

May 11, 2025

705367

Angel Camacho  
SET Environmental  
450 Sumac Road  
Wheeling, Illinois 60090

RE: Thorium Monitoring – City of Chicago Department of Transportation  
CDOT Permit No. 2047620 – 430-451 N. State St.

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiological monitoring during sidewalk removal at 430-451 N. State St. in Chicago, Illinois. The monitoring was performed by Glenn Huber, SAHCI Health Physicist, on May 7, 2025. All activities were conducted under the guidance of document SET General Procedure for Thorium Monitoring.

#### Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 134542) with attached 2"x2" NaI probe (w/ 6" collimated lead shield). The instrument was calibrated on May 6, 2025. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 6,898 counts per minute (cpm).

The average background count rate for this location was determined to be 1,810 cpm.

#### Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Survey data was collected by scanning the surface of the sidewalk before and after removal at 6 inches below ground surface. No soil was exposed during removal of the sidewalk.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Form. The count rates ranged from 2,100 cpm to 2,400 cpm. No count rates were found at any time that exceeded the threshold limit of 6,898 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.

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.



Glenn Huber, CHP  
President

## Radiation Survey Form

Location/ Project ID: 430-451 N. State St. SET/ CDOT Sidewalk Removal

Date: 5/7/25

Technician: Glenn Huber

Inst Model: Ludlum 2221

Serial No.: 134542

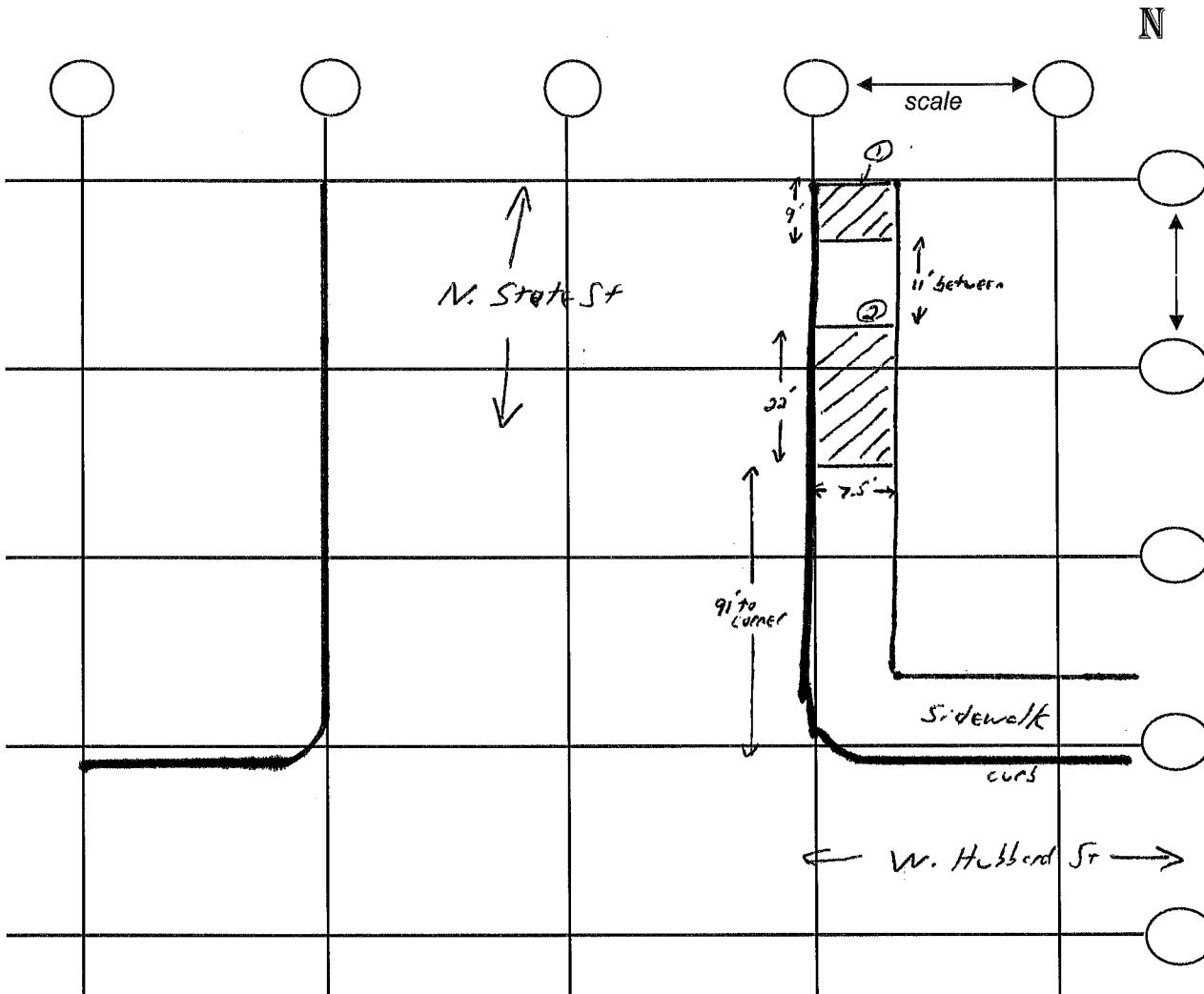
Probe Type: 1"x1" Nal / 2"x2" Nal  
 Shielded /  Not Shielded

Lift Elevation: Surface to -6"

Background 1,810 cpm

Action Level: 6,898 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.



Area 1  
surface 2000  
-6" 2400

Area 2  
surface 2100  
-6" 2300