

Task Order No. R13-063-09-Amendment 2

Boynton Beach Landfill Post-Closure Maintenance Assistance

A. Background

CH2M HILL Engineers, Inc. (CH2M) historically has assisted the City of Boynton Beach (City) with the preparation and certification of semi-annual groundwater sampling reports for the City's Class I landfill (Landfill) in accordance with the Palm Beach County Health Department (PBCHD) Permits for post-closure monitoring. Additionally, CH2M helped the City develop a groundwater investigation program, accepted by the PBCHD, designed to evaluate a decision to cease long-term groundwater monitoring.

Concurrent with the groundwater investigation, CH2M assisted the City with implementation of a corrective action plan in response to Consent Order SW-15-08 issued by the PBCHD. The corrective action plan involved the following activities:

- Repair of exposed geomembrane (20-mil very low density polyethylene);
- Importing and placing granular fill to provide a minimum of 18 inches of soil overlying the geomembrane;
- Installation of sod to provide vegetative erosion protect for the newly placed soil; and
- Installation and monitoring of landfill gas (LFG) monitoring probes along the northern and eastern perimeter of the Landfill.

The LFG monitoring probes were installed on August 30-31, 2016 and allowed to stabilize before sampling began. Three sampling events were then conducted: November 10, 2016; November 15, 2016; and February 15-16, 2017. During the initial sampling events on November 10 and November 15, methane, a constituent of LFG, was detected at Probes GP-7, GP-8, and GP-12 at levels below the Lower Explosive Limit (LEL). No methane was detected in any of the other LFG probes during the November sampling events. During the February 15-16, 2017 sampling event, two readings were obtained from each probe and methane values for Probe GP-8 exceeded the LEL for methane. With the exception of the LEL exceedance at Probe GP-8, no methane was detected in any of the other LFG probes during the February 2017 sampling event.

In response to the exceedance of the LEL at Probe GP-8, the City, with assistance from CH2M, developed an initial gas remediation plan in accordance with Chapter 62-701.530(3)(a), Florida Administrative Code. The plan was to resample all LFG probes currently installed at the landfill and to install additional monitoring probes in the vicinity of Probe GP-8. Resampling of Probe GP-8 on March 1, 2017 indicated methane readings above the LEL. The City expanded their response actions to provide for the health, safety and welfare of residents in the vicinity of the Landfill. This scope of services describes the activities provided by CH2M in conjunction with the LFG remediation plan development and implementation.

B. Scope of Services

This is Amendment 2 to Task Order No. R13-063-09. Tasks 1 through 7 were previously authorized under the original Task Order and Amendment 1; therefore, the Tasks under this amendment begin at Task 8.

Task 8 – Initial Notification and Communications

Upon measuring the elevated LFG reading from Probe GP-8, CH2M scheduled and conducted a meeting/teleconference with City staff to inform them of the findings, and to provide guidance regarding response and regulatory obligations. The intent of the initial response was to provide protection for the health, safety and welfare of nearby residents and to coordinate planned actions with City staff and regulatory authorities. Following the initial meeting/teleconference with the City, a series of teleconferences were conducted to discuss a response strategy, and to develop notification documents for the PBCHD and the residents near the Landfill. Draft documents were prepared by CH2M, and final documents were prepared and distributed by the City.

Deliverables

- Draft letter to PBCHD, electronic
- List of frequently asked question (FAQs) and responses, electronic

Task 9 –Notification of Residents near Landfill

Following the resampling of the LFG probes and the finding of further elevation of methane readings at Probe GP-8, additional activities were undertaken. These activities included: notification of other City and County officials, including Palm Beach County Fire Rescue; door-to-door notification of residents near the Landfill; additional LFG monitoring data collection from the LFG probes; methane monitoring inside residences along the north side of the Landfill; and push probe LFG monitoring in the vicinity of Probe GP-8. The initial approach was to install additional monitoring probes and passive LFG vent wells in the vicinity of Probe GP-8, but this approach proved unsuccessful because of the slope of the berm, proximity of Probe GP-8 to the Landfill perimeter fence and a lack of closure as-built information to precisely determine the limits of the geomembrane.

After sampling inside the residences and push probe sampling near Probe GP-8 indicated no positive results for methane, the need for immediate installation of additional probes and LFG vent wells diminished, and it was decided to postpone the installation until the logistics could be further evaluated.

Deliverable

- Draft letter to residents, electronic

Task 10 – Development of Contract Documents for Additional Monitoring and Remediation

CH2M will assisted the City with the development of contract documents, drawings and specifications for the installation of eight (8) passive LFG vent wells and three (3) additional LFG monitoring probes in the vicinity of Probe GP-8. The City will be responsible for obtaining permission from the residents to install vents and/or probes that need to be located outside the landfill perimeter fence, and may be on residents' property. The City will also obtain the services of a Florida licensed surveyor to conduct a boundary survey to determine the property boundaries of the Landfill property prior to the installation of passive LFG vent wells and/or additional LFG monitoring probes.

Deliverables

- Site plan drawing showing vent and probe locations, electronic
- Drawings showing construction details for the LFG monitoring probes and passive LFG vent wells (e.g., one (1) site plan and two (2) detail drawing – probe and well) , electronic
- Material specifications for vents and probe construction on detail drawings or as separate document, electronic
- Bid Form, electronic

Task 11 – LFG Monitoring Program

Under this task, CH2M will conduct monitoring of the LFG probes at the Landfill. There are currently thirteen (13) at the landfill and three (3) additional probes are anticipated to be installed by mid-April 2017. The probes will be monitored on a weekly basis between March 6, 2017 and June 2, 2017, every other week between June 5, 2017 and August 25, 2017, monthly for the remainder of Calendar Year (CY) 2017 and quarterly during CY 2018. This is a total of twenty-seven (27) sampling events.

CH2M will provide a data report to the City at the end of each sampling event and will maintain a summary table of the data collected since the beginning of sampling in November 2016. Following the completion of the last sampling episode in CY 2018, CH2M will prepare a Technical Memorandum (TM) describing the data collection efforts and summarizing the data. The TM will include a recommendation for further monitoring, if appropriate. CH2M will provide the City with a draft TM for review and comment. Following adjudication of any feedback, CH2M will submit the final TM to the City.

Deliverables

- Monitoring Plan, electronic
- Sampling data for each sampling event, electronic
- Summary table showing sampling data starting in November 2016. Summary table to be updated and provided to the City following each sampling episode, electronic
- Draft TM documenting the LFG sampling efforts, electronic
- Final TM documenting the LFG sampling efforts, electronic

Task 12 – Services During Construction

CH2M will provide services during construction including reviewing and responding to up to three (3) contractor submittals of materials for gas probe and vent well installation. CH2M's field support includes daily observation by one CH2M staff member (9 hours per day) for 4 days.

Deliverables

- Submittal Review Forms, electronic
- Construction Logbook, electronic
- Sketch showing the location of the passive LFG vent wells and LFG monitoring probes relative to the position of Probe GP8, electronic

Task 13 – Ongoing Technical and Administrative Support

CH2M will continue to provide technical and administrative support regarding potential LFG migration under this task. Support will be provided on an as needed basis up to the level of effort assigned to this task in Table 1 – Fee Compensation. For each specific assignment, the deliverables, schedules and the associated costs to complete the work will be confirmed by you or your designee and CH2M prior to beginning work.

Deliverable

- No specific deliverable under this task. Deliverable will depend on City's needs.

C. Assumptions

This estimated cost is based on the following assumptions:

- The City will be responsible for managing the procurement process for the installation of the monitoring probes and vent wells;
- The City will be responsible for submitting documents to the PBCHD and residents;
- No subcontractors will be utilized by CH2M during the delivery of the scope included herein; and
- The presence or duties of CH2M's personnel at a construction site, whether as onsite representatives or otherwise, do not make CH2M or CH2M's personnel in any way responsible for those duties that belong to the City and/or the construction contractor or other entities, and do not relieve the construction contractor or any other entity of their obligations, duties, and responsibilities, including, but not limited to, all construction methods, means, techniques, sequences, and procedures necessary for coordinating and completing all portions of the construction work in accordance with the construction Contract Documents and any health or safety precautions required by such construction work.

D. Contract Reference

This Task Order shall be performed under the terms and conditions described within the Agreement titled Hydrogeological Consulting Services, dated August 19, 2013, between the City of Boynton Beach and CH2M Hill Engineers, Inc., as amended, and under the terms and conditions described within Task Order R13-063-09, amended herein.

E. Compensation

Compensation by the City to CH2M will be on a lump sum basis in accordance with the above-referenced Agreement. The estimated compensation for the additional services described in this Task Order Amendment 2 is \$155,904.28 as presented in Table 1, which is attached.

Material or other changes in the Scope of Services for this work may serve as a basis of modifying the agreement as mutually agreed between CH2M and City. CH2M's Project Manager will notify City's Project Manager in writing if it appears that a deviation from the currently authorized Scope of Services will be necessary. The notification will describe the specific reason for the deviation, and identify the anticipated impact on the authorized Contract Amount and project schedule. In no event shall the CH2M perform work outside of the scope of services without direct prior authorization from the City.

F. Schedule

Schedules for activities performed on an as needed basis, or to observe work performed by City contractors will be as mutually agreed by the parties at time of service. The schedule for monitoring services will be as described in Task 11. Data reports for Individual sampling episodes will be delivered to the City within one week of the completion of the sampling episode. The draft TM documenting and summarizing the overall sampling activities will be submitted to the City's within 60 days of completing the final sampling episode. The final TM will be submitted to the City within 15 calendar days of the receipt of City comments.

G. Authorization

APPROVED BY:
CITY OF BOYNTON BEACH, FLORIDA

By: _____

Dated this _____ day of _____, 2017

SUBMITTED BY:
CH2M

By:  _____
Francois Didier Menard, P.E.
Vice President

Dated this 28th day of March, 2017

TABLE 1. - FEE COMPENSATION AMENDED QUANTITIES

TASK	HOURS	RATE	TOTAL
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Task 8 – Initial Notification and Communications

Principal	15	\$ 210.00	\$3,150.00
Sr. Project Manager	8	\$ 208.14	\$1,665.12
Project Manager	0	\$ 137.74	\$0.00
Sr. Technologist	21	\$ 191.87	\$4,029.27
Sr. Engineer/Scientist	0	\$ 155.00	\$0.00
Engineer/Scientist	22	\$ 120.00	\$2,640.00
Jr. Engineer/Scientist	0	\$ 90.00	\$0.00
Designer	0	\$ 105.81	\$0.00
Technician	0	\$ 103.53	\$0.00
Office	0	\$ 86.22	\$0.00

Expenses			\$905.30
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TASK SUBTOTAL			\$12,389.69
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Task 9 –Notification of Residents near Landfill

Principal	6	\$ 210.00	\$1,260.00
Sr. Project Manager	16	\$ 208.14	\$3,330.24
Project Manager	0	\$ 137.74	\$0.00
Sr. Technologist	2	\$ 191.87	\$383.74
Sr. Engineer/Scientist	0	\$ 155.00	\$0.00
Engineer/Scientist	4	\$ 120.00	\$480.00
Jr. Engineer/Scientist	0	\$ 90.00	\$0.00
Designer	22	\$ 105.81	\$2,327.82
Technician	0	\$ 103.53	\$0.00
Office	2	\$ 86.22	\$172.44

Expenses			\$613.60
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TASK SUBTOTAL			\$8,567.84
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Task 10 – Development of Contract Documents for Additional Monitoring and Remediation

Principal	5	\$ 210.00	\$1,050.00
Sr. Project Manager	0	\$ 208.14	\$0.00
Project Manager	0	\$ 137.74	\$0.00
Sr. Technologist	11	\$ 191.87	\$2,110.57
Sr. Engineer/Scientist	0	\$ 155.00	\$0.00
Engineer/Scientist	18	\$ 120.00	\$2,160.00
Jr. Engineer/Scientist	0	\$ 90.00	\$0.00
Designer	0	\$ 105.81	\$0.00
Technician	0	\$ 103.53	\$0.00
Office	0	\$ 86.22	\$0.00

Expenses			\$444.70
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TASK SUBTOTAL			\$5,765.27
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TASK	HOURS	RATE	TOTAL
Task 11 – LFG Monitoring Program			
Principal	0	\$ 210.00	\$0.00
Sr. Project Manager	30	\$ 208.14	\$6,244.20
Project Manager	0	\$ 137.74	\$0.00
Sr. Technologist	10	\$ 191.87	\$1,918.70
Sr. Engineer/Scientist	0	\$ 155.00	\$0.00
Engineer/Scientist	194	\$ 120.00	\$23,280.00
Jr. Engineer/Scientist	0	\$ 90.00	\$0.00
Designer	172	\$ 105.81	\$18,199.32
Technician	0	\$ 103.53	\$0.00
Office	18	\$ 86.22	\$1,551.96
Expenses			\$4,029.10
TASK SUBTOTAL			\$55,223.28

Task 12 – Services During Construction

Principal	0	\$ 210.00	\$0.00
Sr. Project Manager	12	\$ 208.14	\$2,497.68
Project Manager	0	\$ 137.74	\$0.00
Sr. Technologist	5	\$ 191.87	\$959.35
Sr. Engineer/Scientist	0	\$ 155.00	\$0.00
Engineer/Scientist	15	\$ 120.00	\$1,800.00
Jr. Engineer/Scientist	0	\$ 90.00	\$0.00
Designer	41	\$ 105.81	\$4,338.21
Technician	0	\$ 103.53	\$0.00
Office	6	\$ 86.22	\$517.32
Expenses			\$782.65
TASK SUBTOTAL			\$10,895.21

Task 13 – Ongoing Technical and Administrative Support

Principal	26	\$ 210.00	\$5,460.00
Sr. Project Manager	18	\$ 208.14	\$3,746.52
Project Manager	0	\$ 137.74	\$0.00
Sr. Technologist	121	\$ 191.87	\$23,216.27
Sr. Engineer/Scientist	0	\$ 155.00	\$0.00
Engineer/Scientist	60	\$ 120.00	\$7,200.00
Jr. Engineer/Scientist	0	\$ 90.00	\$0.00
Designer	40	\$ 105.81	\$4,232.40
Technician	0	\$ 103.53	\$0.00
Office	90	\$ 86.22	\$7,759.80
Expenses			\$4,024.00
TASK SUBTOTAL			\$55,638.99

AMENDMENT 2 SUBTOTAL	\$148,480.28
AMENDMENT 2 ALLOWANCE (5%)	\$7,424.00
AMENDMENT 2 TOTAL	\$155,904.28

PREVIOUS TASK ORDER TOTAL	\$79,142.66
AMENDED TASK ORDER TOTAL	\$235,046.94

PURCHASE ORDER CITY OF BOYNTON BEACH, FLORIDA

PROCUREMENT SERVICES DEPARTMENT
100 EAST BOYNTON BEACH BOULEVARD
P.O. BOX 310
BOYNTON BEACH, FLORIDA 33425-0310

P.O. #: 160652
DATE: 12/23/15

VENDOR 507

TO: CH2M HILL INC.
P.O. BOX 200991
DALLAS, TX 75320

SHIP TO:
City of Boynton Beach
PUBLIC WORKS DEPARTMENT
222 N.E. 9TH AVENUE
BOYNTON BEACH, FL 33435

REQUISITION NO. 65513	ORDERING DEPARTMENT: SW/AGGA	INQUIRIES REGARDING PURCHASE ORDER CALL (561)742-6310
DATE NEEDED:	BID NO: COMMISSION APPROVED:	

LINE#	QUANTITY	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
			***** * CHANGE #: 2 * * CHANGE ORDER * * DATE CHG: 01/05/17 * *****		
29	2732.56	DL	CO #2 - SITE VISIT & TELECONFERENCE WITH FDEP	1.0000 2732.56	2732.56 ✓
30	1622.56	DL	CO #2 - TELECONFERENCE WITH LWDD	1.0000 1622.56	1622.56 ✓
31	17620.70	DL	CO #2 - PRODUCE DESIGN CRITERIA PACKAGE & BID TAB	1.0000 17,400.00	17620.70 ✓
32	3548.84	DL	CO #2 - PREPARE AN OPINION OF PROBABLE CONSTRUCTION COST	1.0000 3190.45	3548.84 ✓
33	7727.56	DL	CO #2 - CONTRACTOR SELECTION ASSISTANCE	1.0000 7,103.25	7727.56 ✓
34	33432.76	DL	CO #2 - SERVICES DURING CONSTRUCTION	1.0000 34,088.12	33432.76 ✓
35	12457.68	DL	CO #2 - PERIMETER LANDFILL GAS PROBE TESTING	1.0000 3,022.51	12457.68 ✓

REMARKS:
LANDFILL POST-CLOSURE MAINTENANCE ASSISTANCE
TASK ORDER R13-063-09
R15-149 COMMISSION APPROVED 12/1/15

4-22-2016: Amendment 1 (R16-061), Commission Approved 4-19-2016. ADD \$32,016.40 to purchase order for additional services on the Boynton Beach Landfill Post-Closure Maintenance/Repair Assistance.
1/5/17: CHANGE ORDER 2 - RE-ENTER LINE ITEMS BY



PROCUREMENT SERVICES:	<i>[Signature]</i>	P.O. TOTAL: 79142.66
ACCOUNT NO. 431-2515-534.49-17	PROJECT	

DEPARTMENT

PURCHASE ORDER
CITY OF BOYNTON BEACH, FLORIDA

PROCUREMENT SERVICES DEPARTMENT
100 EAST BOYNTON BEACH BOULEVARD
P.O. BOX 310
BOYNTON BEACH, FLORIDA 33425-0310

P.O. #: 160652
DATE: 12/23/15

VENDOR 507

TO: CH2M HILL INC.
P.O. BOX 200991
DALLAS, TX 75320

SHIP TO:
City of Boynton Beach
PUBLIC WORKS DEPARTMENT
222 N.E. 9TH AVENUE
BOYNTON BEACH, FL 33435

REQUISITION NO. 65513	ORDERING DEPARTMENT: SW/AGGA	INQUIRIES REGARDING PURCHASE ORDER CALL (561)742-6310
DATE NEEDED:	BID NO: COMMISSION APPROVED:	

LINE#	QUANTITY UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST

		* CHANGE #: 2 *		
		* CHANGE ORDER *		
		* DATE CHG: 01/05/17 *		

TASKS IN ORDER TO RECEIVE INVOICES ON PO.

1/19/17 - Invoice #1: \$49,205.54

PROCUREMENT SERVICES:		P.O. TOTAL:
ACCOUNT NO. 431-2515-534.49-17	PROJECT	

DEPARTMENT

**PURCHASE ORDER
CITY OF BOYNTON BEACH, FLORIDA**

PROCUREMENT SERVICES DEPARTMENT
100 EAST BOYNTON BEACH BOULEVARD
P.O. BOX 310
BOYNTON BEACH, FLORIDA 33425-0310

P.O. #: 160652
DATE: 12/23/15

VENDOR 507

TO: CH2M HILL INC.
P.O. BOX 200991
DALLAS, TX 75320

SHIP TO:
City of Boynton Beach
PUBLIC WORKS DEPARTMENT
222 N.E. 9TH AVENUE
BOYNTON BEACH, FL 33435

REQUISITION NO. 65513	ORDERING DEPARTMENT: SW/AGGA	INQUIRIES REGARDING PURCHASE ORDER CALL (561)742-6310
DATE NEEDED:	BID NO: COMMISSION APPROVED:	

LINE#	QUANTITY UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
		***** * CHANGE #: 1 *		
		* CHANGE ORDER *		
		* DATE CHG: 04/22/16 *		

28	32016.40 DL	AMENDMENT 1 TO TASK ORDER R13-063-09; Additional Tasks related to the Boynton Beach Landfill Post-Closure Maintenance Assistance. ADD \$32,016.40 to purchase order for Amendment 1. Commission Approved April 19, 2016.	1.0000	32016.40

REMARKS:
LANDFILL POST-CLOSURE MAINTENANCE ASSISTANCE
TASK ORDER R13-063-09
R15-149 COMMISSION APPROVED 12/1/15

4-22-2016: Amendment 1 (R16-061), Commission
Approved 4-19-2016. ADD \$32,016.40 to purchase
order for additional services on the Boynton
Beach Landfill Post-Closure Maintenance/Repair
Assistance.

PROCUREMENT SERVICES:		P.O. TOTAL: 32016.40
ACCOUNT NO. 431-2515-534.49-17	PROJECT	

DEPARTMENT

**PURCHASE ORDER
CITY OF BOYNTON BEACH, FLORIDA**

PROCUREMENT SERVICES DEPARTMENT
100 EAST BOYNTON BEACH BOULEVARD
P.O. BOX 310
BOYNTON BEACH, FLORIDA 33425-0310

P.O. #: 160652
DATE: 12/23/15

VENDOR 507

TO: CH2M HILL INC.
P.O. BOX 200991
DALLAS, TX 75320

SHIP TO:
City of Boynton Beach
PUBLIC WORKS DEPARTMENT
222 N.E. 9TH AVENUE
BOYNTON BEACH, FL 33435



REQUISITION NO. 65513	ORDERING DEPARTMENT: SW/AGGA	INQUIRIES REGARDING PURCHASE ORDER CALL (561)742-6310
DATE NEEDED:	COMMISSION APPROVED:	

LINE#	QUANTITY UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
1	120.00 HR	SITE VISIT & TELECONFERENCE W/FDEP-ENGINEER -10.00	12.0000	1440.00
2	155.00 HR	SITE VISIT & TELECONFERENCE W/FDEP-SR ENGINEER	2.0000	310.00
3	208.14 HR	SITE VISIT & TELECONFERENCE W/FDEP-SR PROJECT MGR -2.00	4.0000	832.56
4	150.00 DL	SITE VISIT & TELECONFERENCE W/FDEP-EXPENSES	1.0000	150.00
5	120.00 HR	TELECONFERENCE W/LWDD-ENGINEER	4.0000	480.00
6	155.00 HR	TELECONFERENCE W/LWDD-SR ENGINEER	2.0000	310.00
7	208.14 HR	TELECONFERENCE W/LWDD-SR PROJECT MGR	4.0000	832.56
8	1.00 EA	TELECONFERENCE W/LWDD-EXPENSES	.0001	.00
9	86.22 HR	PRODUCE DESIGN CRITERIA PACKAGE & BID TAB-OFFICE	6.0000	517.32
10	120.00 HR	PRODUCE DESIGN CRITERIA PACKAGE & BID TAB-ENGINEER	60.0000	7200.00
11	155.00 HR	PRODUCE DESIGN CRITERIA PACKAGE & BID TAB-SR ENGIN -2	10.0000	1550.00
12	208.14 HR	PRODUCE DESIGN CRITERIA PACK & BID TAB-SR PRJ MGR -16.50	17.0000	3538.38
13	1.00 EA	PRODUCE DESIGN CRITERIA PACKAGE & BID TAB-EXPENSES	.0001	.00
14	120.00 HR	PREPARE OPINION OF PROBABLE CONST COST-ENGINEER	14.0000	1680.00
15	155.00 HR	PREPARE OPINION OF PROBABLE CONST COST-SR ENGINEER	2.0000	310.00

PROCUREMENT SERVICES:		P.O. TOTAL:
ACCOUNT NO. 431-2515-534.49-17	PROJECT	

DEPARTMENT

**PURCHASE ORDER
CITY OF BOYNTON BEACH, FLORIDA**

PROCUREMENT SERVICES DEPARTMENT
100 EAST BOYNTON BEACH BOULEVARD
P.O. BOX 310
BOYNTON BEACH, FLORIDA 33425-0310

P.O. #: 160652
DATE: 12/23/15

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DALLAS, TX 75320

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City of Boynton Beach
PUBLIC WORKS DEPARTMENT
222 N.E. 9TH AVENUE
BOYNTON BEACH, FL 33435

REQUISITION NO. 65513	ORDERING DEPARTMENT: SW/AGGA	INQUIRIES REGARDING PURCHASE ORDER CALL (561)742-6310
DATE NEEDED:	COMMISSION APPROVED:	

LINE#	QUANTITY	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
16	208.14	HR	PREPARE OPINION OF PROBABLE CONST COST-SR PRJ MGR	4.0000	832.56
17	1.00	EA	PREPARE OPINION OF PROBABLE CONST COST-EXPENSES	.0001	.00
18	86.22	HR	CONTRACTOR SELECTION ASST-OFFICE	6.0000	517.32
19	120.00	HR	CONTRACTOR SELECTION ASST-ENGINEER	16.0000	1920.00
20	155.00	HR	CONTRACTOR SELECTION ASST-SR ENGINEER	12.0000	1860.00
21	208.14	HR	CONTRACTOR SELECTION ASST-SR PROJECT MGR	-13 16.0000	3330.24
22	100.00	DL	CONTRACTOR SELECTION ASST-EXPENSES	1.0000	100.00
23	86.22	HR	SERVICES DURING CONSTRUCTION-OFFICE	-54.30 40.0000	3448.80
24	120.00	HR	SERVICES DURING CONSTRUCTION-ENGINEER	-65- 80.0000	9600.00
25	155.00	HR	SERVICES DURING CONSTRUCTION-SR ENGINEER	4.0000	620.00
26	208.14	HR	SERVICES DURING CONSTRUCTION-SR PROJECT MGR	-3 18.0000	3746.52
27	2000.00	DL	SERVICES DURING CONSTRUCTION-EXPENSES	1.0000	2000.00

REMARKS:
LANDFILL POST-CLOSURE MAINTENANCE ASSISTANCE

PROCUREMENT SERVICES:		P.O. TOTAL:	47126.26
ACCOUNT NO. 431-2515-534.49-17	PROJECT		

DEPARTMENT

PURCHASE ORDER
CITY OF BOYNTON BEACH, FLORIDA

PROCUREMENT SERVICES DEPARTMENT
100 EAST BOYNTON BEACH BOULEVARD
P.O. BOX 310
BOYNTON BEACH, FLORIDA 33425-0310

P.O. #: 160652
DATE: 12/23/15

VENDOR 507

TO: CH2M HILL INC.
P.O. BOX 200991
DALLAS, TX 75320

SHIP TO:
City of Boynton Beach
PUBLIC WORKS DEPARTMENT
222 N.E. 9TH AVENUE
BOYNTON BEACH, FL 33435

REQUISITION NO. 65513	ORDERING DEPARTMENT: SW/AGGA	INQUIRIES REGARDING PURCHASE ORDER CALL (561)742-6310
DATE NEEDED:	BID NO:	
	COMMISSION APPROVED:	

LINE#	QUANTITY	UOM	ITEM NO. AND DESCRIPTION	UNIT COST	EXTENDED COST
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TASK ORDER R13-063-09
R15-149 COMMISSION APPROVED 12/1/15

PROCUREMENT SERVICES:		P.O. TOTAL:
ACCOUNT NO. 431-2515-534.49-17	PROJECT	

DEPARTMENT

Task Order No. R13-063-09Exhibit B**Boynton Beach Landfill Post-Closure Maintenance Assistance****A. Background**

Since 2010 CH2M HILL Engineers, Inc. (CH2M) has assisted the City of Boynton Beach (City) with the preparation and certification of semi-annual groundwater sampling reports for the City's Class I landfill (Landfill) in accordance with the Palm Beach County Health Department (PBCHD) Permit Number 124522-005-SF for post-closure monitoring. Additionally, CH2M helped the City develop a groundwater investigation program, accepted by the PBCHD, designed to evaluate a decision to cease long-term groundwater monitoring. The hydrogeologic investigation is expected to take place during Fiscal Year 2015/16; this investigation is not considered as part of this scope of work.

Concurrently, CH2M's proposed scope of work in this proposal is aligned with the City's goal to meet regulatory guidelines by repairing sections of final cover damaged by erosion during the long-term care period of the City's Landfill. The professional services consist of the following activities, which are detailed in the Scope of Work:

- CH2M will conduct a brief site visit to review the findings of the September 3, 2015 Florida Department of Environmental Protection Inspection Checklist.
- CH2M will convene a teleconference with Florida Department of Environmental Protection (FDEP) officials to confirm the process and requirements to obtain regulatory approval for required remedial actions prior to the City procuring a qualified contractor and commencing repairs to the final cover system; CH2M will facilitate a teleconference with the City and the Lake Worth Drainage District (LWDD) to discuss procurement of access approval and to memorialize any LWDD permit or restoration requirements in the procurement package prepared by the City;
- CH2M will prepare a written corrective action plan (CAP) as required by Question 3.4 in the September 3, 2015 Florida Department of Environmental Protection Inspection Checklist. It is assumed that the design criteria package including a grading plan will serve as the basis for the CAP, which will be submitted to FDEP by the City.
- CH2M will prepare a design criteria package, which will be included in the procurement package prepared by the City;
- CH2M will prepare an opinion of probable construction cost based upon estimated quantities. The estimate will include mobilization / demobilization, granular fill, topsoil, and sod or seed covering;
- CH2M will serve as a technical resource during the bid review process; and
- CH2M will provide limited services during construction including submittal reviews and field observation necessary to prepare the certification of construction completion documentation at the conclusion of the project for submission to FDEP.

B. Scope of Services

The scope of services included in this authorization are as follows:

Task 1 –Site Visit and Teleconference with FDEP

CH2M will conduct a brief site visit with City staff to review the findings of the September 3, 2015 Florida Department of Environmental Protection Inspection Checklist. CH2M will then facilitate a teleconference with the City and FDEP to confirm the requirements to obtain regulatory approval for required remedial actions prior to commencing repairs to the final cover system. CH2M will prepare a meeting agenda for distribution and discussion with attendees. The teleconference is expected to last up to two (2) hours. Following the meeting, CH2M will prepare a draft meeting summary, identifying critical discussion points for review and comment by all participants.

For budgetary purposes, it is assumed the Principal, Senior Project Manager and Project Manager will participate in the teleconference on behalf of CH2M.

Deliverables

- Agenda, electronic
- Draft and Final Meeting Summary (draft for review by all)

Task 2 –Teleconference with LWDD

CH2M will facilitate and participate in a teleconference with the City and LWDD representatives to negotiate access approval to the site and address any LWDD requirements in the procurement package prepared by the City.

For budgetary purposes, it is assumed the Principal and Senior Project Manager will participate on behalf of CH2M.

Deliverables

- Agenda, electronic
- Draft and Final Meeting Summary (draft for review by all)

Task 3 – Produce Bid Package and Bid Form

CH2M will prepare a written corrective action plan that will serve as the basis for the bid package that includes construction drawings, technical construction specifications, a site plan that delineates the work limits and a grading plan. The bid package will be incorporated into the procurement package prepared by the City.

It should be noted that CH2M will need to obtain current topographic information from the City to prepare preliminary design drawings. It is assumed that the City will engage a qualified surveying firm to perform a pre-construction survey. CH2M will provide technical assistance to the City to develop the scope of work for the selected surveying firm. Using the pre-construction survey, CH2M will develop plans for construction of the final cover of portions where erosion damage has occurred and will include standard erosion control drawings or FDOT call outs (e.g., silt fence, hay bales) where needed.

CH2M will prepare and submit a draft bid package for the City's review and comment. For budgetary purposes, it is assumed that the Senior Project Manager and Project Manager will participate in a teleconference with the City following the draft submittal to discuss written comments received from the City and respond to questions. The City is requested to provide one set of consolidated written comments prior to the teleconference. CH2M will respond to the City's comments to finalize the bid package that will be incorporated into the procurement package prepared by the City.

Once the bid package has been approved by the City, CH2M will provide electronic files. CH2M will prepare a bid form in MS-Word format for inclusion in the City's front-end documents.

Deliverables

- Draft and final corrective action plan.
- Draft and final bid package.
- Bid Form.

Task 4 – Prepare an Opinion of Probable Construction Cost

CH2M will prepare an opinion of probable construction cost based upon estimated quantities. The estimate will include mobilization/demobilization, granular fill, topsoil, and sod or seed covering. Bid quantities will be based upon either LS, CY or SY as appropriate.

CH2M will perform a quantity take-off based on the best available information, including the most recent FDEP Inspection Report.

Deliverable

- Opinion of Probable Construction Cost based upon estimated quantities.

Task 5 – Contractor Selection Assistance

CH2M will assist the City as a technical resource during the bid evaluation phase. Activities include attending the pre-bid meeting and providing technical input during the evaluation including responding to bidder questions and preparing addenda. Once bids are received, CH2M will review the bids submitted and provide a summary for City consideration prior to contractor selection. CH2M will conduct a teleconference with the City to discuss pro and cons, as well as any outstanding issues related to CH2M's technical review.

Deliverables

- Attend pre-bid meeting.
- Respond to bidder questions and provide technical input to addenda.
- Prepare draft and final bid evaluation summary memorandum.

Task 6 – Services During Construction

CH2M will provide services during construction including reviewing and responding to up to fifteen (15) contractor submittals including the location of the borrow pit(s) where granular material and topsoil will be obtained. CH2M's field support includes daily observation by one CH2M staff member (4 hours) for 10 days.

Following project completion, CH2M will draft, finalize and submit to FDEP an application for certification of construction completion, signed and sealed by a professional engineer, at the completion of this project.

A draft of the application for certification of construction completion will be submitted for review and comment by the City. CH2M will adjudicate City comments and finalize the application prior to submission to FDEP. Following submittal to FDEP, CH2M will respond to up to 2 (two) Requests for Additional Information within this task order. Upon acceptance by FDEP, the Certification of Construction Completion should be placed in the operating record.

Deliverables

- Submittal Review Forms
- Submittal Tracking Log
- Construction Logbook
- Draft and final certification of construction completion for submission to FDEP
- Response to up to 2 (two) Requests for Additional Information

C. Assumptions

This estimated cost is based on the following assumptions:

- Additional meetings with the City, FDEP, PBCHD or the contractor are not included in this scope of services.
- The City will be responsible for satisfying any site access requirements negotiated under Task 2.
- The City will complete the site survey by December 4, 2015.
- The City will be responsible for managing the procurement process and meeting the timelines presented in the Consent Order.
- The City will review and provide comments on the draft Bid Package and draft Bid Form within one (1) week of submittal by CH2M.
- The City will be responsible for submitting all required documents to the PBCHD as specified in the Consent Order.
- CH2M is not responsible for City nor contractor delays that result in penalties specified in the Consent Order.
- No subcontractors will be utilized by CH2M during the delivery of the scope included herein.
- The City is responsible for continuing the yearly maintenance program implemented for the post closure monitoring period as specified in the Consent Order.
- If the duration of the selected Contractor's work is greater than the time assumed in this Task Order or if the City self-performs some of the inspections during construction, the level of effort for the services during construction may be amended.

D. Contract Reference

This Task Order shall be performed under the terms and conditions described within the Agreement titled Hydrogeological Consulting Services, dated August 19, 2013, between the City of Boynton Beach and CH2M Hill Engineers, Inc., as amended.

E. Compensation

Compensation by the City to CH2M will be on a time and materials basis in accordance with the above-mentioned Agreement. The estimated compensation for the services described in this Task Order is \$47,126.26 as presented in Table 1.

TABLE 1.

TASK	HOURS	RATE	TOTAL
1. Site Visit and Teleconference with FDEP			
Engineer	12	\$120.00	\$1,440.00
Senior Engineer	2	\$155.00	\$310.00
Senior Project Manager	4	\$208.14	\$832.56
Expenses			\$150.00
SUBTOTAL			\$2,732.56
2. Teleconference with LWDD			
Engineer	4	\$120.00	\$480.00
Senior Engineer	2	\$155.00	\$310.00
Senior Project Manager	4	\$208.14	\$832.56
Expenses			\$0.00
SUBTOTAL			\$1,622.56
3. Produce Design Criteria Package and Bid Tab			
Office	6	\$86.22	\$517.32
Engineer	60	\$120.00	\$7,200.00
Senior Engineer	10	\$155.00	\$1,550.00
Senior Project Manager	17	\$208.14	\$3,538.38
Expenses			\$0.00
SUBTOTAL			\$12,805.70
4. Prepare an Opinion of Probable Construction Cost			
Engineer	14	\$120.00	\$1,680.00
Senior Engineer	2	\$155.00	\$310.00
Senior Project Manager	4	\$208.14	\$832.56
Expenses			\$0.00
SUBTOTAL			\$2,822.56
5. Contractor Selection Assistance			

Office	6	\$86.22	\$517.32
Engineer	16	\$120.00	\$1,920.00
Senior Engineer	12	\$155.00	\$1,860.00
Senior Project Manager	16	\$208.14	\$3,330.24

Expenses			\$100.00
SUBTOTAL			\$7,727.56

6. Services During Construction

Office	40	\$86.22	\$3,448.80
Engineer	80	\$120.00	\$9,600.00
Senior Engineer	4	\$155.00	\$620.00
Senior Project Manager	18	\$208.14	\$3,746.52

Expenses			\$2,000.00
SUBTOTAL			\$19,415.32

TOTAL			\$47,126.26
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F. Schedule

CH2M estimates that its scope of work will be completed as presented below in Table 1. Every effort will be made to expedite the completion of the tasks.

Table 1
Project Schedule

Activity	Target Completion Date
Notice to Proceed Issued to CH2M	December 2, 2015
Site Visit and Teleconference with FDEP	December 31, 2015
Teleconference with LWDD	January 8, 2016
Draft Bid Package and Bid Form	January 29, 2016
Final Bid Package and Bid Form	February 12, 2016
Submit an Opinion of Probable Construction Cost	February 12, 2016
City Advertises Bid Pursuant to the Consent Order	March 4, 2016
Contractor Selection Assistance	April 22, 2016
Services During Construction	June 24, 2016

G. Authorization

APPROVED BY:
CITY OF BOYNTON BEACH, FLORIDA

By: Lou Salvarani

Dated this 8 ^{December} day of ~~November~~, 2015.

APPROVED AS TO FORM:

[Signature]
CITY ATTORNEY

SUBMITTED BY:
CH2M

By: [Signature]
Matthew B. Alvarez, PE
Vice President and Area Manager

Dated this 6 day of November, 2015