



May 31, 2018

Mike Lanenga
SET Environmental
450 Sumac Road
Wheeling, Illinois 60090

RE: Thorium Monitoring: City of Chicago Department of Transportation
598 E. North Water Street
CDOT Permit # 865639

Dear Mr. Lanenga:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to perform a surface gamma scan for the City of Chicago Department of Transportation at 598 East North Water Street in Chicago, Illinois.

The survey was conducted to screen for potential thorium contamination along planned transportation paths on the Related Midwest Property adjacent to Lake Shore Drive. No subsurface work or excavation was performed.

The monitoring was performed by Glenn Huber, SAHCI Health Physicist, on May 31, 2018. 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 Ludlum Model 44-10 2"x2" NaI Detector (w/ 6" collimated lead shield). The instrument was calibrated on August 8, 2017. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 6,415 counts per minute (cpm).

The background count rate for this location was determined to average 2,155 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. The transportation paths identified as Access Path #1 and Access Path #2 are detailed on Figure 1. See attached. The transportation paths were delineated into grid sections 30 feet long and approximately 30 feet wide. Access Path

1 covered a total length of 375 feet starting at the East North Water Street gate and ending at the gate below Lake Shore Drive. Access Path 2 covered a length of 225 feet starting from the end of the concrete ramp extending from Lake Shore Drive and ending where it joins Access Path 1.

A surface walkover survey was performed on each grid along 3 foot intersects. The maximum gamma count rate for each grid was recorded on the attached Radiation Survey Form. The count rates in the excavations ranged from 1,600 cpm to 3,000 cpm. No count rates were found at any time that exceeded the threshold limit of 6,415 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.

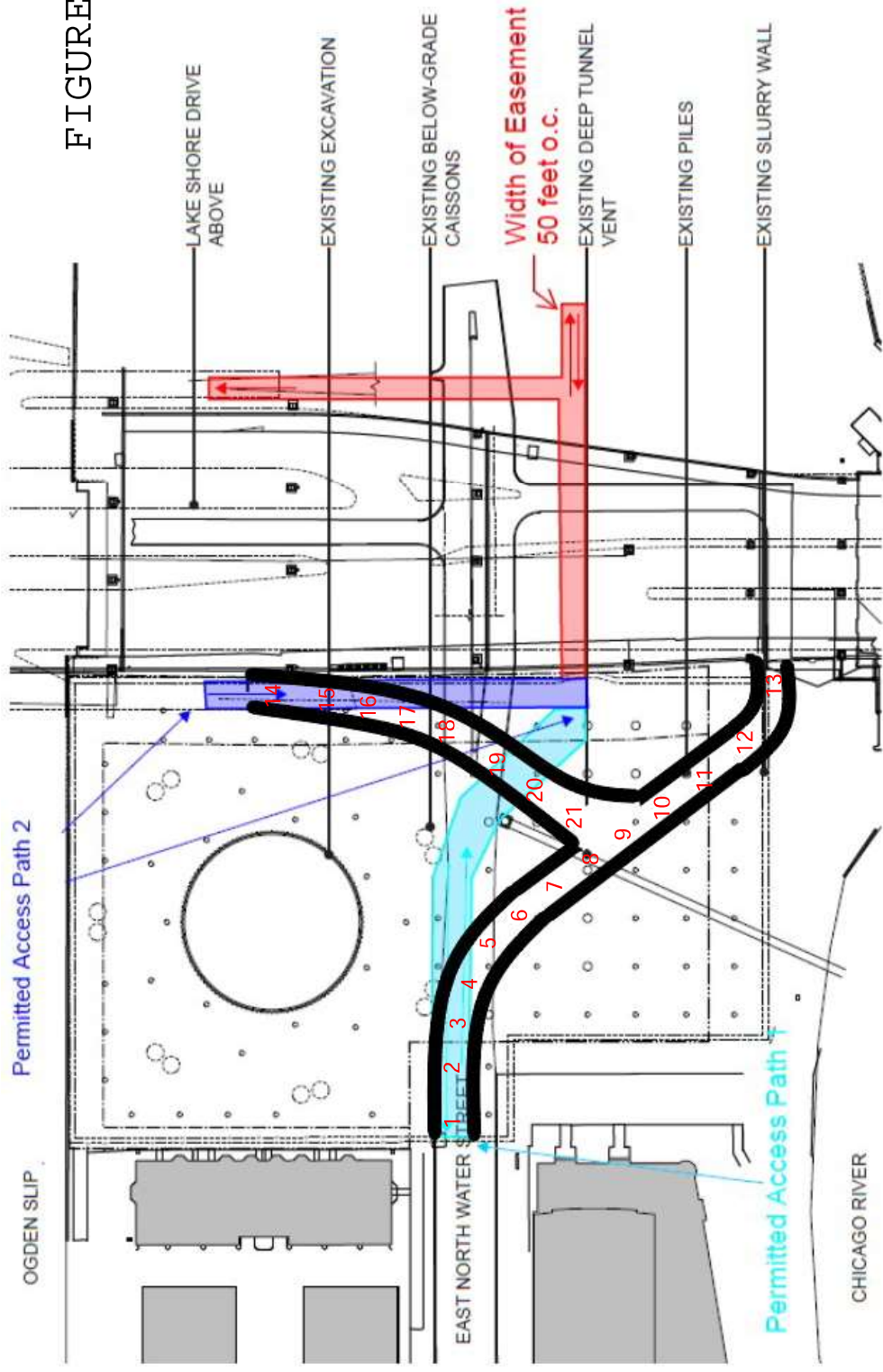
Thank you for your assistance with this project. If you have any questions or need additional information, please call me at (815) 485-6161.

Sincerely,
Stan A. Huber Consultants, Inc.

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

Glenn Huber, CHP
President

FIGURE 1



Radiation Survey Form

Project ID: CDOT 598 East North Water Street - Transport Path Surface Survey
Technician: Glenn Huber
Date: 5/31/2018
Instrument ID: Ludlum Model 2221 # 134532
w/ Ludlum Model 44-10 2"x2" NaI (6" shielded)

7.1 pCi/g Count Rate Threshold: 6415 CPM
Background: 2155 CPM

Access Path #1

Location ID	Distance	Max CPM
1	0'-30'	1800
2	30'-60'	3000
3	60'-90'	2200
4	90'-120'	2400
5	120'-150'	2100
6	150'-180'	2300
7	180'-210'	2200
8	210'-240'	2400
9	240'-270'	2500
10	270'-300'	2100
11	300'-330'	2700
12	330'-360'	2200
13	360'-375'	2200

Access Path #2

Location ID	Distance	Max CPM
14	0'-30'	1600
15	30'-60'	1900
16	60'-90'	2000
17	90'-120'	2400
18	120'-150'	2000
19	150'-180'	2200
20	180'-210'	2100
21	210'-225'	2600