

Technical Memorandum

Date 10 April 2009

To Bob Brock/USACE
Joe Malen, Dept. of Army

From Sarah Belway, PE

Subject Taku Gardens Sound Berm Additional Sampling Locations

The purpose of this Technical Memorandum is to provide the plan for additional sound berm sampling at the Former Communication Site, Fort Wainwright, Alaska (FCS). The intent of the additional sampling is to address the Alaska Department of Environmental Conservation's (ADEC) concerns that two sections of the sound berm have not been adequately characterized and that the original discrete sampling was conducted without ADEC approval. Specifically, ADEC expressed these concerns in a letter to the Army dated 23 March 08.

A brief summary of the previous sampling conducted within the sound berm and our proposed plan for additional sampling follows.

PREVIOUS SAMPLING

Surface soil along the sound berm was originally sampled as part of the 2007 remedial investigation (RI) sampling effort by CH2M Hill. The purpose of the sampling was to determine whether contaminants of concern were in the sound berm and if so, do they pose potential risks to human health and the environment. CH2M Hill performed multi-incremental (MI) sampling since there were no known source areas nor were any suspected. The sound berm was divided up into nine decision units and an MI sample was collected from each decision unit. At that time, a second round of discrete sampling would only be conducted if contaminant concentrations in the sound berm were above the screening levels. The discrete sampling would be used to assess potential risks associated with that decision unit. In addition, during subsequent conversations on the matter ADEC stated that Alaska Regulations prohibit the use of MI results in the risk assessment.

As reported in the Preliminary Risk Screening Evaluation Report (CH2M Hill 2008), the concentration of one chemical (benzo(a)pyrene) was above the risk-based screening level in two decision units (DB04 and DB06). Therefore, follow-up discrete soil sampling to support the risk assessment was completed.

In the 2008 Surface Soil Data Gaps Evaluation for the FCS (CH2M Hill 2008) (Data Gap Tech Memo), CH2M Hill recommended 10 samples to be obtained at regular spacing across each decision area. Each decision unit was to be divided into 10 equal sections and one sample to be collected from the center of each section.

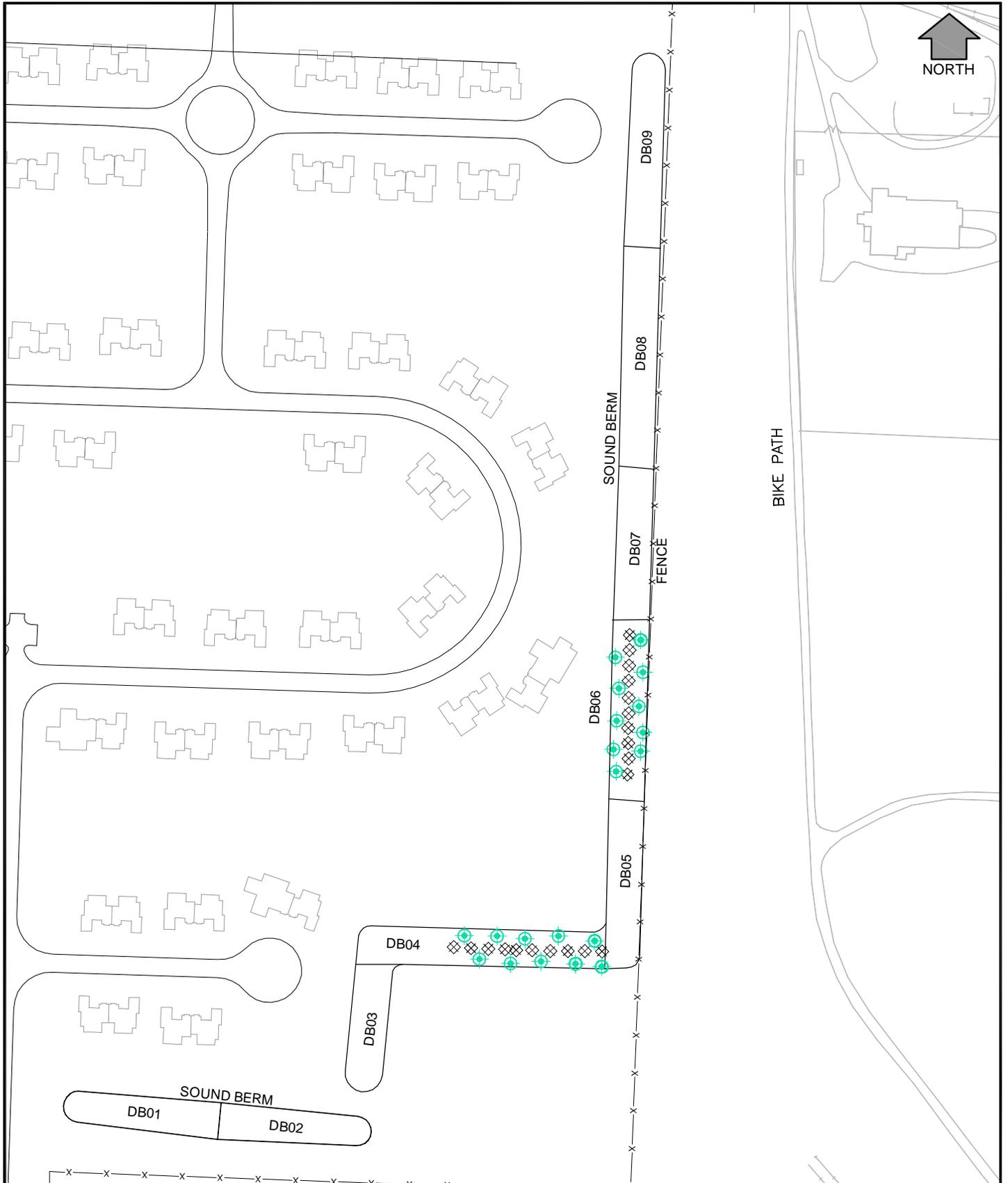
On 24 September 2008, Jacobs collected a total of 20 samples (10 from DB04 and 10 from DB06). The locations of these samples are shown in Figure 1. These samples were collected in accordance with the 2008 Data Gap Tech Memo (CH2M Hill 2008). Samples were spaced evenly throughout each decision unit and collected from 0 to 2 feet from the top of the sound berm. All sample results were below ADEC Method Two Migration to Groundwater. These results have been used in the risk assessment currently being prepared by CH2M Hill presented in their 2009 RI Report (CH2M Hill 2009). The results are also summarized in the Draft Drum and Debris and PCB RI Report (Jacobs 2009).

PROPOSED ADDITIONAL SAMPLING

Subsequent to communications between the Army and ADEC, the Army decided that additional sampling within the sound berm would be conducted during the 2009 field season. Twenty additional samples (10 from DB04 and 10 from DB06) will be collected from the sound berm at random locations within the sides of the berm (general locations are shown in Figure 1).

Samples will be collected in accordance with the Draft RI Management Plan, Field Sampling Plan (CH2M Hill 2008). Sample analysis and data management will be accomplished in accordance with the Draft RI Management Plan, Quality Assurance Project Plan (CH2M Hill 2008).

Attachment: Figure 1 Sound Berm Sampling Locations



LEGEND

-  EXISTING SOUND BERM SAMPLE LOCATION
-  PROPOSED SOUND BERM SAMPLE LOCATION



SCALE IN FEET

**PROPOSED 2009 SOUND BERM
SAMPLE LOCATIONS**

FT. WAINWRIGHT, ALASKA

PROJECT MANAGER: T. Heikkila	FILE NAME: Fig 1 Prop SB Samples 09.dwg	DATE: Apr. 08, 09
	LAYOUT TAB: Fig 1 Prop SB Samples 09	FIGURE NO.: 1
	FILE LOCATION: ERS-UR \ 05F50701 \ April 09 TM	