Lee County Board Of County Commissioners Agenda Item Summary

Blue Sheet No. 20060742

1. ACTION REQUESTED/PURPOSE:

Award Addendum to the Construction Manager Agreement (Contract #3525) for RFQ-06-03 PINEWOODS WATER TREATMENT PLANT WELLS & RAW WATER MAIN AND CORKSCREW WATER TREATMENT PLANT WELLS & RAW WATER MAIN, to MWH, for Pre-Construction Services & Well Drilling GMP amount of \$2,180,585.00 (includes 5% CM fee of \$100,498.00) to Pinewoods WTP and Pre-Construction Services GMP amount of \$102,627.00 (includes 5% CM Fee of \$4,887.00) to Corkscrew WTP. Also request Board approve waiving of any formal process (if needed) and authorize the use of the Direct Material Purchase Orders based on CM's competitive process, which allows the County to purchase directly from suppliers of equipment and/or materials as a cost/time saving measure. Also, authorize the Chairwoman to execute the Addendum upon receipt. Also approve budget transfer in the amount of \$3,200,100.00 from Utilities Capital Improvement Fund Reserves to the Pinewoods project and amend FY05/06 – FY09/10 CIP accordingly.

2. WHAT ACTION ACCOMPLISHES:

Provides Construction Management services and construction for four (4) raw water supply wells and 6,700 linear feet of raw water supply mains to provide water supply for the Lee County Utilities Pinewoods WTP. Also provides Construction Management services and construction for the expansion of the Corkscrew WTP wellfield and the construction of the required raw watermain for the Corkscrew WTP.

3. MANAGEMENT RECOMMENDATION: Staff recommends approval

4. De	partmental Category:	10 CIDH			5. Meeting Date: 6-20-2006			
6. Ag	enda:	7. Requirement/Purpose: (specify)			8. Request Initiated:			
X Consent		Statute		Commissioner				
	Administrative		Ordinance		Department	Public Works		
	Appeals	X	Admin. Code	AC-4-4	Division	Utilities		
	Public		Other		By: Wan Ve	lez, P.E., Acting Director		
	Walk-On		-		1.1	7 6 6 06		
O Do	okaround:				 _	-		

Background:

On March 14, 2006, the Board entered into a Construction Manager Agreement with MWH for RFQ-06-03 PINEWOODS WATER TREATMENT PLANT WELLS & RAW WATER MAIN AND CORKSCREW WATER TREATMENT PLANT WELLS & RAW WATER MAIN with a Construction Management (CM) fee of 5% of the total project.

At this time we are requesting Board approve Pre-Construction Services and a Well Drilling GMP amount of \$2,180,585.00 (includes 5% CM fee of \$100,498.00) to **Pinewoods WTP** and the Pre-Construction Services GMP amount of \$102,627.00 (includes 5% CM Fee of \$4,887.00) to **Corkscrew WTP**.

Funds will be available in account string: 20715548730.506540 & 20709748712.506540

Attachments: (1) Letter & supporting documents dated May 5, 2006

(2) Request for transfer of funds

10. Review	w for Schedi	uling:					
Department Director	Purchasing or Contracts	Human Resources	Other	County Attorney	Budget Services		County Manager/P.W. Director
fitte in	Marie Hall	N/A	DHIV		Analyst Risk Grants	Mer.	Marie Marie
11. Com	mission Acti	ion:			RECEIVED BY COUNTY ADMIN: (V	Roc. b	y CoAtty
	Approved Deferred				6 7/04 10:20 mg.	Dates	The same of the sa
	Denied				COUNTY ADMIN	18:4	Sime
_	Other				LORWARD DON	Alm	and To:
		, , , , ,			The state of the s	9.3	

REQUEST FOR TRANSFER OF FUNDS

FUND NAME:	LCU Capital Improv	vements		DATE:	06/05/06	BATCH NO.		
FISCAL YEAR:	05/06	FUND #:	48730	DOC TYPE:_	YB	_LEDGER TYPE:		ВА
то:	Lee Co	unty Utilities			c	IP Budget		
		ION NAME)				GRAM NAME)		
	NOTE: PLEASE L FUND #-DEPT/DIV (EXAMPLE: BB51)	#-PROGRAM#	-OBJECT CO					
	ACCOUNT NUME	BER			OBJECT NAME			DEBIT
	20715548730.5065	540		Pinewoods WT	P Deep Injection	Well	\$	3,200,100
						TOTAL TO:	\$	3,200,100
FROM:	l se Co	unty Utilities			C	IP Budget		
TROM.		ON NAME)				GRAM NAME)		
	ACCOU!	NT NUMBER			OBJECT NAME			CREDIT
	GC5890148730.50			Reserve for Cor				3,200,100
EXPLANATION:						TOTAL FROM:	\$	3,200,100
DIVISION	N DIRECTOR SIGN	G ATURE	CO.C. DATE	DEPART	Annua (CS R SIGNATURE	6.	C CK
DBS:	APPROVAL	DENIAL		OPERA	Time K	COOL	4	-8-06 DATE)
	APPROVAL	DENIAL		du	a Lan	AGER SIGNATURE	6	18/66 DATE
CO. ADMIN.:	APPROVAL	DENIAL		c	O. ADMIN. SIGN	ATURE		DATE
BCC APPROVAL	DATE				BCC CHAIR	RMAN SIGNATURE		
BA NO		_ AUTH CODE			TRANS DA	1 E		



May 5, 2006

Kim P. Hoskins, PE Senior Engineer Lee County Utilities Post Office Box 398 Fort Myers, Florida 33902

Subject:

Pinewoods WTP & Corkscrew WTP Wells and Raw Water Main

Construction Management at Risk Agreement

Ms. Hoskins,

Attached please find the revised Preconstruction Phase Services Scope of Work and Fee Schedule for the above-mentioned CM at Risk Agreement. The Scope of Work has been revised based on your comments (April 14, 2006).

As requested, we have also reviewed the suggestion that Lee County pre-purchase long-lead electrical equipment (specify) and have found that it will not be necessary. This equipment can be purchased through the CM at Risk during the course of the construction period.

Please let me know if you have any further comments or questions.

Tel: 239 573 1188

Fax: 239 573 1220

Yours sincerely,

Richard B. Lewis Vice President

Southeast Regional Manager

Attachment 1 Lee County Pinewoods WTP & Corkscrew WTP Wells and Raw Water Main

Preconstruction Phase Services Scope of Work: CM at Risk Agreement

General: This Scope of Work includes preconstruction phase services and development of contracts and subcontracts in support of the establishing of the GMP(s) for the project and commencing construction activities. The following presents a general description of the tasks to be performed for the Preconstruction Phase of the project. It is understood that these tasks and subtasks may not require the same level of effort as initially estimated herein, and some may require more or less effort than initially estimated herein. Therefore, it is not intended that the Construction Manager (CM) is limited to the estimate of hours for a single task or subtask. Hours may be adjusted depending on the level of effort required for the individual Tasks and subtasks. However, the total cost will not exceed the "Not to Exceed" Amount for preconstruction services as described in the Agreement.

Task 1 Project Management:

Task 1.1 – Project Management Supervision:

MWH Constructors shall designate a Project Manager (PM) for this project. PM responsibilities include preliminary investigations, the preparation of fee proposal and schedule, monitoring of labor utilization, maintenance of schedule and budget, assignment and supervision of staff and all its subcontractors, value engineering, constructability review, preparation of construction cost estimates, regulatory meetings, quality control, bidding and construction of the project, and coordination with Lee County in a timely and professional manner. The CM shall be fully responsible for the performance of the scope of work.

Task 1.2 – Project Management and QA/QC Plans:

The company QA/QC Manager shall prepare a Project Quality Management plan. The Quality Plan will include quality assurance and control requirements. The CM will be charged the responsibility of the Plan's implementation and documentation of QA/QC activities. All work performed by the CM Team shall be in accordance with the QA/QC Plan.

The project CM shall prepare a Project Management Plan (PMP) for the project. The PMP will address project implementation approach, staffing, organization, project record

keeping, document control, quality control, and quality assurance responsibilities. The PMP establishes responsibilities and authorities, administrative procedures and policies, and lines of communication throughout the project. The PMP will include information on or will reference sub-plans for other related items such as the Quality Plan, Management plan, Document Control Plan, Safety Plans and other required items.

Deliverable: CM shall develop and deliver to Lee County appropriate copies of a Project Management Plan, Quality Plan, and Project Manual as required by Lee County.

Task 1.3 – Project Accounting and Controls:

CM shall maintain on regular basis project costs and document control system for project cost accounting, tracking, and reporting

CM and Lee County staff shall work together to review cost and control methods and assess current practices, and shall use that information to customize cost-tracking elements of the project control system. CM shall use a schedule system that is linked to and supports the schedule of values pay items, in support of payment applications. Through its link to the master schedule, the cost accounting system can forecast cost at completion and cost remaining at any point in the project.

Deliverable: CM shall develop and maintain a Records Tracking System and provide monthly billings for services performed.

Task 2: Project Meetings

Task 2.1 – Conduct Kick-Off Meeting:

The CM shall schedule, prepare for and attend a Project kickoff meeting with Lee County staff. The CM and key members of the Project team shall attend the meeting.

Deliverable: CM shall create a Meeting Summary documenting discussions and agreed to direction

Task 2.2 – Monthly Progress Meetings

CM shall conduct monthly progress meetings with Lee County staff or as needed required by the County throughout the pre-construction phase. The CM shall update Lee County staff on work in progress, inform of problems or delays as they are encountered.

At each monthly meeting, the CM shall provide Lee County staff with a Monthly Project Status Report. This Report shall include, but not necessarily be limited to, the following:

- Activities accomplished in the previous months
- Problems and present concerns encountered in the Project
- Planned actions for the next month

• Updated Project Schedule.

Within five (5) business days of the meeting the CM shall prepare and submit to Lee County staff a meeting summary and list of follow-up action items with assigned responsibility for each progress review.

Deliverable: For each monthly meeting, CM shall create and distribute a Meeting Summary documenting discussions and agreed to direction.

Task 3 Document Review/VE Proposals

Task 3.1 – Initial Review

CM shall review and comment upon the Construction Documents that have been developed for this project. The scope of that review shall include reviewing those various documents for constructability. Document Review will include review of the available contract documents (plan & specifications) for constructability and bid-ability. Any discrepancies shall be annotated and immediately communicated to Lee County. The review shall identify items in the contract documents that may be difficult to construct, and find ambiguities or contradictions in the documents that might generate requests for clarification or lead to change orders. CM shall also identify additional value-added and cost-saving opportunities to save cost and time. The CM shall also focus on the construction sequencing for keeping the plants in full operation and regulatory compliance.

The CM shall call to Lee County staff's attention apparent defects in the design, drawings, specifications or other document it discovers. However, the CM is not responsible for reviewing the design, engineering, calculations or other engineering aspects of the design, drawings and specification or other documents and shall have the right to rely upon the accuracy and correctness of the design, drawings and specifications or other documents. Within 45 calendar days of signing this Agreement, the CM shall complete a constructability review.

Deliverable: CM shall provide a report with the findings and recommendations following the initial review. This report will be distributed to the PMT.

Task 4 Cost Estimating and Validation

Task 4.1 – Initial Cost Estimate

The CM shall prepare an opinion of probable construction cost for the Project. The methodology and format for presentation of the opinion of probable cost shall be as agreed upon shall be broken down into quantity takeoffs, unit costs, and all mark-ups applied. The CM shall review unit costs of previous estimates by the PMT and/or the ENGINEER, and shall take into consideration factors such as local construction market

factors. An appropriate contingency, developed in consultation with Lee County shall be applied.

Deliverable: CM shall develop an Opinion of Probable Cost with takeoff quantities and estimated unit pricing. CM shall distribute copies of the estimate to the Lee County for review and comment.

Task 5 Master Schedule Development

The construction schedule must reflect and fully support Lee County's schedule needs.

The CM shall prepare and manage a schedule of values for each trade contractor and ensure that it is reasonable for the work involved. The Schedule will be cost loaded by the CM to aid in Cash flow projections. Cost information shall be updated as information becomes available as part of the development of the GMP.

The CM shall prepare a Project schedule for presentation to Lee County staff as part of the delivery of the GMP. The schedule shall be prepared using Primavera Project Schedule and shall be updated monthly as part of the Monthly Project Status Report. The Schedule shall include all major tasks as well as major milestones for the remainder of construction.

The Schedule shall:

- Follow the WBS developed by the CM.
- Be fully linked in order to provide the critical path;
- Include in detail all efforts required by the CM to prepare the GMP including review times and major milestones;
- Be maintained current;
- Be base-lined at the establishment of the GMP

As the work progresses, CM shall provide more details to all of the phases of the Project Schedule. The Schedule shall include sufficient detail of the construction and identify and include all significant efforts that are required to complete the Project on time as defined by the baseline schedule.

The CM shall provide a Project Schedule of the current schedule status with the Monthly Status Reports. The CM shall keep the Project Schedule current and update it weekly.

Deliverables: CM shall provide a critical path schedule for the Project on a monthly basis or as requested or needed.

Task 6 Permitting

The CM shall provide technical support and documentation required for Lee County to complete the regulatory permit applications for the Project.

All building permits and licenses necessary for the prosecution of the Work shall be procured and paid for by CM during the construction phase of the project unless specified otherwise. Costs for Permit fees will be included in the costs of the GMP.

Deliverable: CM shall procure building permits.

Task 7 Preparation of Contract and Subcontract Documents

General: The CM shall prepare an initial procurement plan including prequalification requirements and subcontracting strategy for the project.

Deliverable: The Procurement Plan

Task 7.1 – Prepare Subcontract Documents

The CM shall prepare subcontract documents to be used as the form of agreement for the execution of the Project work.

Deliverable: CM will develop and distribute to Lee County subcontract documents as requested and needed by the County.

Task 7.2 – Bid Packages

The CM shall develop the bid packages by work scopes. The bidders will be selected from the pool of qualified bidders identified through a pre-qualification process. The bidding procedures will be detailed in a Procurement Plan.

Deliverable: CM shall develop biddable subcontract packages for all elements of the work.

Task 8 Prebid Conferences

The CM shall arrange for and conduct up to three pre-bid conferences with prospective bidders; using a standardized agenda, supplemented with project specific items that address project administration claims avoidance, damages for delay, existing site conditions, plant operational constraints, and other issues to ensure comprehensive and responsive bids.

Deliverable: CM shall prepare Meeting Summaries documenting discussions and responses to bidder's inquiries at the conferences and distribute these summaries to the PMT.

Task 9 Bidding Services and Evaluations

The CM shall administer the bid and award process. Any inquiries will be appropriately addressed and tracked to ensure all are responded to.

The evaluation and award of bids to contractors/service provides may include the following:

- Price/Cost Analysis: A comparative bid analysis will be developed by comparing major price or cost elements among the bidders. The evaluator may also highlight any of the price or cost items that may be irregular or inappropriate based on cost analysis or comparison with similar items or historical experience. The result of the evaluation should be a determination of the best value price offer, the competitive range, and whether or not there is a need for discussion with one or more offerers in the competitive range. The evaluation will also include potential price impact on known quantity uncertainties.
- <u>Technical Evaluation</u>: The technical evaluation will focus on each bidder's technical competency to perform the work and establishing the technical distinctions between the proposals, if any, based on the presentation in the offer. This will include safety, quality, schedule, experience, innovations, resources, etc.
- <u>Discussions/Negotiations</u>: <u>Discussions</u> and/or negotiations may be required to clarify price, scope, approach, schedule, etc.

Deliverable: CM shall develop a Bid Evaluation Report and recommendations for award.

Task 10 Develop GMP and Finalize CMA

The GMP will be developed as early as possible following the beginning of preconstruction phase services. After completing the bidding and negotiating process for the work, the CM shall prepare a summary of project costs including all direct and indirect costs for the CM.

Within 14 days of completion of the bidding and negotiating process for all Task Order work packages, the CM shall prepare a summary of project costs including all direct and indirect costs for the CM during the construction.

10.1 BASIS OF GUARANTEED MAXIMUM PRICE

The CM shall include with the Guaranteed Maximum Price (GMP) proposal a written statement of its basis, which shall include:

- 1. A list of the Drawings and Specifications, including all addenda thereto and the Conditions of the Contract, which were used in preparation of the GMP proposal.
- 2. A list of allowances and a statement of their basis.
- 3. A list of the clarifications and assumptions made by the CM in the preparation of the GMP proposal to supplement the information contained in the Drawings and Specifications.

- **4.** The proposed GMP, including a statement of the estimated cost organized by trade categories, allowances, contingency, and other items and the fee that comprise the GMP.
- **5.** The Date of Substantial and Final Completion upon which the proposed GMP is based.
- 10.2 The CM shall meet with Lee County staff to review the GMP proposal and the written statement of its basis. In the event that Lee County discovers any inconsistencies or inaccuracies in the information presented, they shall promptly notify the CM, who shall make appropriate adjustments to the GMP proposal, its basis or both.
- 10.3 Upon acceptance of the GMP proposal, the GMP and its basis shall be set forth in the Agreement. The GMP shall be subject to additions and deductions by changes to the work as provided in the Contract Documents; the date of Substantial and Final Completion shall likewise be subject to adjustment in accordance with the Contract Documents.

Deliverable: CM shall provide a Final GMP to Lee County for approval and before commencing with the work.

Proposal Estimate - RFQ-06-03 Pinewoods WTP - Pre-Construction Services & Well Drilling GMP May 2006 through Nov 2006 MWH PRE-CONSTRUCTION	see *Labor Rates	Sup	agement ervision udmin		Inspection		.aboratory		Construction		Totain
Constructability Principal Engineer		-	30		0		0				30
QA/QC Manager	 	-	27	_	0		0	_			27
Estimating Director		╄	16		0		0		0		16
Estimating Manager Chief/Lead Estimator	+		24				0	_		_	24 48
Principal Estimator	+	+	48		0		0				40
Senior Estimator		+	40	_			0	_		_	40
Administration	 	1	98							_	98
MWH CONSTRUCTION	+			+				\vdash		H	
Project Director	<u> </u>		130	1	0	_	0		0	1	130
Senior Construction Manager			481	_	0		- 0	_			481
General Superintendent/CM			1,300	1	0		0		0		1300
Senior Superintendent			0	1	0		0		0		0
Project Engineer			430	1	0		0		0		430
Operations/Start-up Engineer			35	5	0		0		0		35
Health and Safety Officer			83		0		- 0		0		83
Scheduler			0	_	0		0	_	- 0		0
Subcontract Administration		Ļ	0		0		0	_	0		0
Superintendent/Foreman Inspector		↓	0		0		0		0		0
Inspector		-	0	_	0		0	_	0		0
Secretary/Administrator/Production Controller		-	442		0	_	0	_	0	L.	442
Subtotal Labor Hours			3,224		0		o	L	0	L	3,224
Biliable Labor Cost		\$:	374,914	\$		\$	-	\$		s	374,914
Diversified Drilling Corp.								\$	1,402,400	****	1,402,400 - - - - -
Subcontract / Equipment Subtotals		\$	-	\$	-	\$	•	\$	1,402, 400	\$	1,402,400
General Conditions MWHC General Conditions								\$	10,850	\$	10,850
Subcontract / Equipment / GC's Subtotal (COW)		\$	-	\$	-	\$	•	\$	1,413,250	\$	1,413,250
General Expense Costs MWHC General Expense Costs Liability Insurance Builder's Risk Insurance Bonds		\$ \$	25,636 19,865 34,976							* * * *	25,636 19,865 - 34,976
Subtotal General Expense Costs			80,477	s.		\$		\$		\$	80,477
Estimated Cost			55,391			s		s	1,413,250	\$	1,868,641
U/G Conflicts Allowance			,						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$	-
Contingency	10.00%	\$ 1	41,325							\$	141,325
Estimated Cost + Allowances + Contingency		\$ 5	96,716	\$	-	\$		\$	1,413,250	\$	2,009,966
Estimated Costs before Markup										\$	2,009,966
G&A (5% of Subcontracts, Materials & Equipment) Construction Management Fee (5%) Guaranteed Maximum Price										\$ \$	70,120 100,498 2,180,585

Labor Estimate by Year								
Proposal Estimate - RFQ-06-03			-					
Pinewoods WTP - Pre-Construction Services &	Unit	Management						
Year 1 Rates	Rates	Supervision	Inspection	Laboratory	Construction	Totals		
January 2006 through December 2006 MWH PRE-CONSTRUCTION	Year 3	Admin						
Constructability Principal Engineer	\$155.91	30				30		
QA/QC Manager	\$186.61	27				27		
Estimating Director	\$234.13	16				16		
Estimating Manager	\$191.01	24				24		
Chief/Lead Estimator	\$171.96	48				48		
Principal Estimator	\$151.71	40				40		
Senior Estimator	\$148.41	40				40		
Administration	\$63.12	98				98		
MWH CONSTRUCTION						0		
Project Director	\$211.54	130				130		
Senior Construction Manager	\$159.34	481				481		
General Superintendent/CM	\$112.38	1,300				1300		
Senior Superintendent	\$103.13					0		
Project Engineer	\$95.19	430				430		
Operations/Start-up Engineer	\$180.29	35				35		
Health and Safety Officer	\$115.31	83				83		
Scheduler	\$89.90					0		
Subcontract Administration	\$85.94							
Superintendent/Foreman Inspector	\$85.94					0		
Inspector	\$79.33					0		
Secretary/Administrator/Production Controller	\$52.88	442			· · · · · · · · · · · · · · · · · · ·	442		
Subtotal Labor Hours		3224	0	0	0	3224		
Billable Labor Cost Year 3 @ Unit Rates		\$374,914	\$0	\$0	\$0	\$374,914		
Subtotal MWH Engineering Billable Labor Cost		\$44,491				\$44,491		
Subtotal MWH Construction Billable Labor Cost		\$330,423				\$330,423		

Labor Estimate by Year								
	Labor	Stimate	by rear					
Proposal Estimate - RFQ-06-03]			ľ	ļ			
Pinewoods WTP - Pre-Construction Services &	Unit	Management						
Year 2 Rates	Rates	Supervision	Inspection	Laboratory	Construction	Totals		
January 2007 through December 2007	Year 4	Admin			l			
<u>M</u> WH PRE-CONSTRUCTION								
Constructability Principal Engineer	\$162.15							
QA/QC Manager	\$194.07							
Estimating Director	\$243.50							
Estimating Manager	\$198.65							
Chief/Lead Estimator	\$178.84					0		
Principal Estimator	\$157.78					0		
Senior Estimator	\$154.35					0		
Administration	\$65.65					0		
MWH CONSTRUCTION						0		
Project Director	\$220.00					0		
Senior Construction Manager	\$165.71					0		
General Superintendent/CM	\$116.88					0		
Senior Superintendent	\$107.25					0		
Project Engineer	\$99.00					0		
Operations/Start-up Engineer	\$187.50					0		
Health and Safety Officer	\$119.92					0		
Scheduler	\$93.50					- 0		
Subcontract Administration	\$89.38	- "				0		
Superintendent/Foreman Inspector	\$89.38					0		
Inspector	\$82.50							
Secretary/Administrator/Production Controller	\$55.00					0		
Subtotal Labor Hours		0	- 0	0:	0	0		
Billable Labor Cost Year 4 @ Unit Rates		\$0	\$0	\$0	\$0	\$0		
Subtotal MWH Engineering Billable Labor Cost		\$0				\$0		
Subtotal MWH Construction Billable Labor Cost		\$0				\$0		

Labor Estimate by Year									
Proposal Estimate - RFQ-06-03									
Pinewoods WTP - Pre-Construction Services &	Unit	Management							
Year 3 Rates	Rates	Supervision	Inspection	Laboratory	Construction	Totals			
January 2010 through December 2010 MWH PRE-CONSTRUCTION	Year 7	Admin							
Constructability Principal Engineer	\$168.64								
QA/QC Manager	\$201.83								
Estimating Director	\$253.24								
Estimating Manager	\$206.60								
Chief/Lead Estimator	\$185.99								
Principal Estimator	\$164.09								
Senior Estimator	\$160.52			_					
Administration	\$68.28								
MWH CONSTRUCTION									
Project Director	\$228.80								
Senior Construction Manager	\$172.34								
General Superintendent/CM	\$121.56								
Senior Superintendent	\$111.54								
Project Engineer	\$102.96								
Operations/Start-up Engineer	\$195.00								
Health and Safety Officer	\$124.72								
Scheduler	\$97.24								
Subcontract Administration	\$92.96								
Superintendent/Foreman Inspector	\$92.96								
Inspector	\$85.80								
Secretary/Administrator/Production Controller	\$57.20								
Subtotal Labor Hours		0	0	0	o				
Biliable Labor Cost Year 7 @ Unit Rates		\$0	\$0	\$0	\$0	\$(
Subtotal MWH Engineering Billable Labor Cost		\$0							
Subtotal MWH Construction Billable Labor Cost		\$0							
Billable Labor Cost Years 1 - 3:		\$374,914	\$0	\$0		\$374,91			

Notes:

4 1. Individual subtasks are accounted for separately but do	ot constitute line item budgets and will not	require modification if under run or overrun
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This document is an Amendment to the Agreement dated ______

Labor Rates Sheet 1 of 1

ATTACHMENT A WORK AUTHORIZATION No. 1-3-2

Denotes estimate Hourly Billing Rate Schedule for MWH Pre-Construction and Construction Services	Denotes estimate	and Construction Service	ğ	
US Department of Labor Employment Cost Index Increase*:	4.00%	4.00%	L .,	4 00%
*For the South Region, in accordance with Exhibit B, note 2	Unit	Chrit	Chiit	nit O
	Rates	Rates	Rates	Rates
	Year 1	Year 2	Year 3	Year 4
	Jan 06 - Dec 06	Jan 07 - Dec 07	Jan 08 - Dec 08	Jan 09 - Dec 09
MWH PRE-CONSTRUCTION				
Constructability Principal Engineer	\$155.91	\$162.15	\$168.64	\$175.39
QA/QC Manager	\$186.61	\$194.07	\$201.83	\$209.90
Estimating Director	\$234.13	\$243.50	\$253.24	\$263.37
Estimating Manager	\$191.01	\$198.65	\$206.60	\$214.86
Chief/Lead Estimator	\$171.96	\$178.84	\$185.99	\$193.43
Principal Estimator	\$151.71	\$157.78	\$164.09	\$170.65
Senior Estimator	\$148.41	\$154.35	\$160.52	\$166.94
Administration	\$63.12	\$65.65	\$68.28	\$71.01
MWH CONSTRUCTION				
Project Director	\$211.54	\$220.00	\$228.80	\$237.95
Senior Construction Manager	\$159.34	\$165.71	\$172.34	\$179.23
General Superintendent/CM	\$112.38	\$116.88	\$121.56	\$126.42
Senior Superintendent	\$103.13	\$107.25	\$111.54	\$116.00
Project Engineer	\$95.19	\$99.00	\$102.96	\$107.08
Operations/Start-up Engineer	\$180.29	\$187.50	\$195.00	\$202.80
Health and Safety Officer	\$115.31	\$119.92	\$124.72	\$129.71
Scheduler	\$89.90	\$93.50	\$97.24	\$101.13
Subcontract Administration	\$85.94	\$89.38	\$92.96	\$96.68
Superintendent/Foreman inspector	\$85.94	\$89.38	\$92.96	\$96.68
inspector	\$79.33	\$82.50	\$85.80	\$89.23
Secretary/Administrator/Production Controller	\$52.88	\$55.00	\$57.20	\$59.49

1) General Conditions Costs

Cost Code	Description	Quantity	Units	Unit Price	Extended Price
10101001	Trailer Set-Up & Breakdown		LS	\$1,100.00	\$0.00
10101002	Trailer Decks & Stairs	_	LS	\$3,000.00	\$0.00
10101003	Trailer Utility Hook-Up & Disconnect		LS	\$12,000.00	\$0.00
10101004	Trailer Electrical Hook-Up & Disconnect		LS	\$12,000.00	\$0.00
10101005	Permits & Fees		LS	\$25,000.00	\$0.00
10101006	Estimating Reproduction		LS	\$5,000.00	\$0.00
10101007	Aerial & Land Survey		LS	\$0.00	\$0.00
10101008	Temporary Easements / ROW		LS	\$0.00	\$0.00
10101009	Project Video	1	LS	\$4,000.00	\$4,000.00
10101010	Record Documents	1	LS	\$5,000.00	\$5,000.00
10201001	Trailer Rental		МО	\$1,100.00	\$0.00
10201002	Pest Control		МО	\$75.00	\$0.00
10201003	Security Services		МО	\$4,500.00	\$0.00
10201004	Security Badges	1	LS	\$500.00	\$500.00
10201005	Measurements & Layout		МО	\$5,000.00	\$0.00
10201006	Shop Drawings Preparation		LS	\$0.00	\$0.00
10201007	Coordination Plans		LS	\$0.00	\$0.00
10201008	Aeriai Photographs	8	MO	\$150.00	\$1,200.00
10201009	Material Testing		LS	\$40,000.00	\$0.00
10401001	Tool Shed Rental		МО	\$125.00	\$0.00
10401002	Tool Shed Set-Up & Breakdown		LS	\$500.00	\$0.00
10401003	Temporary Parking		LS	\$5,000.00	\$0.00
10401004	Temporary Storage Yard		LS	\$6,000.00	\$0.00
10401005	Initial Sediment & Erosion Control		LS	\$5,000.00	\$0.00
10401006	Sediment & Erosion Control Maint.		MO	\$100.00	\$0.00
10401007	Dumpster Pulls		EA	\$250.00	\$0.00
10401008	Weather Protection		LS	\$3,000.00	\$0.00
10401009	Debris Removal & Disposal Fees		LS	\$5,000.00	\$0.00
10401010	Uncontrollable Event Mitigation		LS	\$5,000.00	\$0.00
10401011	Barricades		MO	\$100.00	\$0.00
10401012	Safety Equipment		LS	\$10,000.00	\$0. <u>0</u> 0
10401013	Fire Extinguishers	3	EA	\$50.00	\$150.00
10401014	Temporary Fire Protection		LS	\$1,500.00	\$0.00
10401015	Temporary Fencing		LS	\$5,000.00	\$0.00
10401016	Temporary Roads		LS	\$4,000.00	\$0.00
	Dust Control		МО	\$2,000.00	\$0.00
10401018	Temporary Hoists		LS	\$5,000.00	\$0.00
10401019	Scaffolding		МО	\$500.00	\$0.00
	Ladders & Runways		LS	\$2,000.00	\$0.00
	Temporary Project Signs		LS	\$1,000.00	\$0.00
	On-Site Personnel Transportation		МО	\$2,000.00	\$0.00
	On-Site Material Transportation		МО	\$1,500.00	\$0.00
	Site and Grounds Maintenance		MO	\$1,000.00	\$0.00
10501001	Final Cleaning		LS	\$4,000.00	\$0.00
	General Conditions Subtotal				\$10,850.00
					7.5,555100

2) General Expense Costs

2.1) MWH Construction Personnel Only

Average

				Average	
Cost Code	Title	<u>Units</u>	Quantity	Unit Price	Extended Price
10206001	Division Manager		HR		
10206002	Project Director	130	HR	211.54	\$27,500.00
10206003	Sr. Construction Manager	481	HR	159.34	\$76,640.64
10206004	Deputy Construction Manager		HR		
10206005	General Superintendent/CM	1300	HR	112.38	\$146,093.75
10206006	Senior Superintendent	0	HR	#DIV/0!	\$0.00
10206007	Project Engineer	430	HR	95.19	\$40,932.69
10206008	Operation/Start-up Engineer	35	HR	180.29	\$6,310.10
10206009	Health & Safety Officer	83	HR	115.31	\$9,570.92
10206010	Scheduler	0	HR	#DIV/0!	\$0.00
10206011	Subcontract Administration	0_	HR	#DIV/0!	\$0.00
10206012	Superintendent	0	HR	#DIV/0!	\$0.00
10206013	Foreman Inspector		HR		
10206014	Inspector	0	HR	#DIV/0!	\$0.00
10206015	Secretary		HR		
10206016	Administrator	442	HR	52.88	\$23,375.00
10206017	Production Controller		HR		
	Labor Subtotal	2,901.00	HR		\$330,423.10

2.2) Minor Expenses

Cost Code	Title	Units	Quantity	Unit Price	Extended Price
10102001	Bond		LS		\$0.00
10102002	Builder's Risk Insurance		LS		\$0.00
10202001	Telephone Service		MO	\$750.00	\$0.00
10202002	Cellular Phone Service	14	MO	\$120.00	\$1,680.00
10202003	Internet Provider		MO	\$250.00	\$0.00
10202004	Office Supplies	8	MO	\$150.00	\$1,200.00
10202005	Mailing & Postage	8	MO	\$300.00	\$2,400.00
10202006	Site Photographs	8	МО	\$50.00	\$400.00
10202007	Reproduction Costs		MÖ	\$400.00	\$0.00
10202008	Drinking Water		MO	\$100.00	\$0.00
10502001	Site Radios		LS	\$7,000.00	\$0.00
10502002	Small Tools	2,901.00	HR	\$0.25	\$725.25
10502003	Safety Supplies	7	МО	\$100.00	\$700.00
00007000	Insurance allocation		MO		\$0.00
	Minor Expenses Subtotal				\$7,105.25

2.3) Project Office Facilities Costs

Cost Code	<u>T</u> itle	Units	Quantity	Unit Price	Extended Price
10103001	Phone System Set-Up		LS	\$4,000.00	\$0.00
10103002	T1 Line Installation		LS	\$40,000.00	\$0.00
10203001	Potable Water Usage		МО	\$75.00	\$0.00
10203002	Electrical Usage	8	MO	\$150.00	\$1,200.00
10203003	IT Support Services		MO	\$0.00	\$0.00
10203004	Computer Equipment	17	MO	\$120.00	\$2,040.00
10203005	Office Equipment		MO	\$500.00	\$0.00
10203006	Office Furniture		MO	\$300.00	\$0.00
10203007	Janitorial Services & Supplies		MO	\$300.00	\$0.00
10203008	Trash Removal		MO	\$150.00	\$0.00
10503001	Project Signage	1	LS	\$2,000.00	\$2,000.00
10503002	Sanitary Facilities		МО	\$100.00	\$0.00

2.4) Vehicle Transportation Costs

Cost Code	Title	Units	Quantity	Unit Price	Extended Price
10204001	Division Manager	0	MO	\$1,000.00	\$0.00
10204002	Project Director	0	MO	\$1,000.00	\$0.00
10204003	Sr. Construction Manager	3	MO	\$1,000.00	\$3,000.00
10204004	Deputy Construction Manager	0	MO	\$1,000.00	\$0.00
10204005	General Superintendent	8	MO	\$1,000.00	\$8,000.00
10204006	Senior Superintendent	0	МО	\$1,000.00	\$0.00
10204007	Project Engineer	2	MO	\$1,000.00	\$2,000.00
10204009	Health & Safety Officer	0	МО	\$1,000.00	\$0.00
10204012	Superintendent	0	МО	\$1,000.00	\$0.00
10204013	Foreman Inspector	0	МО	\$1,000.00	\$0.00
10204014	Inspector	0	МО	\$1,000.00	\$0.00
10204020	On-Site Transportation		МО	\$150.00	\$0.00
10204025	Travel Costs		LS	\$5,000.00	\$0.00
10204030	Mileage	1	LS	\$291.00	\$291.00
	Vehicle Costs Subtotal	13	Vehicle Months	S	\$13,291.00

2.5) Data Processing Services Costs

Cost Code	Title	Units	Quantity	Unit Price	Extended Price
10205001	Prolog PMIS System		MO	\$500.00	\$0.00
10205002	Misc. Software License Fees		МО	\$100.00	\$0.00
	Data Processing Subtotal				\$0.00

 General Conditions Total	\$10,850.00
General Expense Total	\$25,636.25
 Grand Total GC's / GE	\$36,486.25

Corkacrew WTP Wells and Raw Water Main Construction Management at Risk Agreement Pro-Construction Phase Services Estimated Level of Effort (Manhours)

	O.	M	ΝÖ	S	Constructed.	QA/QC	Start-Up	Safety	Admin			Estimators			Totale
TEMPORAGEI PITON	Lewis	Machinski	Petrous	TBD	Baar	Awezec	Tobel	McLaughlin	Stuckey	Director	Manager	Chief/Lead	Principal Est.	Sr. Estimator	
1 Project Management															
1.1 Project Management (included)	0	5	٥	0	0	٥	0		0	o	Ö	•	0	٥	_
1.2b Prepare Project Management Plan	~	80		4	N	2	2	2	80						36
1.3 Develop and Marntain Record Tracking System	2	*		Ø	2	+	-	-	4						17
Sub-Total	4	12	D	6	4	3	8	9	12	0	0	0	0	0	4
2 Meetings															
2.1 Conduct Klok Off Meeting	4	80		4	0	0	0	٥	0	0					16
2.2 Monthly Progress Meetings (3-4 meetings)	80	12		N.	0	0		0	o	0		80	,	0	8
Sub-Total	12		0	Ф	٥	٥	0	0	0	0	0		0	0	4
3 Document/Constructability Review									!						
3.1 Initial Review	4	90		0	80	4	4	4	4	0	0	0	C	٥	8
Sub-Total	4	89	0	0	100	4	4	4	4	0	0	0	0	0	36
4 Cost Estimate															
4.1 Initial Cost Estimate	2			٥	23	٥	4	4	N	4	8			24	5
Sub-Total	~	80	0	0	2	0	4	4	2	4	8	24	24	24	106
5 Construction Milestone Schedule Development	_														
5.1 Milestone Schdeule Davolpment	2	80		٥	0	٥	4	ō	٥						4
Sufe-Total	7		0	0	ō	5	4	0	8	8	0	0	ō	٥	4
6 Permitting															
6.1 Permitting	0			0	0	0	ō	0	0	0	0	٥	0	ō	80
Sub-Total	0	8	Ö	0	0	0	0	0	0	0	0		0	0	
7 Preparation of Procurement Plan and Subcontract Documents															
7.1 Preparation of Procurement Plan	4	8		0	0	0	٥	0	٥	0	0	0	6	٥	12
7.2 Preparation Subcontract Documents	- 2			0	0	٥	0	0	0	0	0	0	٥	0	10
7.3 Bid Packages	9	16		0	æ	*	89	4	4						88
Sub-Total	4		7	9	•	4	•	4	\$	0	0	0	•	٥	뒤
8 PreBid Conferences															
8.1 Prebid Conference	00 1	w e	•	0 6	0 6	a) •	m) 6	00 a	91	0 6	•	06	0 0	0	88
Sup-rotal	•			2	7	0		•	9	1	2		1	1	8
o Bidding Services and Evaluation	-			0	0	4	0	0	0	4	8	90	80	60	2
Sub-Total		92	•	0	0	4	•	٥	٥	4	60	*	•	80	2
10 GMP Development															
10.1 Basis of Guranteed Maximum Price	8	24		0	80	4	4	4	22	в	8	8	80	80	116
10.2 GMP Review	4	60		٥	0	0	0	0	0	0	0	٥		٥	12
10.3 GMP Final Adjustments	4 ;	4 5	•	0.6	0 4	0	0 •	0	۲ ٥	0 0	o •	•	0 8	Ó 6	8 4
aut-out				֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	1		9		8	9	36	700	4		2
I CI ALS	2	Pr.	5	2	3		3	1		1	-	2		2	3

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Proposal Estimate - RFQ-06-03 Corkscrew WTP - Pre-Construction Services MWH PRE-CONSTRUCTION	see "Labor Rales"	Management Supervision Admin		Inspection	Laboratory	Construction		Totals
Constructability Principal Engineer		1 - 3	30		0	- 0		30
QA/QC Manager	-		7					27
Estimating Director			16	0				16
Estimating Manager	+		24	0				24
Chief/Lead Estimator			18	0	0			48
Principal Estimator		4	10		0	0		40
Senior Estimator			50		- 0	0		40
Administration		9	98	0	0	0		98
MWH CONSTRUCTION			╗					
Project Director		7	70	0				70
Senior Construction Manager		15	6	0		0		156
General Superintendent/CM			0	0				0
Senior Superintendent			0	0	0	0		
Project Engineer			0	0				0
Operations/Start-up Engineer			15	0	0			35
Health and Safety Officer	- 		?7	0		0		27
Scheduler			0	0				0
Subcontract Administration	+		0	0	0	0		0
Superintendent/Foreman Inspector			0	0	0	0		0
Inspector Secretary/Administrator/Production Controller			2	0	0	- 0		12
Secretary/Administrator/Production Controller			4				 	12
Subtotal Labor Hours		62	3	0	0	0		623
Subcontract, Material & Equipment Costs -							\$ \$ \$ \$	
Subcontract / Equipment Subtotals General Conditions		\$ ·		s -	s -	\$ -	\$ \$ \$	- - -
MWHC General Conditions Subcontract / Equipment / GC's Subtotal (COW)		\$ -		\$ -	5 -	\$ - \$ -	\$ \$	
Ganeral Expense Costs MWHC General Expense Costs Liability Insurance Builder's Risk Insurance Bonds		\$ 1,240 \$ 2,287 \$ - \$ -					5555	1,240 2,287 -
Subtotal General Expense Costs		\$ 3,527	,	\$ -	\$ -	\$ -	\$	3 ,5 2 7
Estimated Cost		\$ 97,740)	\$.	\$ -	\$ -	\$	97,740
U/G Conflicts Allowance Contingency	10.00%	\$ ·					\$ \$ \$ \$	- - -
Estimated Cost + Allowances + Contingency		\$ 97,740)	\$ -	\$ -	\$ -	s	97,740
Estimated Costs before Markup							5	97,740
G&A (5% of Subcontract, Material & Equipment) Construction Management Fee (5%) Guaranteed Maximum Price							s s	4,887 102,627

	Labor E	stimate	by Year			
Proposal Estimate - RFQ-06-03						
Corkscrew WTP - Pre-Construction Services	Unit	Management				
Year 1 Rates	Rates	Supervision	inspection	Laboratory	Construction	Totals
January 2006 through December 2006 MWH PRE-CONSTRUCTION	Year 3	Admin		,		
Constructability Principal Engineer	\$155.91	30				30
QA/QC Manager	\$186.61	27				27
Estimating Director	\$234.13	16				16
Estimating Manager	\$191.01	24				24
Chief/Lead Estimator	\$171.96	48				48
Principal Estimator	\$151.71	40				40
Senior Estimator	\$148.41	40				40
Administration	\$63.12	98				98
MWH CONSTRUCTION						0
Project Director	\$211.54	70				70
Senior Construction Manager	\$159.34	156				156
General Superintendent/CM	\$112.38					0
Senior Superintendent	\$103.13					0
Project Engineer	\$95.19					0
Operations/Start-up Engineer	\$180.29	35				35
Health and Safety Officer	\$115.31	27				27
Scheduler	\$89.90					0
Subcontract Administration	\$85.94					0
Superintendent/Foreman Inspector	\$85.94					0
Inspector	\$79.33					0
Secretary/Administrator/Production Controller	\$52.88	12				12
Subtotal Labor Hours		623	0	0	0	623
Billable Labor Cost Year 3 @ Unit Rates		\$94,213	\$0	\$0	\$0	\$94 ,213
Subtotal MWH Engineering Billable Labor Cost		\$44,491				\$44,491
Subtotal MWH Construction Billable Labor Cost		\$49,722				\$49,722

	Labor E	stimate	by Year			
Proposal Estimate - RFQ-06-03 Corkscrew WTP - Pre-Construction Services	Unit	Management				
Year 2 Rates	4	•			[
	Rates	Supervision	inspection	Laboratory	Construction	Totals
January 2007 through December 2007 MWH PRE-CONSTRUCTION	Year 4	Admin				1
Constructability Principal Engineer	\$162.15					
QA/QC Manager	\$194.07					-
Estimating Director	\$243.50					
Estimating Manager	\$198.65					
Chief/Lead Estimator	\$178.84					
Principal Estimator	\$157.78					
Senior Estimator	\$154.35					
Administration	\$65.65					
MWH CONSTRUCTION						
Project Director	\$220.00					
Senior Construction Manager	\$165.71					
General Superintendent/CM	\$116.88					
Senior Superintendent	\$107.25					-
Project Engineer	\$99.00					
Operations/Start-up Engineer	\$187.50					
Health and Safety Officer	\$119.92					
Scheduler	\$93.50					
Subcontract Administration	\$89.38					
Superintendent/Foreman Inspector	\$89.38					
Inspector	\$82.50					
Secretary/Administrator/Production Controller	\$55.00					
Subtotal Labor Hours		0	0	0	0	
Billable Labor Cost Year 4 @ Unit Rates		\$0	\$0	\$0	\$0	\$(
Subtotal MWH Engineering Billable Labor Cost		\$0				\$
Subtotal MWH Construction Billable Labor Cost		\$0				\$

	Labor E	stimate	bv Year			
Proposal Estimate - RFQ-06-03						
Corkscrew WTP - Pre-Construction Services	Unit	Management				
Year 3 Rates	Bates	Supervision	Inspection	Laboratory	Construction	Totals
January 2010 through December 2010 MWH PRE-CONSTRUCTION	Year 7	Admin	·	,		
Constructability Principal Engineer	\$168.64					
QA/QC Manager	\$201.83					
Estimating Director	\$253.24					
Estimating Manager	\$206.60					
Chief/Lead Estimator	\$185.99					
Principal Estimator	\$164.09					C
Senior Estimator	\$160.52					
Administration	\$68.28					
MWH CONSTRUCTION						
Project Director	\$228.80					- 0
Senior Construction Manager	\$172.34					0
General Superintendent/CM	\$121.56					
Senior Superintendent	\$111.54					0
Project Engineer	\$102.96					
Operations/Start-up Engineer	\$195.00					
Health and Safety Officer	\$124.72					
Scheduler	\$97.24					0
Subcontract Administration	\$92.96					
Superintendent/Foreman Inspector	\$92.96					
Inspector	\$85.80					
Secretary/Administrator/Production Controller	\$57.20					0
Subtotal Labor Hours		0	0	0	0	0
Billable Labor Cost Year 7 @ Unit Rates		\$0	\$0	\$0	\$0	\$0
Subtotal MWH Engineering Billable Labor Cost		\$0				
Subtotal MWH Construction Billable Labor Cost		\$0				
Billable Labor Cost Years 1 - 3:	1	\$94,213		\$0	\$0	\$94,213

Notes:

^{4.1.} Individual subtasks are accounted for separately but do not constitute line item budgets and will not require modification if under run or ovarrun.

Labor Rates Sheet 1 of 1

ATTACHMENT A WORK AUTHORIZATION No. 1-3-2

Denotes estimate Hourly Billing Rate Schedule for MWH Pre-Construction and Construction Services	Denotes estimate for MWH Pre-Construction	☐ on and Construction Servic	Se.	
US Department of Labor Employment Cost Index Increase*:	4.00%	4.00%		4.00%
*For the South Region, in accordance with Exhibit B, note 2	l Zeig	, E	Cait	ig S
	Rates	Rates	Rates	Rates
	Year 1	Year 2	Year 3	Year 4
	Jan 06 - Dec 06	Jan 07 - Dec 07	Jan 08 - Dec 08	Jan 09 - Dec 09
MWH PRE-CONSTRUCTION				
Constructability Principal Engineer	\$155.91	\$162.15	\$168.64	\$175.39
QA/QC Manager	\$186.61	\$194.07	\$201.83	\$209.90
Estimating Director	\$234.13	\$243.50	\$253.24	\$263.37
Estimating Manager	\$191.01	\$198.65	\$206.60	\$214.86
Chief/Lead Estimator	\$171.96	\$178.84	\$185.99	\$193.43
Principal Estimator	\$151.71	\$157.78	\$164.09	\$170.65
Senior Estimator	\$148.41	\$154.35	\$160.52	\$166.94
Administration	\$63.12	\$65.65	\$68.28	\$71.01
MWH CONSTRUCTION				
Project Director	\$211.54	\$220.00	\$228.80	\$237.95
Senior Construction Manager	\$159.34	\$165.71	\$172.34	\$179.23
General Superintendent/CM	\$112.38	\$116.88	\$121.56	\$126.42
Senior Superintendent	\$103.13	\$107.25	\$111.54	\$116.00
Project Engineer	\$95.19	\$39.00	\$102.96	\$107.08
Operations/Start-up Engineer	\$180.29	\$187.50	\$195.00	\$202.80
Health and Safety Officer	\$115.31	\$119.92	\$124.72	\$129.71
Scheduler	\$89.90	\$93.50	\$97.24	\$101.13
Subcontract Administration	\$85.94	\$89.38	\$92.96	\$96.68
Superintendent/Foreman Inspector	\$85.94	\$89.38	\$92.96	\$96.68
Inspector	\$79.33	\$82.50	\$85.80	\$89.23
Secretary/Administrator/Production Controller	\$52.88	\$55.00	\$57.20	\$59.49

	Extended Cost
\$2.50 / \$1,000 sub cost	\$0.00
\$10 / \$1,000 billing rate	\$942.13
\$1.33 / \$100 billing rate	\$1,253.03
\$1,100 / vehicle / year	\$91.67
\$3.91 / \$1,000 revenue	\$0.00
\$1.90 / \$1,000 revenue	
\$1.30 / \$1,000 revenue	
Subtotal:	\$2,286.83
\$0.44 / 100 revenue	
Per Bond Recap	
	\$10 / \$1,000 billing rate \$1.33 / \$100 billing rate \$1,100 / vehicle / year \$3.91 / \$1,000 revenue \$1.90 / \$1,000 revenue \$1.30 / \$1,000 revenue Subtotal:

P&P Bond Recap		Factor
1st	100,000	0.01950
next	400,000	0.01950
next	2,000,000	0.01501
next	2,500,000	0.01212
next	2,500,000	0.01101
over	7,500,000	0.01000
P&P Bond Total		
Surcharge (1% / Mo. Over 24 Mo.)		1.00

1 # of Veh Mos. from GC's

Value]
1,950	ŀ
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2,001	
2,001	

Factors reflect Zurich Bond Rate Sheet Effective 1/17/2005 and may require modification. Check with Chip Kerper for update.

0.01949781 Bond % of PO

1) General Conditions Costs

Cost Code	Description	Quantity	Units	Unit Price	Extended Price
10101001	Trailer Set-Up & Breakdown		LS	\$1,100.00	\$0.00
10101002	Trailer Decks & Stairs		LS	\$3,000.00	\$0.00
10101003	Trailer Utility Hook-Up & Disconnect		LS	\$12,000.00	\$0.00
10101004	Trailer Electrical Hook-Up & Disconnect		LS	\$12,000.00	\$0.00
10101005	Permits & Fees		LS	\$25,000.00	\$0.00
10101006	Estimating Reproduction		LS	\$5,000.00	\$0.00
10101007	Aerial & Land Survey		LS	\$0.00	\$0.00
10101008	Temporary Easements / ROW		LS	\$0.00	\$0.00
10101009	Project Video		LS	\$4,000.00	\$0.00
10101010	Record Documents		LS	\$5,000.00	\$0.00
10201001	Trailer Rental		MO	\$1,100.00	\$0.00
10201002	Pest Control		MO	\$75.00	\$0.00
10201003	Security Services		MO	\$4,500.00	\$0.00
10201004	Security Badges		LS	\$500.00	\$0.00
10201005	Measurements & Layout		МО	\$5,000.00	\$0.00
10201006	Shop Drawings Preparation		LS	\$0.00	\$0.00
10201007	Coordination Plans		LS	\$0.00	\$0.00
10201008	Aerial Photographs		МО	\$150.00	\$0.00
10201009	Material Testing		LS	\$40,000.00	\$0.00
10401001	Tool Shed Rental		MO	\$125.00	\$0.00
10401002	Tool Shed Set-Up & Breakdown		LS	\$500.00	\$0.00
10401003	Temporary Parking		LS	\$5,000.00	\$0.00
10401004	Temporary Storage Yard		LS	\$6,000.00	\$0.00
10401005	Initial Sediment & Erosion Control		LS	\$5,000.00	\$0.00
10401006	Sediment & Erosion Control Maint.		MO	\$100.00	\$0.00
10401007	Dumpster Pulis		EA	\$250.00	\$0.00
10401008	Weather Protection		LS	\$3,000.00	\$0.00
10401009	Debris Removal & Disposal Fees		LS	\$5,000.00	\$0.00
10401010	Uncontrollable Event Mitigation		LS	\$5,000.00	\$0.00
10401011	Barricades		MO	\$100.00	\$0.00
10401012	Safety Equipment		LS	\$10,000.00	\$0.00
10401013	Fire Extinguishers		EA	\$50.00	\$0.00
10401014	Temporary Fire Protection		LS	\$1,500.00	\$0.00
10401015	Temporary Fencing		LS	\$5,000.00	\$0.00
10401016	Temporary Roads		LS	\$4,000.00	\$0.00
10401017	Dust Control		MO	\$2,000.00	\$0.00
10401018	Temporary Hoists		LS	\$5,000.00	\$0.00
10401019	Scaffolding		MO	\$500.00	\$0.00
10401020	Ladders & Runways		LS	\$2,000.00	\$0.00
10401021	Temporary Project Signs		LS	\$1,000.00	\$0.00
10401022	On-Site Personnel Transportation		MO	\$2,000.00	\$0.00
10401023	On-Site Material Transportation		MO	\$1,500.00	\$0.00
	Site and Grounds Maintenance		MO	\$1,000.00	\$0.00
10501001	Final Cleaning		LS	\$4,000.00	\$0.00
	Company Compile and Control and				
	General Conditions Subtotal				\$0.00

2) General Expense Costs

2.1) MWH Construction Personnel Only

				Average	
Cost Code	Title	Units	Quantity	Unit Price	Extended Price
10206001	Division Manager		HR		
10206002	Project Director	70	HR	211.54	\$14,807.69
10206003	Sr. Construction Manager	156	HR	159.34	\$24,856.43
10206004	Deputy Construction Manager		HR		
10206005	General Superintendent/CM	0	HR	#DIV/0!	\$0.00
10206006	Senior Superintendent	0	HR	#DIV/0!	\$0.00
10206007	Project Engineer	0	HR	#DIV/0!	\$0.00
10206008	Operation/Start-up Engineer	35	HR	180.29	\$6,310.10
10206009	Health & Safety Officer	27	HR	115.31	\$3,113.43
10206010	Scheduler	0	HR	#DIV/0!	\$0.00
10206011	Subcontract Administration	0	HR	#DIV/0!	\$0.00
10206012	Superintendent	0	HR	#DIV/0!	\$0.00
10206013	Foreman Inspector		HR		
10206014	Inspector	0	HR	#DIV/0!	\$0.00
10206015	Secretary		HR		
10206016	Administrator	12	HR	52.88	\$634.62
10206017	Production Controller		HR		
	Labor Subtotal	300.00	HR		\$49,722.26

2.2) Minor Expenses

Cost Code	Title	Units	Quantity	Unit Price	Extended Price
10102001	Bond		LS		\$0.00
10102002	Builder's Risk Insurance		LS		\$0.00
10202001	Telephone Service		МО	\$750.00	\$0.00
10202002	Cellular Phone Service	1	МО	\$120.00	\$120.00
10202003	Internet Provider		MO	\$250.00	\$0.00
10202004	Office Supplies		МО	\$150.00	\$0.00
10202005	Mailing & Postage		MO	\$300.00	\$0.00
10202006	Site Photographs		MO	\$50.00	\$0.00
10202007	Reproduction Costs		MO	\$400.00	\$0.00
10202008	Drinking Water		MO	\$100.00	\$0.00
10502001	Site Radios		LS	\$7,000.00	\$0.00
10502002	Smail Tools		HR	\$0.25	\$0.00
10502003	Safety Supplies		МО	\$100.00	\$0.00
00007000	Insurance allocation		МО		\$0.00
	Minor Expenses Subtotal				\$120.00

2.3) Project Office Facilities Costs

Cost Code	Title	Units	Quantity	Unit Price	Extended Price
10103001	Phone System Set-Up		LS	\$4,000.00	\$0.00
10103002	T1 Line Installation		LS	\$40,000.00	\$0.00
10203001	Potable Water Usage		MO	\$75.00	\$0.00
10203002	Electrical Usage		MO	\$150.00	\$0.00
10203003	IT Support Services		МО	\$0.00	\$0.00
10203004	Computer Equipment	1	MO	\$120.00	\$120.00
10203005	Office Equipment		MO	\$500.00	\$0.00
10203006	Office Furniture		МО	\$300.00	\$0.00
10203007	Janitorial Services & Supplies		МО	\$300.00	\$0.00
10203008	Trash Removal		MO	\$150.00	\$0.00
10503001	Project Signage		LS	\$2,000.00	\$0.00
10503002	Sanitary Facilities		МО	\$100.00	\$0.00

2.4) Vehicle Transportation Costs

Cost Code	Title	Units	Quantity	Unit Price	Extended Price
10204001	Division Manager	0	MO	\$1,000.00	\$0.00
10204002	Project Director	0	MO	\$1,000.00	\$0.00
10204003	Sr. Construction Manager	1	MO	\$1,000.00	\$1,000.00
10204004	Deputy Construction Manager	0	MO	\$1,000.00	\$0.00
10204005	General Superintendent	0	MO	\$1,000.00	\$0.00
10204006	Senior Superintendent	0	MO	\$1,000.00	\$0.00
10204007	Project Engineer	0	MO	\$1,000.00	\$0.00
10204009	Health & Safety Officer	0	MO	\$1,000.00	\$0.00
10204012	Superintendent	0	MO	\$1,000.00	\$0.00
10204013	Foreman Inspector	0	MO	\$1,000.00	\$0.00
10204014	Inspector	0	MO	\$1,000.00	\$0.00
10204020	On-Site Transportation		MO	\$150.00	\$0.00
10204025	Travel Costs		LS	\$5,000.00	\$0.00
10204030	Mileage		LS	\$291.00	\$0.00
	Vehicle Costs Subtotal	1_	Vehicle Month	s	\$1,000.00

2.5) Data Processing Services Costs

Cost Code	Title	Units	Quantity	Unit Price	Extended Price
10205001	Prolog PMIS System		MO	\$500.00	\$0.00
10205002	Misc. Software License Fees		MO	\$100.00	\$0.00
	Data Processing Subtotal				\$0.00
			Ganaral Co	nditions Total	\$0.00

General Conditions Total	\$0.00
General Expense Total	\$1,240.00
Grand Total GC's / GE	\$1,240.00

Pinewcode WTP Weile and Raw Water Main Construction Management of Riak Agreement Pre-Construction Phase Services Estimated Level of Effort (Manhours)

Item/Description Item/Description Project Management 1 Project Management (included)								N S S S S S S S S S S S S S S S S S S S	Admin						
1 Project Management 1.1 Project Management (included)	Lewis	Machinski	Petrous	TBD	Baar	Awezec	Tobel	McLaughlin	Stuckey	Director	Manager	Chief/Lead	Principal Est.	Sr. Estimator	
1.1 Project Management (included)															
	0	0	٥	0	0	0		0	0	0	0		0	0	0
1.2b Prepare Project Management Plan	cvi	80		4	53	12	Ø		8						8
1 3 Develop and Maintain Record Tracking System	2	4		2	2	-	_	-	4						17
Sub-Total	4	12	0	8	4	3		es	12	٥	0		0	0	47
2 Meetings															
2.1 Conduct Klak Off Meeting	4	B ()		4	0	Ó	_	0	ō	0					16
2.2 Monthly Progress Meetings (3-4 meetings)	60	12		8	0	0	0	¢	0	o			80	0	8
Sub-Total	12	20	•	8	0	0	0	0	0	0	0				46
3 Document/Constructability Review															
3.1 Inklal Review	4	80		0	B	4	4	4	4	o	0		0	0	8
Sub-Total	4	8	0	0	8	4	4	4	4	٥					36
4 Cost Estimate															
4.1 Initial Cost Estimate	N	80		0	CAI	0	4	₹	2	4	89	24	24	24	106
Sub-Total	8	•	0	0	2	0	4	4	2	4	**				106
5 Construction Milestone Schedule Development															
5.1 Milestone Scholeule Devolpment	71	œ		0	0	٥	4	0	0						14
Sub-Total	N	80	0	0		0	4	0	0	0	0		0	0	14
6 Permitting															
6.1 Permitting	Ö	8		٥	0	ō		0	0	0	0		0	0	80
Sub-Total	0	8	0	0	0	0	0	٥	٩	•	0			0	4
7 Preparation of Procurement Plan and Subcontract Documents															
7.1 Preparation of Procurement Plan	4	89		0	Ó	0	٥	6	0	0	0			0	12
7.2 Preparation Subcontract Documents	61	80)		0	0	0			0	0	0				10
7.3 Bid Packages	60	18		0	80	4	80	4	9						88
Sub-Total	14	32	0	٥	8	4	80	7	40	0	0		9	0	110
8 PreBid Conferences															
8.1 Prebid Conference	80 1	8	•	0.0	0 (0 0 6	ω i	Ф.	91	0	06		5 6	0 6	92
Sub-Total	80		5	5	5	00			2						ñ
9 Bidding Services and Evaluation	_			,	•	•	•		•	•	•				
9 1 Bidding Services and Evaluation	60	16		67	0 (4,	0 (0 (5 6	4.	0 6		9 6		\$ 5
Sub-Total	80	18	B	D	٦	4	5		7		0				\$
10 GMP Development						•	•	•	1	,	•				,
10.1 Basis of Guranteed Maximum Price	ω .	72		0	3 0			4	3	o i	\$0 1				116
10.2 GMP Review	4	80		_	0	0	0	0	0	0	0			0	12
10.3 GMP Final Adjustments	4	4	•	Q i	07	0	ο.	0	0 ;	0 *	0.6		0 6	0.6	
Sub-Total	9	8	•	•			4	1	24	9	•			•	130
TOTALS	2	158	0	12	30	27	35	27	88	16	24	48		9	623

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