



March 21, 2016

Michelle Weiland
Western Utility Contractors, Inc.
2565 Palmer Ave.
University Park, IL 60466

RE: 323 N. Michigan Avenue Thorium Monitoring

Dear Ms. Weiland:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation and installation of a utility duct at 323 N. Michigan Ave. in Chicago, Illinois. The monitoring was performed on March 15 and 16, 2016.

Instrumentation

Surface gamma scans were performed by Kyle Smith and Glenn Huber using a Ludlum Model 2221 Scaled / Ratemeter (serial no. 134542) with attached 2"x2" NaI probe (6" lead shielded). The instrument was calibrated on August 13, 2015. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 5,816 counts per minute (cpm).

The average background count rate for this location was found to be 2,000 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Data was collected by monitoring the soil in each 18 inch lift as it was removed from the excavation and recording the highest count rate for the floor and walls to an excavation depth of 6 feet. No soil was stockpiled during the project and all excavated materials were loaded directly into the truck after screening.

The maximum gamma count rates for each 18 inch lift are detailed on the attached Radiation Survey Form. The count rates in the excavation ranged from 2,100 cpm to 3,300 cpm. There was a layer of granite pavers immediately below the surface containing Naturally Occurring Radioactive Material (NORM) that ranged from 5,500 cpm to 8,400 cpm. With the exception of these granite pavers no count rates were found at any time that exceeded the threshold limit of 5,816 cpm.

Additional Monitoring

Since no count rates were identified above the 7.1 pCi/gram threshold limit, no additional soil sampling, air monitoring, or personnel monitoring were performed.

You will need to forward a copy of this report to the City of Chicago Department of Public Health (Attn: Rahmatunsia Begum) with the CDOT Permit Number in the subject line. I will be providing a copy of this report to USEPA, as required.

Thank you for your assistance with this project. If you have any questions or need additional information please call me at (815) 485-6161.

Sincerely,
Stan A. Huber Consultants, Inc.

A handwritten signature in black ink, appearing to read 'G. Huber', written in a cursive style.

Glenn Huber, CHP
President

Radiation Survey Form

Location/ Project ID: Western Utility Contractors : 323 N. Michigan Ave.

Date: 3/15/16 - 3/16/16

Technician: Kyle Smith / Glenn Huber

Inst Model: Ludlum 2201

Serial No. : 134542

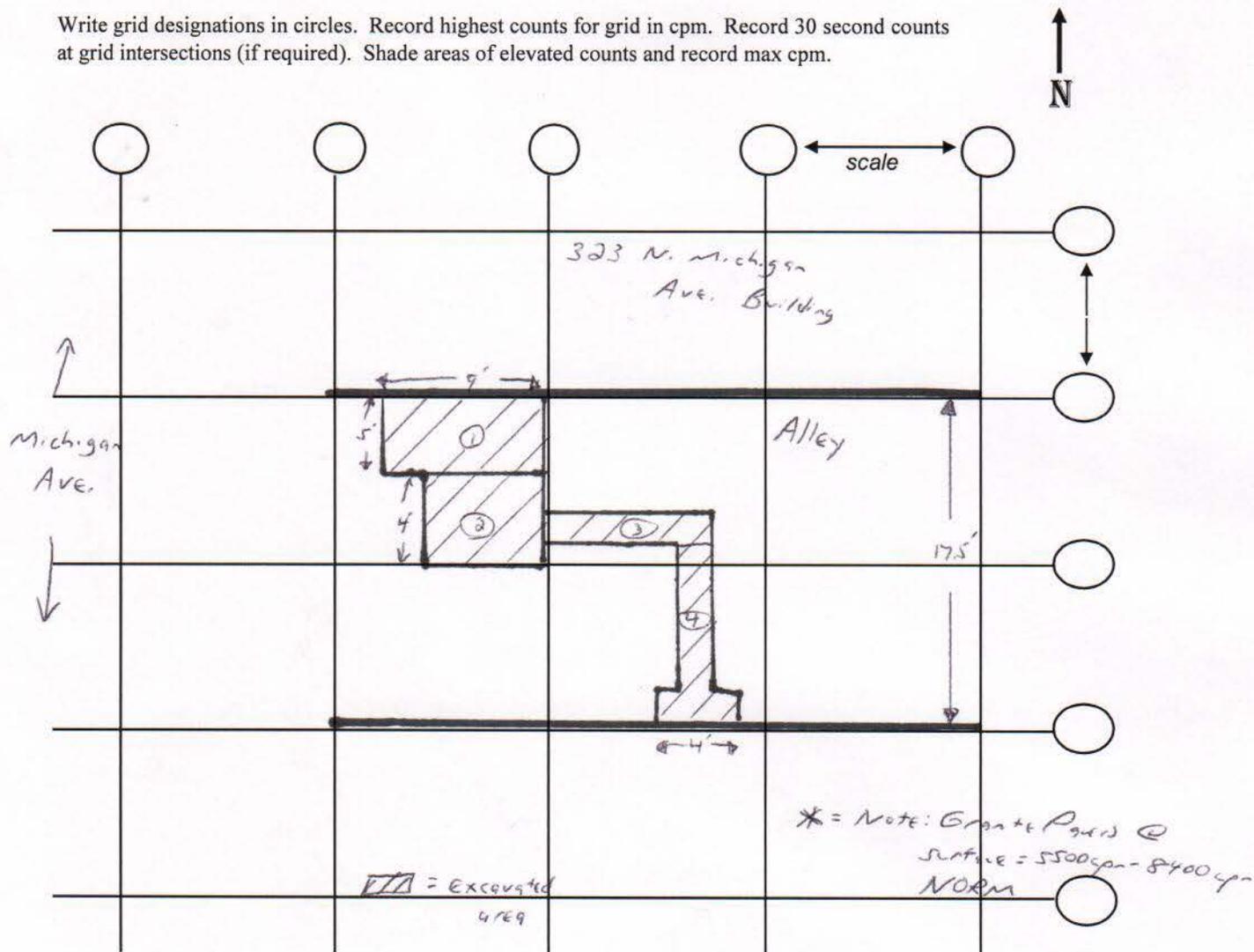
Probe Type: 1"x1" NaI / 2"x2" NaI
Shielded / Not Shielded

Lift Elevation: surface → -6'

Background 2000 cpm

Action Level: 5,816 cpm

Write grid designations in circles. Record highest counts for grid in cpm. Record 30 second counts at grid intersections (if required). Shade areas of elevated counts and record max cpm.



①	②	③	④
Surface 2100cpm*	Surface 2200cpm*	Surface 2000cpm*	Surface 2100cpm*
-18" 2200	-18" 2300	-18" 2400	-18" 3300
-36" 2500	-36" 2700	-36" 2600	-36" 2900
-54" 2700	-54" 2600		
	-72" 2800		