

City of Key West

Change Order Request No.	01	Date:	1/10/2024						
Key West Project No.:	SE35042006	BV Project Number:	411829						
Project Name:	Richard A. Heyman Environmental Protection Facility – Dewatering System Upgrade								
Amount:	\$ 98,720								

Technical Background

Based on direction of the City of Key West, the scope of Task Order 10 was limited to the design of the replacement belt filter presses. During the project kick off meeting held on March 29, 2022, and the confirmation email received from the City on April 5, 2022, Black & Veatch was requested to estimate the additional effort required to include the design for a replacement polymer feed system and a replacement belt filter press sludge feed pumps system.

Additionally, as part of Richard A. Heyman Environmental Protection Facility Aeration Upgrades in 2019, design of a replacement belt conveyor was already performed up to a 90% level (Black & Veatch project 199322). As part of this amendment, Black & Veatch will include the update and final design of the replacement belt conveyor to be incorporated as part of the bid package.

During a conference call with the City on January 4, 2024, Black & Veatch was requested to include the design a potable water connection for the dewatering rinse water.

Scope of Work

As part of Task 103 – Detailed Design – Construction Documents Level 3 and Level 4 under the current scope of work, Black & Veatch will incorporate the design of a replacement polymer feed system, replacement sludge feed pump system, and replacement belt conveyor system. As part of the design effort, Black & Veatch will contact equipment manufacturers for updated design information and cost quotations. Specifications for the potable water plumbing materials, polymer feed system, sludge feed pump system, and belt conveyor system will be included in the design.

The additional design will require the following new drawings:

- 1. Solids Building Demo Plan Belt Conveyor
- 2. Solids Building Demo Plan Polymer Feed System
- 3. Solids Building Demo Plan Sludge Feed Pump System
- 4. Solids Building Belt Conveyor
- 5. Solids Building Belt Conveyor
- 6. Solids Building Belt Conveyor
- 7. Solids Building Enlarged Plans & Sections Sludge Feed Pump System and Polymer Feed System
- 8. Solids Building Enlarged Plans & Sections Belt Conveyor
- 9. Solids Building Plumbing Plan & Section

- 10. Electrical One Line Diagram
- 11. Solids Building Power Plan Belt Conveyor
- 12. Solids Building Power Plan Sludge Feed Pumps and Polymer Feed System
- 13. P&ID Polymer Feed System
- 14. P&ID BFP Sludge Feed and Water Booster Pumps

Deliverables

These additional design from this amendment will be incorporated in the overall project design and included as part of the deliverables for Task 103.

Schedule

An updated schedule is included as Attachment 1.

Compensation

As detailed in Attachment 2 "Level of Effort Estimate," compensation for the scope of services described herein will be for the lump sum fee of \$98,720. Monthly invoices will be submitted to the City based on project progress.

Respectfully submitted,

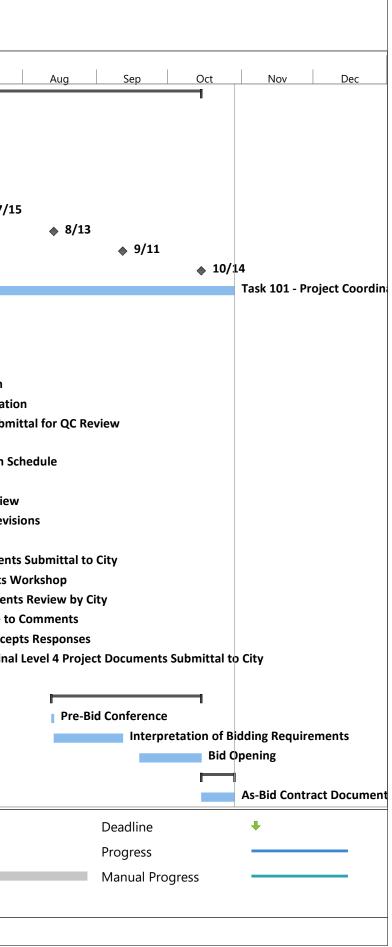
Isabel Botero, P.E. Client Director Black & Veatch

Attachment 1 Schedule

Task Order No.10 - Design Services Richard H. Heyman Environmental Protection Facility Dewatering System Upgrade

City of Key West

								City of Key West				
ID	Task Name		Duration	Start	Finish	Dec 20	024	Feb Mar	Apr	May	Jun	
1	Key Millestones		658 days	Thu 3/10/22	Mon 10/14/24	Dec	Jan	FED IVIAI	Api	lvidy	Juli	Jul
2	Notice to Proceed		0 days		Thu 3/10/22							
3	Draft Level 2 Submitta		0 days	Fri 7/15/22	Fri 7/15/22							
4	Level 2 Workshop		0 days	Thu 7/21/22	Thu 7/21/22							
5	Draft Level 3/4 Design	Submittal	0 days	Fri 5/31/24	Fri 5/31/24						5/31	
6	Level 3/4 Workshop		0 days	Fri 6/7/24	Fri 6/7/24						♦ 6/7	
7	Final Level 4 Design Su	bmittal	0 days	Mon 7/15/24	Mon 7/15/24							♦ 7/1
8	Pre-Bid Conference		0 days	Tue 8/13/24	Tue 8/13/24							
9	Addenda Submittal		0 days	Wed 9/11/24	Wed 9/11/24							
10	Bid Opening		0 days	Mon 10/14/2	4Mon 10/14/24							
11	Task 101 - Project Coordi	ination	668 days		Mon 10/28/24							
12	Task 102 - Detailed Desig Documents Level 2	gn - Construction	109 days	Thu 3/17/22	Thu 8/18/22							
28	Task 103 - Detailed Desig	gn - Construction	89 days	Mon 3/11/24	Mon 7/15/24			· · · · ·				
	Documents Level 3 and L	evel 4										
29	Technical Drawings Pre	eparation	42 days	Mon 3/11/24	Tue 5/7/24					Tech	nical Drawings P	reparation
30	Technical Specification	s Preparation	42 days	Mon 3/11/24	Tue 5/7/24					Tech	nical Specificatio	ons Preparatio
31	Prepare Project Docum Review	nents submittal for QC	1 day	Wed 5/8/24	Wed 5/8/24					Prep	are Project Docu	uments subm
32	Update Project Constru	uction Schedule	5 days	Thu 5/9/24	Wed 5/15/24					U	pdate Project Co	onstruction So
33	Update OPCC		10 days	Thu 5/9/24	Wed 5/22/24						Update OPCC	
34	Project Documents QC	Review	7 days	Thu 5/9/24	Fri 5/17/24						Project Documer	nts QC Review
35	Project Documents Rev	visions	7 days	Mon 5/20/24	Wed 5/29/24						Project Doc	uments Revis
36	Prepare submittal pack	kage	1 day	Thu 5/30/24	Thu 5/30/24						1.1	
37	Draft Project Docume	nts Submittal to City	1 day	Fri 5/31/24	Fri 5/31/24						Draft Proje	ect Document
38	Project Documents Wo	orkshop	1 day	Fri 6/7/24	Fri 6/7/24						Project	Documents V
39	Project Documents Rev	view by City	10 days	Mon 6/3/24	Fri 6/14/24						Proje	ect Document
40	BV Reponse to Comme	ents	5 days	Mon 6/17/24	Fri 6/21/24						B '	V Reponse to
41	Client Accepts Respons	ses	5 days	Mon 6/24/24	Fri 6/28/24							Client Accep
42	Final Level 4 Project D City	ocuments Submittal to	10 days	Mon 7/1/24	Mon 7/15/24							Final
43	Task 201 - Bid and Pre-A	ward Services	44 days	Tue 8/13/24	Mon 10/14/24							
44	Pre-Bid Conference		1 day	Tue 8/13/24	Tue 8/13/24							
45	Interpretation of Biddi	ng Requirements	20 days	Wed 8/14/24	Wed 9/11/24							
46	Bid Opening		18 days	Thu 9/19/24	Mon 10/14/24							
47	Task 202 - As-Bid Docum	nents Preparation	10 days	Tue 10/15/24	Mon 10/28/24							
48	As-Bid Contract Docum	nents Preparation	10 days	Tue 10/15/24	Mon 10/28/24							
		Task		Proj	ect Summary			Manual Task		Sta	art-only	C
Project: 411829 - City of Key West		Split		Inac	tive Task			Duration-only		Fir	nish-only	С
Date:	Mon 1/8/24	Milestone	٠		tive Milestone	\diamond		Manual Summary Roll	up		ternal Tasks	_
		Summary		l Inac	tive Summary			Manual Summary		Ex	ternal Mileston	e 🔷
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Attachment 2 Level of Effort

City of Key West Task Order No. 10 - Richard A. Heyman Environmental Protection Facility Dewatering System Upgrade Amendment No. 1

Work Breakdown Structure	Project Director	Senior Project Manager	Engineering Manager	Sr Technical Specialist - WW Process	Sr. Engineer - Structural	Sr. Engineer - Process Mechanical	Sr. Engineer - Chem Feed	Project Engineer - Electrical	Senior Engineering Technician - Electrical	Sr. Engineer - I&C	Engineering Technician - I&C	Engineering Technician - Struct and Process	Senior Engineer - Cost Estimating	Staff Engineer 11 - Civil	Total Hours	Labor Cost
Task Series 100 - DESIGN SERVICES	4	20	24	20	68	26	88	64	32	41	20	98	35	44	584	\$98,720
Percent of Total - Task 103	1%	3%	4%	3%	12%	4%	15%	11%	5%	7%	3%	17%	6%	8%	100%	
103 Detailed Design - Construction Documents Level 3 and Level 4	4	20	24	20	68	26	88	64	32	41	20	98	35	44	584	\$98,720
Percent of Total	1%	3%	4%	3%	12%	4%	15%	11%	5%	7%	3%	17%	6%	8%	100%	
Total Hours Estimated	4	20	24	20	68	26	88	64	32	41	20	98	35	44	584	
Total Salary (Labor B&V)	\$1,180	\$4,800	\$4,728	\$5,500	\$12,580	\$4,810	\$16,280	\$10,560	\$4,800	\$7,585	\$2,300	\$11,270	\$6,475	\$5,852		\$98,720
TOTAL FEE									1				1			\$98,720

\$185.00

NEGOTIATED RATES USED TO DEVELOP THIS FEE

\$240.00 \$295.00

\$197.00

\$185.00 \$275.00

\$185.00 \$165.00

\$150.00



01/12/24

\$115.00

\$185.00

\$115.00

\$185.00

\$133.00