



June 9, 2017

Luke Wells
Electric Conduit Construction
816 Hicks Drive
Elburn, IL 60119

RE: 410-441 N. State St. Thorium Monitoring 6/5/17 – 6/8/17
CDOT Permit #804682

Dear Mr. Wells:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during excavation for a conduit installation located at 410 - 441 N. State St. in Chicago, Illinois. The monitoring was performed by Justin Maxwell, SAHCI Health Physicist, on June 5, 2017 through June 8, 2017.

Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaled / Ratemeter (serial no. 127242) with attached 2"x2" NaI probe (w/ 6" lead collimator shield). The instrument was calibrated on August 8, 2016. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 6,738 counts per minute (cpm).

The average background count rate for this location was determined to be 1,544 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Survey data was collected by entering the excavation after each 18-inch lift and recording the highest count rate for the floors and walls to a maximum excavation depth of 3 feet. No soil was stockpiled onsite.

The maximum gamma count rate for each lift and areas excavated by vacuum truck were recorded on the attached Radiation Survey Form. The count rates in the excavation ranged from 1,600 cpm to 3,600 cpm. No count rates were found at any time that exceeded the threshold limit of 6,738 cpm.

Additional Monitoring

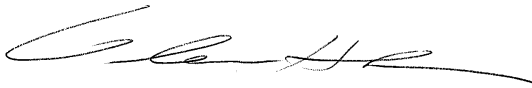
Since no count rates were identified above the 7.1 pCi/gram threshold limit, no additional soil sampling, air monitoring, or personnel monitoring were performed.

Regulatory Notification of Survey Completion

I will be providing a copy of this report to both the City of Chicago Department of Public Health and US Environmental Protection Agency, 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 'Glenn Huber', with a long horizontal flourish extending to the right.

Glenn Huber, CHP
President

Radiation Survey Form

Location/ Project ID: Electric Conduit Construction: 410-441 N. State St.

Date: 6/5/17 - 6/8/17

Technician: Justin Maxwell

Inst Model: Ludlum Model 2221 **Serial No.:** 127242 **Probe:** 168144

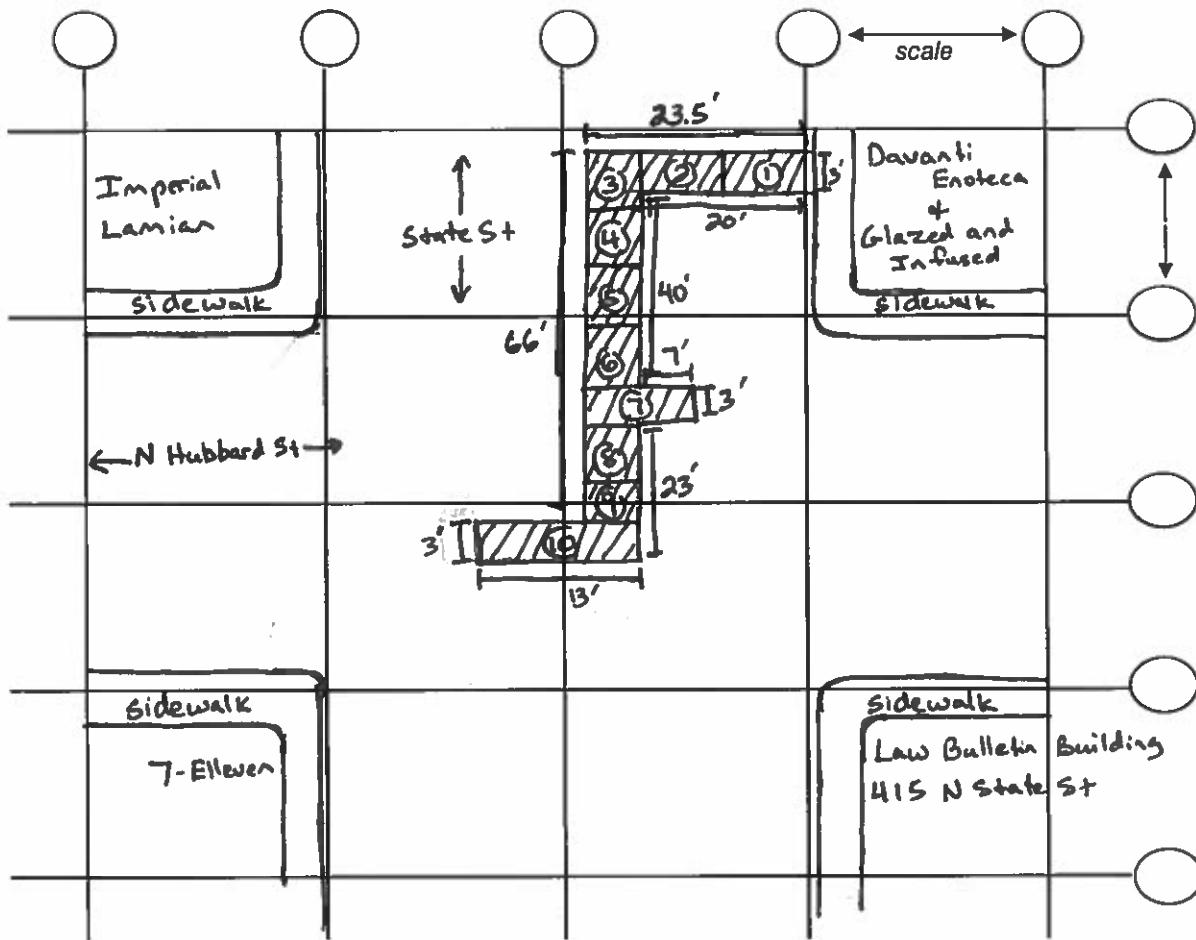
Probe Type: 1"x1" NaI / (2"x2" NaI)
(Shielded) / Not Shielded

Lift Elevation: surface to -3.0'

Background 1544 cpm

Action Level: 6738 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	⑤	⑥	⑦	⑧	⑨	⑩
Surface (kepm):	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.7	1.7	1.8
-1.5'(kepm):	2.1	2.2	3.0	2.8	2.2	1.6	1.7	1.6	1.9	2.1
-3.0'(kepm):	2.6	2.0	2.1	3.6	2.5	1.9	1.7	1.9	2.2	2.5