

# Memo

To: Coakley Executive Committee  
From: Peter Britz, Coakley Coordinator  
Date: January 13, 2021  
Re: Activity report

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## **Deep Bedrock Study**

Timber mats have been installed, well driller is expected to begin installation of new monitoring well over the next two weeks. The well installation is scheduled to begin Monday January 18<sup>th</sup> and should be complete in 3-4 days if there are no equipment issues or other delays.

## **CES Contract**

Contract amendment to cover additional work not yet contracted for the proposed new MW-25 well. This work includes the timber mats, access clearing, and interval packer sampling. There is also a request to approve use of additional funds from the Task 7 budget of amendment 10424016-03 from back on December 17, 2019. The contract is attached as (*2021-01-07 Contract Amendment\_Deep Bedrock Investigation\_10424016-07.pdf*)

## **Fall Sampling Results**

The data validator has completed the review of the fall sampling results. These will be compiled and released in the next week or two. The results include the sampling of OU-1 and OU-2 as well as the residential supply wells.

## **CES now Haley Ward**

CES acquired Haley & Ward, a civil and environmental engineering firm with a 123-year history. The decision was made to change the CES name to Haley Ward. Future correspondence and email addresses will now have the Haley ward name associated with them.



Engineers ♦ Environmental Scientists ♦ Surveyors

January 7, 2021

Mr. Peter Britz  
Coakley Project Coordinator  
1 Junkins Avenue  
Portsmouth, New Hampshire 03801

**Re: Contract Amendment for Deep Bedrock Investigation Tasks  
Coakley Landfill Superfund Site | North Hampton and Greenland, New Hampshire  
Contract Number: 10424016-07**

Dear Peter:

CES, Inc. (CES) is pleased to submit the following contract amendment for professional consulting services to the Coakley Landfill Group (CLG). The Scope of Services for this amendment includes the completion of investigative tasks associated with the deep bedrock investigation. These tasks were incorporated into the Revised Deep Bedrock Investigation Work Plan Addendum (Work Plan Addendum) as submitted to the United States Environmental Protection Agency (USEPA) and New Hampshire Department of Environmental Services (NHDES) on July 17, 2020. The Work Plan Addendum was conditionally approved by the USEPA on August 4, 2020.

## **SCOPE OF SERVICES**

Tasks outlined below are those required in support of the Deep Bedrock Investigation

### **Task 1 – Well Access Clearing: MW-25**

The location of proposed deep bedrock monitoring well MW-25 is within a portion of the New Hampshire Department of Transportation (NHDOT) parcel 21-40 requiring brush clearing and tree removal for access. The final location was documented in the *Surface Geophysical Results and MW-25 Well Locating Memorandum* (Memorandum) dated October 2, 2020. These results were reviewed by the USEPA and NHDES with a Site meeting held on October 14, 2020. The location was agreed upon by the Agencies during the meeting. Costs for clearing were not included in contract amendment 10424016-06 (dated October 27, 2020) due to the pending approval of an access agreement with the NHDOT. This agreement was executed between CES and the NHDOT on November 18, 2020.

CES contracted with BC Forestry, LLC of Dover, New Hampshire to complete the clearing of access from the railroad easement west to the proposed well location (approximately 750 feet). Clearing will consist of the removal of blown down trees and selective removal of standing trees (e.g., dead timber). These activities will be completed in accordance with the terms and conditions of the access agreement with the NHDOT.

Mr. Peter Britz | 01.07.2021 | 10424.016-07 | Page 1



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### **Task 2 – Timber Matting Services: MW-25**

Following the clearance of access to the proposed well location, timber matting will be required to facilitate drilling rig access. The matting will serve to protect existing wetland areas located between upland areas and the proposed MW-25 location. These wetland areas contain standing water and soft soils that limit rig access. CES will contract with JCR Utility (JCR) to provide timber matting services in advance of drilling activities. These services will be implemented using Best Management Practices with regards to protection of wetlands and associated upland areas located between the former railroad easement and proposed well location. A meeting between JCR and CES was held on December 4, 2020 to define the Scope of Services. Following placement of timber matting, drilling will be completed with mats remaining in place until completion of borehole geophysics and interval packer sampling.

### **Task 3 – Interval Packer Sampling: MW-25**

Interval packer sampling will be completed at MW-25 following the installation of the boring and borehole geophysical surveying. Costs associated with well installation and borehole geophysics were included with contract amendment 10424016-06 dated October 27, 2020. Interval packer sampling, as per the investigation schedule provided to the Agencies on November 6, 2020, was to be completed following the constant rate pumping test (April 2021). However, based on a request by the USEPA made during a November 18, 2020 call, interval packer sampling should be collected prior to initiation of the variable rate pumping test. As such, costs associated with the completion of interval packer sampling following borehole geophysics has been included below. It is estimated, based on previously completed interval packer sampling efforts at the Site, that approximately twelve samples will be collected (nine intervals and three equipment blanks) as part of the effort. Collected samples will be submitted to Alpha Analytical Laboratories (Alpha) of Westborough, Massachusetts, for analysis of PFAS (26 compound list), 1,4-dioxane, arsenic, manganese, and general landfill parameters (ammonia, chemical oxygen demand, chloride, hardness, and nitrate). Samples will be collected using low-flow techniques and in accordance with *Standard Operating Procedure (SOP) #14 – Straddle Packer Testing* as included with the current project SAP (CES, 2018).

### **Task 4 – Direct Push Investigation: Area West of MW-21S**

The direct push investigation was completed in the area west of MW-21S the weeks of November 30 and December 7, 2020. The direct push investigation costs were included with our Contract Amendment Revision provided to the CLG on October 29, 2020. This revision was to document a change to a Scope of Services provided to the CLG in contract amendment 10424016-03 dated December 17, 2019. Task 7 of this December 17, 2019 amendment included costs associated with the installation of a shallow bedrock monitoring well in the area located west of MW-21S to further define and monitor the western portion of the GMZ. Based on sampling completed in bedrock monitoring well MW-21D1 and MW-21D2, it was determined that a shallow bedrock well was not needed and that delineation of impacts within the western portion of the GMZ would be defined using direct push technology (DPT). The DPT investigation was incorporated into Section 2.7 of the Work Plan Addendum.

During completion of the proposed soil borings and temporary monitoring wells, it was determined that overburden sediments in this area were deeper than anticipated and resulted in an additional day on Site for the DPT subcontractor and required the use of additional well materials. Costs associated with the additional subcontractor costs and CES' completion of field activities associated with this effort are included below. The original costs associated with Task 7 of the December 17, 2019 contract amendment were \$46,100.00 and the October 29, 2020 contract amendment revision were \$22,755.00, or approximately 50% of the original amendment amount. The additional costs outlined below would bring the total budgeted amount to \$28,215.00, or 61% of the original Task 7 budget amount. It should be noted that this is a request for approval for use of these Task 7 funds and is not a request for funds in addition to those provided in Task 7 of contract amendment 10424016-03.

## COMPENSATION

Task	Cost Estimate
<b>Task 1 – Well Access Clearing: MW-25</b>	
CES Access Clearing Oversight and Coordination – Labor and Expenses	\$600.00
<u>BC Forestry, LLC. – Well Access Clearing Services</u>	<u>\$2,750.00</u>
Task Total	\$3,350.00
<b>Task 2 – Timber Mat Placement: MW-25</b>	
CES Contracting and Access Agreement – Labor and Expenses	\$550.00
<u>JCR Utility – Timber Matting Services</u>	<u>\$29,150.00</u>
Task Total	\$29,700.00
<b>Task 3: Interval Packer Sampling: MW-25</b>	
Northeast Geophysical Services – Packer Sampling	\$7,300.00
Alpha Analytical Laboratory – Packer Sampling Analysis	\$7,825.00
CES Packer Sampling Oversight – Labor and Expenses	\$5,250.00
<u>Interval Packer Sampling Recommendations Memorandum</u>	<u>\$2,550.00</u>
Task Total	\$22,925.00
<b>Task 4 – Direct Push Investigation: Area West of MW-21S</b>	
CES DPT Installation and Sampling – Labor and Expenses	\$3,250.00
<u>New England Boring Contractors – DPT Services</u>	<u>\$2,210.00</u>
Task Total	\$5,460.00*
<b>Contract Amendment Total (excludes Task 4)</b>	<b>\$55,975.00</b>

Note: \* - Denotes amount requested for approval of previously provided budget and is not included in contract amendment total.

Costs associated with this project will continue to be invoiced monthly, based upon the work completed during the invoice period. Work will be performed in accordance with contract Terms and Conditions previously executed by CLG and CES under 10424016. The proposed costs, upon approval by the CLG, will be added to the Deep Bedrock Investigation project budget (10424.016) under the terms and conditions and rate schedule used in the original project agreement. An estimate to completion will be prepared when 25% of the budget remains. This estimate will include an analysis of remaining contracted tasks and evaluation of any additionally requested items requested by or approved by the CLG.

If you have any questions concerning this proposal, please contact the undersigned at (207) 404-5958.

Sincerely,  
CES, Inc.



Christopher F. Buckman, P.G.  
Senior Project Geologist



John A. Pond, Executive V.P.  
Principal-in-Charge  
Environmental Division Director

CFB/JAP/jok  
Attachments

Acceptance and Authorization to Proceed on behalf of Coakley Landfill Group:

Signature: \_\_\_\_\_ Billing Address: \_\_\_\_\_

Printed Name: \_\_\_\_\_ City/State/ZIP: \_\_\_\_\_

Date: \_\_\_\_\_ Email (Optional): \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_