab.

Project No.: 5128183/ Location: 5101 65th Street West, Bradenton, FL 34210

BID "A" Based on Completion time of 180 Calendar Days

	BID "A" Based on	Compl	etion tir	me of <u>180</u> Calend	lar Days
ITEM				BID PRICE	TOTAL BID
#	DESCRIPTION	U/M	QTY.	PER UNIT	PRICE
25	Remove & Replace Fused Safety Switch (Disconnect)	EA	4	\$	\$
26	INTENTIONALLY LEFT BLANK				
*27	Conduit - Sch 80, PVC Electrical Conduit (2" min) (Addendum #1)	LF	50	\$	\$
28	Remove & Replace Electrical Mounting Structure	EA	1	\$	\$
29	Install New Float Switches	EA	6	\$	\$
30	Pumps, Hydromatic S6L2000M4-4, 20HP, 1750 RPM	EA	3	\$	\$
31	Concrete Fillet, 3,000 psi, Type II, No Reinf., Remove & Replace	CY	2	\$	\$
32	New Concrete Wet Well Floor, 4,000 psi, Type II, with Reinf.	CY	3	\$	\$
33	Brick & Mortor Valve Supports, Max 8" High	VF	3	\$	\$
	SUBTOTAL CONSTRUCTION COST				\$

Bid Form - 13
Belt Press Filter Drain Station Proj.#5128183
Bid "A"
Based on 180 Calendar Day
Completion Time
Addendum #1
Authorized
Signature:

Southwest Water Reclamation Facility (SWWRF), Belt Press Filter Drain Station Rehab.

Project No.: 5128183/ Location: 5101 65th Street West, Bradenton, FL 34210

ITEM				BID PRICE	TOTAL BID
#	DESCRIPTION	U/M	QTY.	PER UNIT	PRICE
34	Mobilization	LS	1		\$
35	Miscellaneous Work & Clean Up	LS	1		\$
36	Record Drawings	LS	1		\$
	TOTAL BASE BID "A" BASED ON A COMPLETION TIME OF 180 CALENDAR DAYS				\$
	CONTRACT CONTINGENCY WORK (Used only with County Approval)	%	10		\$
•	TOTAL CONTRACT AWARD WITH Bid "A", 180 Calendar Day C Filter Drain Station Rehab)	comple	tion Time	(Belt Press	\$

	Bid Form - 14
	Belt Press Filter Drain Station Proj.#5128183
	Bid "A"
	Based on 180 Calendar Day
Bidder:	Completion Time
	Addendum #1
Authorized	
Signature:	

(Submit in Triplicate) / IFB#14-1713-OV / Addendum #1

Southwest Water Reclamation Facility (SWWRF), Belt Press Filter Drain Station Rehab.

Project No.: 5128183/ Location: 5101 65th Street West, Bradenton, FL 34210

	BID "B" Based on	Compl	etion tir	ne of 120 Calend	dar Days
TEM				BID PRICE	TOTAL BID
#	DESCRIPTION	U/M	QTY.	PER UNIT	PRICE
1	Wetwell Cleaning	SF	605	\$	\$
2	8" DR-11 HDPE Piping	LF	69	\$	\$
3	8" HDPE Flange Adapters w/ Backup Ring	EA	6	\$	\$
4	8" HDPE Fittings	LB	120	\$	\$
5	Pump Base Ells, BPIU.16	EA	3	\$	\$
6	Pump Base Ell Mounting Plate	EA	3	\$	\$
7	S.S. Pipe Bracing, 10 Ft. Dia.	EA	2	\$	\$
8	2" S.S. Pump Guide Rail System	LF	45	\$	\$
9	Resilient (Link) Seals w/Carrier Pipe	EA	6	\$	\$
.0	Repair Ex. Liner, (Excl. Bid Items 9 & 11)	SF	20	\$	\$
1	Remove & Replace Ex. PVC Drain Line & P-Trap	EA	1	\$	\$
L2	8" Flanged Plug Valve	EA	3	\$	\$

	Bid Form - 15
	Belt Press Filter Drain Station Proj.#5128183
	Bid "B"
	Based on 120 Calendar Day
Bidder:	Completion Time
	Addendum #1
Authorized	
Signature:	

Southwest Water Reclamation Facility (SWWRF), Belt Press Filter Drain Station Rehab.

Project No.: 5128183/ Location: 5101 65th Street West, Bradenton, FL 34210

	BID "B" Based on	Comp1	etion tim	e of 120 Calend	dar Days
ITEM				BID PRICE	TOTAL BID
#	DESCRIPTION	U/M	QTY.	PER UNIT	PRICE
13	8" Flanged Swing Check Valve	EA	3	\$	\$
14	INTENTIONALLY LEFT BLANK			- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
15	Ductile Iron Fittings	LB	225	\$	\$
16	INTENTIONALLY LEFT BLANK				
17	8" Male Aluminum Quick Coupler Adapter	EA	1	\$	\$
18	S.S. Adjustable Valve Supports	EA	3	\$	\$
19	10" Gate Valve (MJ)	EA	11	\$	\$
20	8" & Less Influent Line Plug	EA	2	\$	\$
21	12" Influent Line Plug	EA	1	\$	\$
22	INTENTIONALLY LEFT BLANK				
23	By-Pass Pumping	LS	1	\$	\$
24	24-Hour By-Pass Pump Operator	LS	1	\$	\$

	Bid Form - 16
	Belt Press Filter Drain Station Proj.#5128183
	Bid "B"
	Based on 120 Calendar Day
Bidder:	Completion Time
	Addendum #1
Authorized	
Signature:	

Southwest Water Reclamation Facility (SWWRF), Belt Press Filter Drain Station Rehab.

Project No.: 5128183/ Location: 5101 65th Street West, Bradenton, FL 34210

	BID "B" Based on	Comp	letion tim	e of 120 Calend	dar Days
ITEM				BID PRICE	TOTAL BID
#	DESCRIPTION	U/M	QTY.	PER UNIT	PRICE
25	Remove & Replace Fused Safety Switch (Disconnect)	EA	4	\$	\$
26	INTENTIONALLY LEFT BLANK				
*27	Conduit - Sch 80, PVC Electrical Conduit (2" min) (Addendum #1)	LF	50	\$	\$
28	Remove & Replace Electrical Mounting Structure	EA	1	\$	\$
29	Install New Float Switches	EA	6	\$	\$
30	Pumps, Hydromatic S6L2000M4-4, 20HP, 1750 RPM	EA	3	\$	\$
31	Concrete Fillet, 3,000 psi, Type II, No Reinf., Remove & Replace	CY	2	\$	\$
32	New Concrete Wet Well Floor, 4,000 psi, Type II, with Reinf.	CY	3	\$	\$
	Brick & Mortor Valve Supports, Max 8" High	VF	3	\$	\$
	SUBTOTAL CONSTRUCTION COST				\$

	Bid Form - 17
	Belt Press Filter Drain Station Proj.#5128183
	Bid "B"
	Based on 120 Calendar Day
Bidder:	Completion Time
	Addendum #1
Authorized	
Signature:	

(Submit in Triplicate) / IFB#14-1713-OV / Addendum #1

Southwest Water Reclamation Facility (SWWRF), Belt Press Filter Drain Station Rehab.

Project No.: 5128183/ Location: 5101 65th Street West, Bradenton, FL 34210

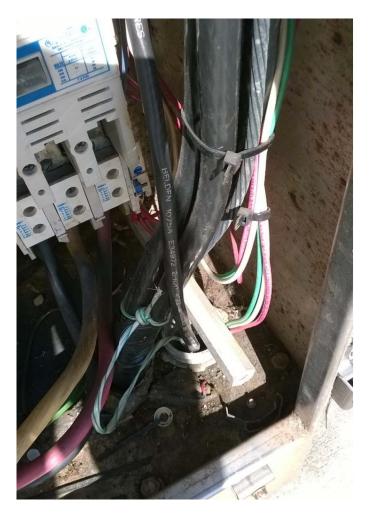
BID "B" Based on Completion time of 120 Calendar Days

ITEM				BID PRICE	TOTAL BID
#	DESCRIPTION	U/M	QTY.	PER UNIT	PRICE
34	Mobilization	LS	1		\$
35	Miscellaneous Work & Clean Up	LS	1		\$
36	Record Drawings	LS	1		\$
	TOTAL BASE BID "B" BASED ON A COMPLETION TIME OF 120 CALENDAR DAYS	in it.			\$
	CONTRACT CONTINGENCY WORK (Used only with County Approval)	%	10		\$
	TOTAL CONTRACT AWARD WITH Bid "B", <u>120</u> Calendar Day C Filter Drain Station Rehab)	comple	tion Time	(Belt Press	\$

	Bid Form - 18
	Belt Press Filter Drain Station Proj.#5128183
	Bid "B"
	Based on 120 Calendar Day
Bidder:	Completion Time
	Addendum #1
Authorized	

Signature:









# Section **SOLIDS HANDLING** Page **128** Dated **MAY 2013** Supersedes **APRIL 2013**

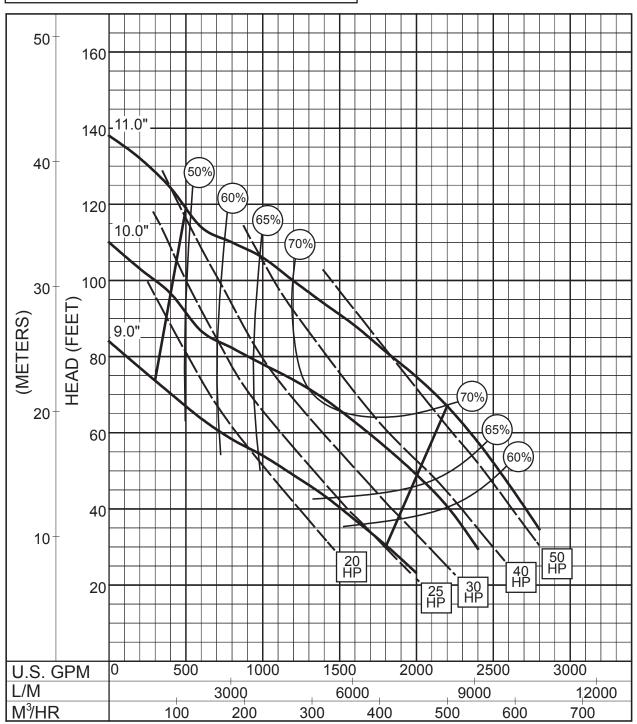
## Performance Curve

S6A/S6AX

RPM: 1750 Discharge: 6"

Solids: **3-3/4**"

**NOTE:** FOR USE WITH M-T-M AND PULTRUDED RAIL SYSTEM ONLY.



The curves reflect maximum performance characteristics without exceeding full load (Nameplate) horsepower. All pumps have a service factor of 1.2. Operation is recommended in the bounded area with operational point within the curve limit. Performance curves are based on actual tests with clear water at 70° F. and 1280 feet site elevation.

Conditions of Service:

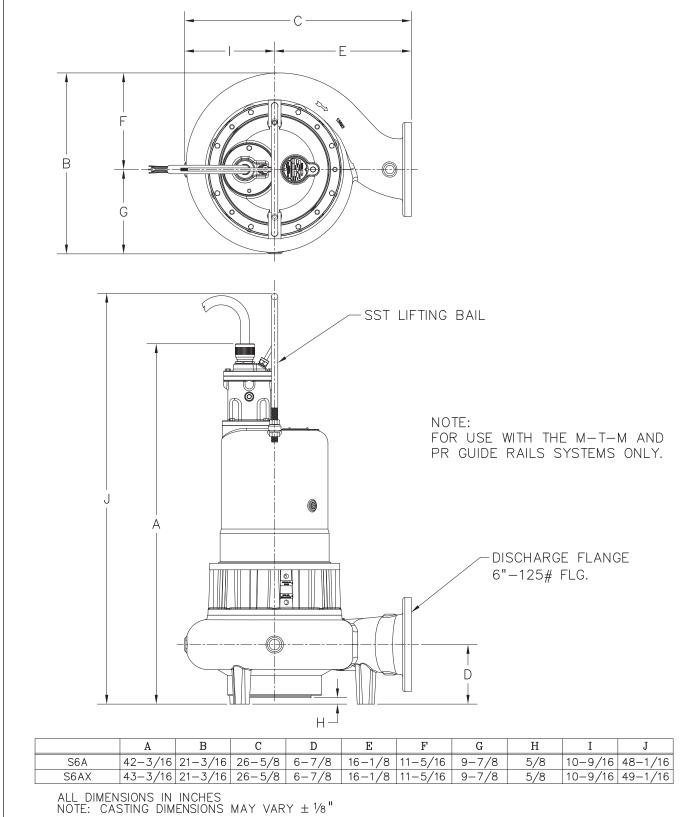
PENTAIR

**HYDROMATIC**°

GPM: TDH:

© 2013 Pentair Ltd.





Supersedes MAY 2013



## MODEL: S6A & S6AX—Solids Handling Sewage Pump

R.P.M.		1750					
MOTOR TYPE	ENCLOSED, OIL	COOLED IND	UCTION, VFD	SUITABLE			
MOTOR DESIGN NEMA TYPE	B (3ø)						
GENERAL INSULATION CLASS		Н					
STATOR WINDING CLASS	Н						
MAXIMUM STATOR TEMPERATURE 356°F (180°C)							
MOTOR PROTECTION BI-METALLIC, TEMPERATURE SENSITIVE DISC,				DISC,			
	SIZED TO OPE	SIZED TO OPEN AT 130°C AND AUTOMATICALLY					
	RESET @ 9	6–68°C DIFFE	RENTIAL, ONE	: IN			
	SINGLE F	HASE, TWO	N THREE PHAS	SE			
ELECTRICAL RATINGS	HEAT	24VDC	115VAC	230VAC			
	SENSOR	5AMPS	5AMPS	5AMPS			
	SEAL FAIL 300VAC 5mA						
VOLTAGE TOLERANCE	±10%						

	Mary Mary	19 / E	35 1	400   300   300	FULLOW:	Or Solling	2007	in Solution	. My	Way Man		1 45 M		7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		85°.7°.7°	A STANDAN	7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7
	200				35.9	40.6	334											
10	230	3	N	1.2	31.2	35.3	290	9.5	116	12.4	.81	.79	.74	.65	.79	.77	.72	.64
	460				15.6	17.7	145											
	575				12.5	14.1	116											
	200				48.3	56.3	334											
15	230	3	J	1.2	46 23	52 26	290	13.5	116	16.7	.84	.83	.80	.74	.82	.81	.78	.72
	460 575				16.8	19.6	145 116											l
	200				62.5	75	334											
	230				54.4	65.2	290											l
20	460	3	G	1.2	27.2	32.6	145	17.8	116	21.6	.84	.84	.83	.79	.82	.82	.81	.77
	575				21.7	26.1	116											l
	200				78.3	92.2	575											
	230	_			68	80	500											l l
25	460	3	J	1.2	34	40	250	21.7	200	27.1	.87	.86	.84	.70	.81	.80	.77	.70
	575				27.2	32.1	200	1										
	200				92.2	110.7	575											
	230	_	١	4.0	80.2	96.3	500	05.7	000	01.0	07	07	00	00	04	04	70	70
30	460	3	Н	1.2	40.1	48.1	250	25.7	200	31.9	.87	.87	.86	.83	.81	.81	.79	.73
	575				32.1	38.5	200											
	230				105	128.3	580											
40	460	3	G	1.2	52.5	64.1	290	34.3	230	41.8	.87	.87	.87	.85	.81	.82	.82	.79
	575				42	51.3	232											
	230				141	197	690											
50	460	3	G	1.2	70.5	98.5	345	46.7	275	55.1	.75	.80	.82	.79	.81	.83	.85	.83
	575				56.4	78.8	276											





## MODEL: S6A(X) — Solids Handling Sewage Pumps

### **Physical Data:**

DISCHARGE SIZE	6"
IMPELLER TYPE	BALANCED, ENCLOSED, 2 VANE
CABLE LENGTH	35' STANDARD 50' OPTIONAL

### **Liquid Handling:**

SOLIDS SIZE	3-3/4"
MAXIMUM LIQUID TEMP.	140ºF
ACCEPTABLE PH RANGE	6 - 9
SPECIFIC GRAVITY	0.9 - 1.1
VISCOSITY	28 - 35 SSU

### **Temperature:**

MAXIMUM STATOR	3	311°F
OIL FLASH POINT		390°F
HEAT SENSOR	Open: Closed:	275°F MAX./257°F MIN. 205°F MAX./154°F MIN.

### **Technical Data:**

POWER CORD TYPE		SOOW, W						
SENSOR CORD TYPE		SOOW						
MATERIALS OF CONSTRUCTION	MOTOR HOUSING	CAST IRON	ASTM	A-48	CLASS 30			
	CASING	CAST IRON	ASTM	A-48	CLASS 30			
	IMPELLER	CAST IRON	ASTM	A-48	CLASS 30			
¥ E	CASING WEAR RING	BRONZE	ASTM	B-584-836	ALLOY 115			
TEI NSJ	MOTOR SHAFT	416 STAINLESS STEEL						
₹ 0	HARDWARE	300 SERIES STAINLESS STEEL						
	"O" RINGS	NITRILE						
MECH	HANICAL SEALS Standard: Optional: Optional:	UPPER AND LOWER CARBON/CERAMIC/NITRILE, TYPE 21 LOWER TUNGSTEN CARBIDE/TUNGSTEN CARBIDE/NITRILE, TYPE 21 LOWER SILICON CARBIDE/SILICON CARBIDE/NITRILE, TYPE 21						
UPPE	R BEARING	(RADIAL) SINGLE ROW — BALL						
LOWE	ER BEARING	(THRUST) SINGLE ROW — BALL						

HYDROMATIC\*

Southwest Flows for the main plant drain station and the Belt Filter Presses (BFP) / Supernate drain stations-all flows are in MGD

Γ	Jan-14		Feb-14		Mar-14		Apr-14		May-14		Jun-14		Jul-14	
ľ	BFP-S/N	Plant		Plant		Plant	·	Plant		Plant		Plant		Plant
	Drain	Drain	BFP-S/N	Drain										
	Station													
1	4.700	3.100	0.076	3.167	0.491	2.468	0.565	2.954	0.432	3.012	0.401	2.628	0.459	3.100
2	1.510	3.380	0.062	3.061	0.220	2.358	0.611	3.300	0.424	2.993	0.418	2.610	0.430	2.656
3	0.140	3.140	0.143	2.979	0.281	1.228	0.579	3.223	0.380	2.756	0.416	2.660	0.416	2.490
4	0.046	3.100	0.136	3.149	0.452	1.854	0.531	3.228	0.248	2.436	0.465	2.522	0.425	2.510
5	4.800	3.080	0.162	3.111	0.555	2.050	0.598	3.150	0.443	2.383	0.496	2.414	0.451	2.360
6	1.350	3.130	0.308	2.805	0.537	2.119	0.361	3.220	0.380	2.574	0.447	2.460	0.389	2.351
7	0.086	2.837	0.417	3.001	0.452	1.680	0.549	3.234	0.409	2.951	0.558	2.700	0.412	2.660
8	0.078	2.764	0.300	2.903	0.527	2.226	0.501	2.812	0.457	2.882	0.537	2.492	0.422	2.510
9	0.078	2.656	0.124	2.937	0.252	2.195	0.293	2.476	0.424	2.860	0.440	2.678	0.596	2.370
10	0.150	2.720	0.412	3.264	0.454	2.128	0.472	2.956	0.401	2.884	0.425	2.650	0.455	2.357
11	0.057	2.729	0.407	3.534	0.481	2.216	0.452	3.010	0.205	2.853	0.473	3.200	0.458	2.276
12	0.048	2.810	0.377	3.261	0.515	2.066	0.476	3.012	0.351	2.955	0.413	3.530	0.435	2.250
13	1.410	2.970	0.380	2.911	0.598	2.556	0.423	2.884	0.501	2.881	0.398	3.530	0.437	2.340
14	1.600	3.000	0.484	3.139	0.568	2.642	0.427	3.024	0.487	2.837	0.396	3.510	0.431	2.234
15	0.134	3.081	0.298	3.130	0.528	2.670	0.533	2.983	0.463	2.883	0.339	3.550	0.437	2.203
16	0.122	2.990	0.296	3.154	0.219	2.587	0.508	2.624	0.450	3.000	0.370	3.605	0.451	2.260
17	1.210	3.000	0.497	3.341	0.863	2.834	0.529	2.748	0.420	2.910	0.420	3.603	0.500	2.050
18	4.500	3.000	0.524	3.210	0.586	2.367	0.545	2.475	0.377	2.900	0.425	3.290	0.505	2.270
19	0.048	3.000	0.491	3.245	0.568	2.229	0.524	2.749	0.501	2.659	0.391	2.740	0.506	2.190
20	0.048	2.990	0.571	3.319	0.546	2.270	0.458	2.903	0.389	2.769	0.388	2.724	0.472	2.140
21	1.200	3.000	0.553	2.761	0.564	2.303	0.505	2.804	0.356	2.786	0.386	2.763	0.466	2.210
22	1.500	3.110	0.413	2.217	0.444	2.302	0.569	3.154	0.410	2.710	0.377	2.660	0.489	2.380
23	0.110	3.022	0.780	2.141	0.132	2.506	0.536	3.140	0.342	2.544	0.455	2.850	0.472	2.640
24	0.142	2.934	0.536	2.318	0.499	2.343	0.526	3.199	0.340	2.506	0.420	2.884	0.453	2.570
25	0.054	3.059	0.579	2.243	0.519	2.339	0.491	3.060	0.363	2.450	0.433	2.694	0.419	2.400
26	0.053	2.998	0.517	2.160	0.591	2.400	0.479	3.180	0.313	2.470	0.534	2.750	0.421	2.420
27		3.419	0.625	2.295	0.462	3.047	0.373	3.244	0.352	2.455	0.522	3.170	0.419	2.350
28	0.142	2.997	0.569	2.221	0.624	4.423	0.456	3.303	0.500	2.423	0.436	3.274	0.419	2.540
29	0.126	2.932			0.549	2.505	0.423	3.145	0.437	2.480	0.410	2.920	0.437	2.440
30	0.134	2.892			0.110	2.457	0.473	3.259	0.421	2.380	0.450	3.110	0.509	2.760
31	0.108	2.894			0.501	2.554			0.417	2.395			0.516	2.450
	0.000	0.001	0.001	0.000	0.4	0.00=	0.400	0.64=	0.400	0.700	0.40=	0.000	0 (	0 / / /
9	0.833	2.991	0.394	2.892	0.474	2.385	0.492	3.015	0.400	2.709	0.435	2.939	0.455	2.411
	4.800	3.419	0.780	3.534	0.863	4.423	0.611	3.303	0.501	3.012	0.558	3.605	0.596	3.100

Average Max

	Plant
BFP-S/N	Drain
Station	Station
0.498	2.763
1 2 4 4	2.405

0.4982.763Average over 7 months1.2443.485Average Max. over 7 months