



ES-2880.05  
April 28, 2014

Earth Solutions NW LLC

- Geotechnical Engineering
- Construction Monitoring
- Environmental Sciences

Potala Village Kirkland, LLC  
2804 Grand Avenue, Suite 308  
Everett, Washington 98201

Attention: Mr. Joe Zlab

**Subject: Bentonite Barrier  
Impacted Soil Removal  
Potala Village  
Kirkland, Washington**

Dear Mr. Zlab:

In accordance with your request, Earth Solutions NW (ESNW) has prepared this letter and recommendation for bentonite barrier installation. The ongoing removal of impacted soil associated with the prior fueling station will be accomplished up to the westerly limits of the property. Bentonite (Volclay) panels will be secured to the excavation face along the property line to improve certainty that offsite contaminants will not migrate onsite and impact the areas of restored soil. The attached detail (Plate 1) illustrates bentonite (Volclay) panel installation. Impacted soil exhibiting high concentrations of contaminant will necessitate installation of sheet drain strips to facilitate venting of vapors. ESNW will evaluate the need for venting strips based on confirmation testing of the excavation sidewalls.

We trust this letter and recommendation for bentonite barrier installation meet your current needs. If you have any questions, or if additional information is required, please call.

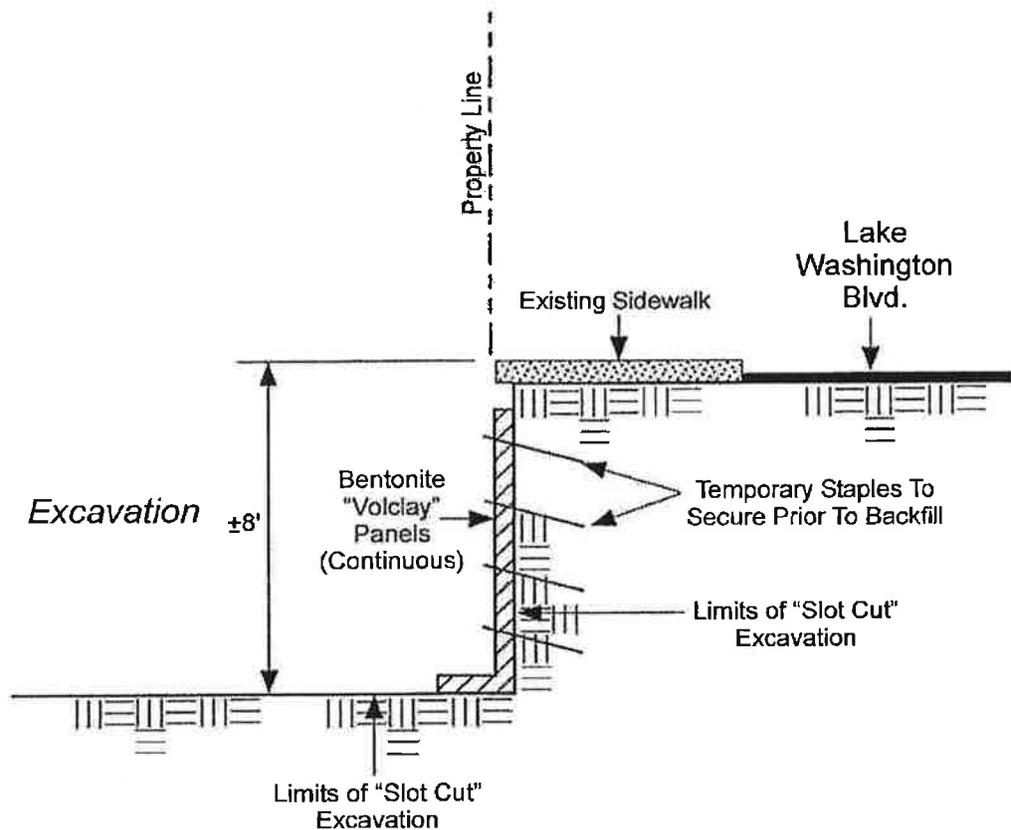
Sincerely,

EARTH SOLUTIONS NW, LLC



Raymond A. Coglas, P.E.  
Principal

Attachment: Plate 1 – “Impermeable Membrane At Slot Cuts”



Not - To - Scale

NOTES:

- Slot Cuts to remove impacted soil shall sequentially in 4' to 6' wide "Slots".
- Volclay Panels shall be secured to face of Slot Cut prior to backfilling and restoring Excavation Slots.
- If high concentration of impacted soil is determined to exist beyond limits of the Slot Excavation, Sheet Drain Venting Strips shall be placed in addition to Volclay Panels (on property side of the Volclay Panels).

		<b>Earth Solutions NW LLC</b> <small>Geotechnical Engineering, Construction Monitoring and Environmental Sciences</small>	
<p><b>"Impermeable" Membrane At Slot Cuts</b>  <b>Potala Village</b>  <b>Kirkland, Washington</b></p>			
Drwn.	GLS	Date	04/24/2014
Proj. No.	2880.05		
Checked	RAC	Date	April 2014
Plate	1		