

May 18, 2020

Ricardo Mendez
Granite Construction
5031 W. 66th St
Bedford Park, IL 60638

RE: Thorium Monitoring – 401 E. Ohio St.
Granite Inliner / Seven-D Construction
CDOT Permit: 1230141

Dear Mr. Mendez:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation for repair of a storm sewer catch basin lateral at 401 E. Ohio Street in Chicago, Illinois. The monitoring was performed by Brian Schmidt and Mark Dewald, SAHCI Health Physics Technicians, on May 6 and May 15, 2020.

Instrumentation

Surface gamma scans were performed using Ludlum Model 2221 Scaler / Ratemeters (serial no. 132844 and 126496) with attached Ludlum Model 44-10 2"x2" NaI Detectors (w/ 6" collimated lead shields).

Serial no. 132844, which was used on May 6, 2020, was calibrated on August 6, 2019. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,299 counts per minute (cpm). The average background count rate was measured at 1,731 cpm.

Serial no. 126496, which was used on May 15, 2020, was calibrated on October 18, 2019. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,102 cpm. The average background count rate was measured at 2,110 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeters described above. Survey data was collected by entering the excavations surrounding adjacent to the catch basin and recording the highest count rate for the floor and walls to a maximum excavation depth of 4.5 feet below ground surface. All asphalt, concrete, and soil were loaded directly into a truck for disposal.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Forms. The count rates in the excavation ranged from 1,500 cpm to 4,600 cpm. No count rates were found at any time that exceeded the instrument specific threshold limits of 7,210 cpm and 7,299 cpm, respectively.

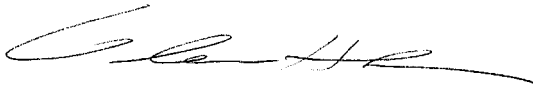
Additional Monitoring

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 'G. Huber', with a long horizontal flourish extending to the right.

Glenn Huber, CHP
President

Radiation Survey Form

Location/ Project ID: 7-D Construction - 401 E. Ohio St. - Sewer Repair - ROW RADIOLOGICAL SOIL SURVEY

Date: 5/6/2020

Technician: Brian Scumion

Inst Model: Ludlum-2221

Serial No.: 132844

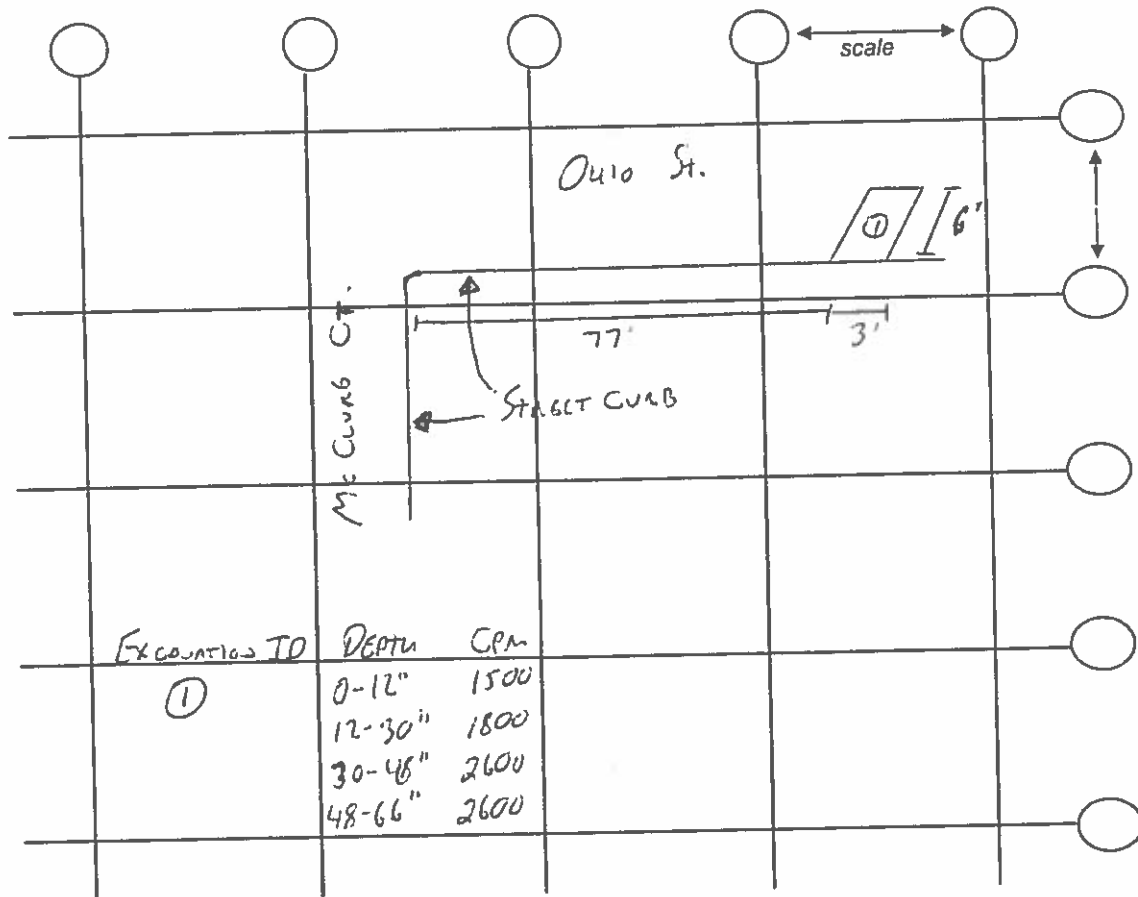
Probe Type: 1"x1" NaI / 2"x2" NaI
Shielded / Not Shielded

Lift Elevation: 0-48"

Background 1731 cpm

Action Level: 7,299 cpm Note: Action Level Corrected 5/20/20 GAH

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.



Radiation Survey Form

Location/ Project ID: 401-420 Ohio St

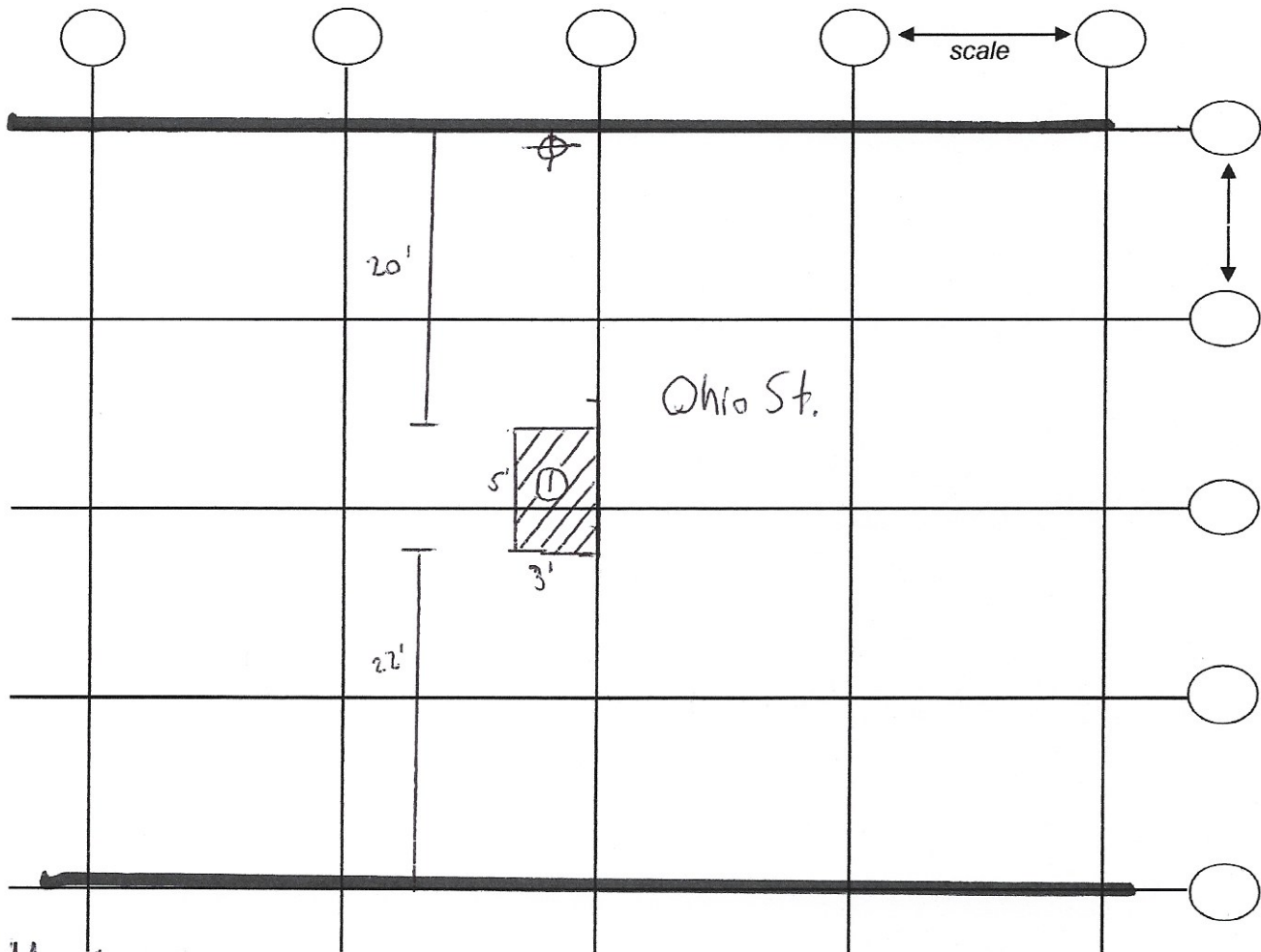
Date: 5/15/2020 Technician: Mark Dewald

Inst Model: Iudlon 2221 Serial No.: 126496

Probe Type: 1"x1" NaI / 2"x2" NaI / Shielded / Not Shielded
Lift Elevation: 0-5'

Background 2110 cpm Action Level: 7102 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
1.5'	3100
3'	3900
4.5'	4600

→ Background Location
 → Excavated Area