## <u>General</u>

Nassau-Amelia Utilities (NAU) plans to purchase a rotary press for sludge treatment. Based on our understanding of the project and conversations with NAU personnel, PBS&J has prepared the following *Scope of Work* for the Wastewater Treatment Plant Rotary Press project.

#### Scope of Work

Project elements include the following:

- Rotary press equipment including fixed conveyor, polymer and chemical addition, and associated pumps, piping, and necessary equipment
- A pole barn with a metal roof to cover the operating equipment
- Associated electrical and instrumentation

The installation shall require the demolition of the existing sand drying beds while recovering the sludge feed piping and drains and installing concrete slab for placement of the equipment. The pole barn shall have a wall on the eastern end.

PBS&J services will include the following tasks:

- Task 1 Preliminary Engineering and Kick-off Meeting
- Task 2 Detailed Design
- Task 3 Permitting
- Task 4 Bid Phase Services
- Task 5 Construction Phase and Start-up Services

These tasks are described below.

#### Task 1 - Preliminary Engineering and Kick-off Meeting

PBS&J will meet with NAU staff for a project kick-off meeting. At this meeting, PBS&J will staff to review the project goals, scope, and schedule. PBS&J will request information from NAU that will be necessary for the project. PBS&J will collect field data and review pertinent drawings, permits, and technical information for the project. Survey information will be collected by others where needed for the project design.

Total compensation, including expenses, for this phase is \$7,317.

### <u>Task 2 – Detailed Design</u>

PBS&J will prepare construction drawing and specifications designed in accordance with NAU standards. PBS&J will provide mechanical, process, architectural, structural, mechanical, HVAC, and electrical/instrumentation services.

Progress submittals and review meetings will be held at the 60% and 100% stages of completion. Upon review and approval of the 100% submittal, final construction drawings and specifications will be prepared.

Total compensation, including expenses, for this task is \$ 54,813.



#### Task 3 - Permitting

This project will require a modification of the Florida Department of Environmental Protection (FDEP) wastewater treatment plant permit. PBS&J will prepare the FDEP documents for the permit modification. NAU will be responsible for the permit fees.

Total compensation, including expenses, for this task is \$4,660.

### Task 4 - Bid Phase Services

PBS&J will prepare Bid Documents and distribute to qualified contractors, suppliers, and plan rooms. Only complete sets of Bid Documents will be issued. PBS&J will set the price for Bid Document sets, based on cost of reproduction, distribution cost, etc. Four (4) full sets of Bid Documents will be provided to NAU. PBS&J will sell copies and collect fees for the copies. A list of Bid Document holders will be provided to NAU by PBS&J.

During the bid period, PBS&J will provide technical assistance to NAU to questions from contractors, suppliers, and other interested parties; assist in the issuance of addenda when necessary or directed by NAU; and participate in a pre-bid conference (if directed by NAU). This scope is based on a 30-day bid phase.

PBS&J will assist NAU with the Bid Opening, review all bids, and recommend award to the lowest responsible and responsive bidder.

Total compensation, including expenses, for this phase is \$8,036.

#### Task 5 - Construction Phase Services

Upon award of construction Contract, PBS&J will participate in a pre-construction conference with NAU, the construction contractor, subcontractors, and others impacted by the project.

PBS&J will receive and review shop drawings in accordance with NAU Bid Documents, review and recommend approval of payment requests, respond to the Contractor's RAI's, and prepare change orders, where deemed appropriate.

During the course of construction, PBS&J will provide monthly construction visits, plus additional visits as may be required for specific milestone events. PBS&J will observe as an experienced and qualified design professional the progress and quality of the executed work of the Contractor and to determine in general if such work is proceeding in accordance with the Bid Documents. PBS&J shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of such work. PBS&J's efforts will be directed toward providing a greater degree of confidence for NAU that the completed work of the Contractor will conform to the Bid Documents, but PBS&J shall not be responsible for the failure of the Contractor to perform the work in accordance with the Bid Documents, so long as PBS&J shall have exercised reasonable care in discharging its duties under the terms of this task, the standard of care being that which an engineer being reasonably careful in the profession of engineering would exercise. During such visits, and on the basis of on-site observations, PBS&J shall keep NAU



informed of the progress of the work, shall endeavor to guard NAU against defects and deficiencies of such work, and may disapprove or reject work failing to conform to the Bid Documents. Upon substantial completion, PBS&J and NAU personnel will prepare a substantial completion "punchlist" of deficient project items. A final inspection will be held once the deficiencies are corrected.

PBS&J will also provide start-up services for up to two 8-hour periods for the rotary press equipment.

PBS&J will certify construction completion to FDEP and prepare "Record Drawings", based on the as-built data provided by the Contractor. Two sets of "Record Drawings" and one electronic copy will be provided to NAU. Total compensation, including expenses, for this phase is \$34,409.

### Sub-Consultant

The electrical and design, bid phase services, and construction phase services will be performed by David Lassiter, P.E., sub-consultant to PBS&J.

## Services Not Provided by PBS&J

The following services will not be provided by PBS&J as a part of this scope:

- Surveying services
- Geotechnical Services
- Permitting fees are to be paid for by NAU
- Permitting services other than the FDEP permit

#### **Compensation**

Total compensation for this task order will be \$109,234. This total amount includes \$12,650 for sub-consultant fees and expenses.

In accordance with the professional service agreement dated December 14<sup>th</sup>, 2005 section 4. "PBS&J shall submit invoices to the Clerk, John A. Crawford, for work accomplished during each calendar month. The amount of each monthly invoice shall be determined on the "percentage of completion method" whereby PBS&J will estimate the percentage of the total work (provided on a lump-sum basis) accomplished during the invoice period. Monthly invoices shall include, separately listed, any charges for services for which time charges and/or unit costs shall apply. Such invoices shall also include, separately listed, any charges for Professional Associates and reimbursement costs."



# Schedule

The following is the proposed schedule for this project:

•	Task 1 - Preliminary Engineering and Kick-off Meeting	2 weeks
•	Task 2 - Detailed Design including review time	16 weeks
•	Task 3 – Permitting (concurrent with design)	2 weeks
•	Task 4 - Bid Phase Services	6 weeks
•	Task 5 - Construction Phase Services	42 weeks

We estimate final documents will be ready for bid within 18 weeks of Notice to Proceed by NAU.



# **PROJECT BUDGET WORKSHEET**

PBS

CLIENT: Nassau Amelia Utilities

PROJECT: Sludge Rotary Press

JOB NO.: X

LABOR MULTI.: 1.00
REIMBUR. MULTI: 1.10
PREPARED BY: HPC

Manhours/Labor Costs         TA           PERSONNEL CLASSIFICATION         RATE           Principal         \$ 180           Project Manager         \$ 150           Sr. Engineer IV         \$ 180           Sr. Engineer III         \$ 150           Sr. Engineer III         \$ 120           Sr. Engineer I         \$ 95	Data Collection 00 00 8 00 8 70	TASK 2a 60% Design 16 8	TASK2b 100% Design	TASK 2c Bid Docs	TASK 3 Permitting	TASK 4 Bid Phase	TASK Const.	_	TOTAL	RAW LABOR	MULTI. LABOR
RATE   Principal   \$ 180   Project Manager   \$ 150   Sr. Engineer IV   \$ 180   Sr. Engineer III   \$ 150   Sr. Engineer II   \$ 120   Sr. Engineer I   \$ 95	Collection 00 00 8 00 8 70	Design 16	Design	Bid Docs	Permitting	Bid Phase	Const.			IAROP	LABOR
RATE   Principal   \$ 180   Project Manager   \$ 150   Sr. Engineer IV   \$ 180   Sr. Engineer III   \$ 150   Sr. Engineer II   \$ 120   Sr. Engineer I   \$ 95	00 8 00 8 00 8	16		BIO DOCS	Permitting	Bid Phase	1				
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Sr. Engineer IV       \$ 180         Sr. Engineer III       \$ 150         Sr. Engineer II       \$ 120         Sr. Engineer I       \$ 95	00 8 70		- 8						0	_	
Sr. Engineer IV       \$ 180         Sr. Engineer III       \$ 150         Sr. Engineer II       \$ 120         Sr. Engineer I       \$ 95	70	8		4	12	8	48		104	\$15,600	\$15,60
Sr. Engineer II         \$ 120           Sr. Engineer I         \$ 95			8	8	4	8	40		84	\$15,120	\$15,12
Sr. Engineer I \$ 95	-	16	12	8	0	8	20		64	\$9,645	\$9,64
	00   8	12	20	20	0	10	40		110	\$13,200	\$13,20
	30	0	0	0	0	0	0		0	\$0	
Engineer II \$ 80	70 24	80	40	0	8	20	60		232	\$18,722	\$18,72
Construction Observer \$ 76	90			_					0	\$0	\$(
Sr. CADD/GIS Tech. \$ 69	20 8	80	80	40	20	4	12		244	\$16,885	\$16,885
CADD Operator \$ 63	80								0	\$0	\$0
Clerical \$ 45	30 4	4	4	4			8		24	\$1,087	\$1,087
Total Hours	60	216	172	84	44	58	228		862		i i i i i i i i i i i i i i i i i i i
Raw Labor Cost	\$6,272	\$19,864	\$15,794	\$8,595	\$4,550		\$28,249	\$0		\$90,259	
Multi. Labor Cost	\$6,272	\$19,864	\$15,794	\$8,595	\$4,550	\$6,936	\$28,249	\$0			\$90,259
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Reimbursable Costs	TASK 1	TASK 2a	TASK2b	TASK 2c	TASK 3	TASK 4	TASK 5		a s és de	Reinbur.	Multi.
	Data	60%	100%	Bid Docs	Permitting	Bid Phase	Const.			Costs	Costs
	Collection	Design	Design	11.000		ļ!	Phase			22.422	
Local Transportation	\$200	\$200	\$80	\$1,000		ļ!	\$2,000			\$3,480	
Other Travel	\$200		<b>AFO</b>	*100		ļ	\$600			\$800	
PC Computer		450	<b>\$</b> 50	\$100					[	\$150	
PC CADD/GIS		\$50	\$50	\$50					11 0 1 1 T	\$150	
Printing/Copying			\$400	\$400						\$800	
Telephone	+50	+20	4400	*100						\$0	
Courier/Shipping	\$50	\$20	\$100	\$100	\$100	⊢				\$370	
Miscellaneous Expenses	<b>AF00</b>	#3.00C	*3.000	** 000	+0	44.000	±3.000		r y s all r a.	\$0	
Subconsultants	\$500	\$3,000	\$3,000	\$1,000	\$0 \$100	\$1,000	\$3,000	60		\$11,500	
Total Reimbursables	\$950	\$3,270	\$3,680	\$2,650	\$100	\$1,000	\$5,600	\$0		\$17,250	
Total Multi. Reimbursables	\$1,045	\$3,597	\$4,048	\$2,915	\$110	\$1,100	\$6,160	\$0	- : 1		\$18,975

BOARD OF COUNTY COMMISSIONERS NASSAU COUNTY, FLORIDA

Barry Holloway Its: Chairman

Attestation: Only To Authenticity As To

Chairman's Signature:

is: Ex-Officio Clark

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Approved as to form by the Nassau County Attorney:

David A. Hallman