### Lee County Board Of County Commissioners Agenda Item Summary

Blue Sheet No. 20040248

#### 1. REQUESTED MOTION:

ACTION REQUESTED: Approve Supplemental Task Authorization (STA) No. 1 to Johnson Engineering, Inc. for CN-03-02 DESIGN OF CORKSCREW 5 MGD WELLFIELD EXPANSION (Contract No. 2660) to replace four (4) poorly to non-producing Sandstone Aquifer wells. It is proposed to replace wells 2, 3, 4, and 5 as part of this project. The Lump Sum amount for the replacement wells is \$176,000.00.

WHY ACTION IS NECESSARY: Board approval is required.

WHAT ACTION ACCOMPLISHES: To increase raw water production at the Corkscrew Wellfield through additional production from the Sandstone Aquifer.

1	MENTAL CA	ATEGORY:				3.	<b>MEETING</b>	DATE:		
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4. AGENDA	<u>ON DISTRIC</u> ·	T #:	5 DEO							
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		ited on behal	f of the Boa	rd of County (	Commission	ers for prof	essional serv	ices for the	i Design of Corksc	rew 5
MGD Wellfie	ld Expansion.	On February	4, 2004 the	Board approv	ed a waiver	of Lee Cou	nty Ordinanc	e 92-22 to al	low Johnson	ICW J
Engineering, 1	nc., number o	ne ranked firm	n, to contin	ue with the des	sign phase of	f the Corks	crew Wellfie	ld Expansion	).	
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Attachments:	Three (3) copi	es of the Supp	emental Ta	ask Authoriza	tion No. 1 fo	r execution	1.			
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8. MANAGE	MENT REC	OMMENDA'	TIONS:							<del></del>
			9. <u>F</u>	<u>RECOMMEN</u>	<u>(DED APPI</u>	<u>ROVAL</u> :				
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10. COMMIS	SSION ACTION	<u> </u>		•						
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# LEE COUNTY PROFESSIONAL SERVICE/SERVICE PROVIDER AGREEMENT CHANGE ORDER/SUPPLEMENTAL TASK AUTHORIZATION

☐ Change Order ☑ Supplemental Task Authorization	NO1
(A Change Order or Supplemental Task Authorization Requires Approximately Expenditures Under \$25,000 or Approval by the County Manager for \$50,000 or Approval by the Board of County Commissioners for Expenditure	Expenditures Between \$25,000 and
CONTRACT/PROJECT NAME Design of Corkscrew 5 MGD Wellfie	ld Expansion
CONSULTANT Johnson Engineering, Inc. PRO	JECT NO. <u>207097</u>
SOLICIT NO.: CN-03-02 CONTRACT NO. 2660	ACCOUNT NO. 2070974871;
REQUESTED BY: Ivan Velez, P.E. DATE OF REQUES	ST: February 27, 2004
Upon the completion and execution of this Change Order or Supplement the Consultant/Provider is authorized to and shall proceed with the following	al Task Authorization by both parties g:
EXHIBIT "CO/STA-A: SCOPE OF PROFESSIONAL SERIVCE:	DATED: February 27, 2004
EXHIBIT "CO/STA-B: COMPENSATION & METHOD OF PAYMENT:	DATED: February 27, 2004
EXHIBIT "CO/STA-C: TIME AND SCHEDULE OF PERFORMANCE:	DATED: February 27, 2004
EXHIBIT "CO/STA-D: CONSULTANT'S/PROVIDERS ASSOCIATED SUB-CONSULTANT(S)/SUB-CONTRACTORS:	DATED: February 27, 2004
EXHIBIT "CO/STA-E: PROJECT GUIDELINES AND CRITERIA:	DATED: February 27, 2004
It is understood and agreed that the acceptance of this modification constitutes an accord and satisfaction.	by the CONSULTANT/PROVIDER
RECOMMENDED: ACCEPTED:	COUNTY APPROVAL:
By: By: By: By: Departmynt/Director Date Consultant/Provider	Ву:
By: Cinia Room 3/3/04 Date Accepted: 2/27/04	Department Director (Under \$25,000) Date Approved:
Contracts Mg/ht Date Corporate Seal	Ву:
APPROVED:	County Manager (Between (\$25,000 and under \$50,000 Date Approved:
3y: 'County Attorney's Office Date	
*County Attorney signature needed or <b>over</b> Board level expenditures only.	By: Chairman Board of County Commissioners Date Approved:

☐ CHANGE ORDER AGREEMENT No or ☑ SUPPLEMENTAL TASK AUTHORIZATION No. 1		
	EXHIBIT	"CO/STA-A"
	Date:	February 27, 2004
SCOPE OF PROFESSIONAL SERVICES		
for Design of Corkscrew 5 MGD Wellfield Expansion		

(Enter Project Name from Page 1 of the Change Order or Supplemental Task Authorization)

## SECTION 1.00 CHANGE(S) TO PROFESSIONAL SERVICES

The "Scope of Professional Services" as set forth in Exhibit "A" of the Professional Services Agreement, or Service Provider Agreement, referred to hereinbefore is hereby supplemented, changed or authorized, so that the CONSULTANT or SERVICE PROVIDER, shall provide and perform the following professional services, tasks, or work as a supplement to, change to, or authorized to, the scope of services previously agreed to and authorized:

#### **GENERAL SCOPE STATEMENT**

Recent water use permitting has provided Lee County Utilities with the opportunity to increase raw water production at its Corkscrew Wellfield through additional production from the Sandstone Aquifer. The wellfield has ten (10) existing Sandstone Aquifer wells with eleven (11) proposed.

The South Florida Water Management District has required Lee County Utilities to prepare a wellfield operating plan to minimize impacts to wetlands. Johnson Engineering is currently assisting Lee County Utilities staff in preparing that plan. Investigations as part of that effort have identified problems with existing wellfield operations, namely underutilization of the Sandstone Aquifer due to faulty well design and construction.

In an effort to save Lee County construction costs and time, Johnson Engineering proposes to replace four (4) poorly to non-producing Sandstone Aquifer wells. The hydrogeological information and production rates achieved under a new well design by Johnson Engineering can greatly impact the proposed expansion of the wellfield. Based on current testing efforts completed as part of the recent expansion project, it is anticipated that a reduced expansion effort will be possible.

It is proposed to replace wells 2, 3, 4, and 5 as part of this project.

## TASK-11 - Replacement Wells

#### SCOPE OF WORK

- 1. Obtain well construction permits from South Florida Water Management District.
- 2. Obtain public water supply well location permits from Lee County Health Department.
- 3. Properly abandon wells 2, 3, 4, and 5 by pulling the existing pumps and filling the wells with cement from bottom to top via tremie pipe method.
- 4. For each well location mobilize rig, equipment, cement, bentonite, and casing.
- 5. For each well location drill 22 ½ inch hole to 20 feet and install 18 inch surface casing.
- 6. For each well location drill a 5 inch pilot hole to the Sandstone Aquifer to log the lithology and identify the proper casing setting depths.
- 7. Ream each pilot hole with 18 ½ inch to the determined depth.
- 8. Furnish and install 12 inch schedule 40 PVC casing.
- 9. Fill the annular space between the casing and borehole with cement via pressure grout method.
- 10. Drill out a 12 inch borehole below the casing into the Sandstone Aguifer to the proper depth.
- 11. Air-lift develop the well to remove sediments.
- 12. Install temporary vertical turbine pump to 100 feet.
- 13. Pump well for additional development.
- 14. Perform specific capacity pumping tests on the wells to determine appropriate production pumping rates and anticipated drawdowns.
- 15. Collect water samples at the end of the specific capacity tests and analyze water samples for turbidity, dissolved chloride, and electrical conductivity.
- 16. Prepare completion reports for each well.
- 17. Prepare technical memo documenting all activities.

## BASIS OF PROPOSAL

## THIS SCOPE OF SERVICES ASSUMES THE FOLLOWING:

- 1. OWNER will pay all permit application and regulatory fees.
- 2. OWNER will provide a project manager to process paper work and other duties on behalf of the OWNER.
- 3. Additional scope items will be approved in writing by the OWNER prior to commencing the work.

WORK OUTLINE - "HOURS AND COSTS"

	ENGINEER VII III	TECHNICIAN DES IV III II			
TASK (Hourly Rates)	\$130 \$85	\$90 \$70 \$60, \$48 \$37	O JEI Pc	Out of Pocket SubConsultants TOTAL	ts TOTAL
11.00 Replacement Wells	40	160	\$14,800 \$200	200 \$161,000	\$176,000
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			0\$		\$0
			0 <del>\$</del>		\$0
			0\$		\$0
			\$0		\$0
			\$0		\$0
Total Hours	40 0	0 0 160 0 0	\$14,800 \$200	200 \$161,000	\$176,000

	HANGE ORDER AGREEMENT No.  or  JPPLEMENTAL TASK AUTHORIZATION No. 1		
		EXHIBI	T "CO/STA-B"
		Date:	February 27, 2004
COMPI	ENSATION AND METHOD OF PAYMENT		
for <b>D</b>	Design of Corkscrew 5 MGD Wellfield Expansion	,	
	(Enter Project Name from Page 1 of	the	

Change Order or Supplemental Task Authorization)

## SECTION 1.00 CHANGE(S) IN COMPENSATION

The compensation the CONSULTANT, or SERVICE PROVIDER, shall be entitled to receive for providing and performing the supplemented, changed or authorized services, tasks, work as set forth and enumerated in the Scope of Services set forth in this CHANGE ORDER OR SUPPLEMENTAL TASK AUTHORIZATION AGREEMENT, Exhibit "CO/STA-A", attached hereto shall be as follows:

NOTE: A Lump Sum (L.S.) or Not-to-Exceed (N.T.E.) amount of compensation to be paid the CONSULTANT should be established and set forth below for each task or sub-task described and authorized in Exhibit "S/COA-A". In accordance with Professional Services Agreement Article 5.03(2) "Method of Payment", tasks to be paid on a Work-in-Progress payment basis should be identified (WIPP).

Task Number	Task Title	Amount of Compensation	Indicate Basis of Compensation LS or NTE	If Applicable Indicate (W.I.P.P.)
11	Replacement Wells	\$176,000	LS	W.I.P.P.
TOTAL		\$176,000	LS	W.I.P.P.
(Unless lis	st is continued on next page)			

☐ CHANGE ORI	DER AGREEMENT No.	
SUPPLEMEN	or FAL TASK AUTHORIZATION No. 1	_
SECTION 2.00	SUMMARY OF CHANGE(S) IN COMPENSATION	

Pursuant to and in consideration of the change(s) in the Scope of Professional Services set forth in the CHANGE ORDER or AGREEMENT, Exhibit "CO/STA-A", the compensation the COUNTY has previously agreed to pay to the CONSULTANT, or SERVICE PROVIDER, as set forth in Exhibit "B of the Professional Services Agreement, or Service Provider Agreement shall be changed to be as follows:

Section/Task Number	Section/Task Name	Compensation In the Basic Agreement	Adjustment(s) by Previous CO or STA Nos	Adjustment(s) Due to this CO or STA 1	Summary of Changed Compensation
TASK 11	Replacement Wells	\$820,749	0	\$176,000	\$996,749
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TOTAL		\$820,749	\$0	\$176,000	\$996,749

CHANGE ORDER AGREEMENT No.		
or  SUPPLEMENTAL TASK AUTHORIZATION No. 1	_	
	<u>EXHIBI</u>	T "CO/STA-C"
TIME AND SCHEDULE OF PERFORMANCE	Date:	February 27, 2004
for Design of Corkscrew 5 MGD Wellfield Expansion		
(Enter Project Name from Page 1 of the		Western de la company de la co
Change Order or Supplemental Task Autho	rization)	

SECTION 1.00

## CHANGES FOR THIS CHANGE ORDER OR SUPPLEMENTAL TASK AUTHORIZATION AGREEMENT

The time and schedule of completion for the various phases or tasks required to provide and perform the services, tasks, or work set forth in this CHANGE ORDER or SUPPLEMENTAL TASK AUTHORIZATION AGREEMENT, Exhibit "CO/STA-A", entitled "Scope of Professional Services" attached hereto is as follows:

Phase and/or Task Reference as Enumerated in EXHIBIT "A"	Name or Title of Phase and/or Task	Number of Calendar Days For Completion of Each Phase and/or Task	Cumulative Number of Calendar Days For Completion from Date of Notice to Proceed For this CO or STA
Task 11	Replacement Wells	60	60
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CHANGE ORDER AGREEMENT No.		
or  SUPPLEMENTAL TASK AUTHORIZATION No. 1	_	
	<u>EXHIBI</u>	T "CO/STA-C"
	Date:	February 27, 2004
TIME AND SCHEDULE OF PERFORMANCE		
for Design of Corkscrew 5 MGD Wellfield Expansion)		
(Enter Project Name from Page 1 of the	9	
Change Order or Supplemental Task Authori	zation)	

SECTION 2.00

SUMMARY OF THE IMPACT OF CHANGE(S) IN PROFESSIONAL SERVCIES ON THE OVERALL PROJECT TIME AND SCHEDULE OF PERFORMANCE

Pursuant to and in consideration of the changes in the Scope of Professional Services in this CHANGE ORDER or SUPPLEMENTAL TASK AUTHORIZATION AGREEMENT, Exhibit "CO/STA-A", the time and schedule the COUNTY and the CONSULTANT, or SERVICE PROVIDER, has previously agreed to for all of the work to be done under this Professional Services Agreement, or Service Provider Agreement, shall be changed to be as follows:

Phase and/or Task Reference as Enumerated in EXHIBIT "A" and EXHIBIT "CO/ STA-A	Name or Title of Phase and/or Task	Number of Calendar Days For Completion of Each Phase and/or Task	Cumulative Number of Calendar Days For Completion from Date of Notice to Proceed
Task 11	Replacement Wells	60	60
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☐ CHANGE ORDER AGREEMENT No or ☐ SUPPLEMENTAL TASK AUTHORIZATION No	_					
	<u>EXHIBI</u>	T "CO/STA-D"				
	Date:	February 27, 2004				
CONSULTANTS, OR SERVICE PROVIDER'S, ASSOCIATED SUB-CONSULTANT(S) AND SUBCONTRACTOR(S)						
for Design of Corkscrew 5 MGD Wellfield Expansion						
(Enton Dunio et Novo Como Dona 4 - 5 11						

(Enter Project Name from Page 1 of the Change Order or Supplemental Task Authorization)

CONSULTANT, or SERVCIE PROVIDER, intends to engage the following sub-consultant(s) and/or sub-contractor(s) to assist the CONSULTANT, or SERVCIE PROVIDER, in providing and performing the services, tasks, or work required under this CHANGE ORDER, or SUPPLEMENTAL TASK AUTHORIZATION AGREEMENT.

(If none, enter the work "none" in the space below.)

Service and/or Work to be Provided or Performed	Name and Address of Individual or Firm	Mind Wor Ente	Disadvantaged, Minority or Women Business Enterprise, (If Yes, Indicate Type)		Sub-Consultant Services are Exempted from Prime Consultant's Insurance Coverage	
) A (		Yes	No	Туре	Yes	No
Well Drilling	Troy Moore Well Drilling 5681 Pangola Drive Fort Myers, FL 33905		X		X	

CHANGE ORDER AGREEMENT No.	
or  SUPPLEMENTAL TASK AUTHORIZATION No. 1	_ <del>_</del>
	EXHIBIT "CO/STA-E"
	Date: <b>February 27, 2004</b>
PROJECT GUIDELINES AND CRITERIA	
for Design of Corkscrew 5 MGD Wellfield Expansion	

(Enter Project Name from Page 1 of the Change Order or Supplemental Task Authorization)

As a supplement, or change, to the Project Guidelines and Criteria set forth in the Professional Services Agreement, or Service Provider Agreement, Exhibit "E", the COUNTY has established the following Guidelines, Criteria, Goals, Objectives, Constraints, Schedule, Budget, and/or Requirements which shall serve as a guide to the CONSULTANT, or SERVICE PROVIDER, in performing the professional services, tasks, or work to be provided pursuant to the professional services set forth hereinbefore in CHANGE ORDER or SUPPLEMENTAL TASK AUTHORIZATION AGREEMENT, Exhibit "CO/STA-A", attached hereto:

(If none, enter the word "None" in the space below.)

ITEM No. 1

NONE

## TROY MOORE WELL DRILLING

5681 Pangola Drive Fort Myers, Florida 33905 Phone (239) 694-1144 Fax (239) 694-3236

### PROJECT:

LEE COUNTY UTILITIES CORKSCREW WELLFIELD SANDSTONE REPLACEMENT WELLS

#### PROPOSAL TO:

Lonnie Howard Johnson Engineering, Inc P.O. Box 1550 Fort Myers, Florida 33902

Construct 12 inch Sandstone Replacement Well	atv tvne	unit cost	extend cost
Mobile drill, equipment, and materials	1 LS	\$15,000	
Drill 22.5" hole to 20 feet and install 18" surface casing	20 LF	\$50	\$1,000
Drill 5" pilot hole	200 LF	\$5	\$1,000
Ream pilot hole with 18.5" bit	200 LF	\$25	\$5,000
Furnish and install 12" SCH 40 PVC casing	200 LF	\$15	\$3,000
Cement casing to surface	200 CF	\$15	\$3,000
Drill 12" borehole for open interval	100 LF	\$20	\$2,000
Air develop well	10 HR	\$50	\$500
Install temporary veritcal turbine pump to 100 feet	1 LS	\$1,500	\$1,500
Over-pump well to develop and run step tests	10 HR	\$250	\$2,500
Abandon Existing Well			
Mobilize equipment and materials	1 LS	\$2,500	\$2,500
Pull existing pump	1 LS	\$1,000	\$1,000
Install tremie pipe to bottom of well	1 LS	\$250	\$250
Furnish and pump 5% gel cement	200 CF	\$10	\$2,000
total per well price			\$40,250
Total for replacement of wells 2,3,4, and 5			\$161,000