



September 10, 2022

977807

Angel Camacho
SET Environmental
450 Sumac Road
Wheeling, Illinois 60090

RE: Thorium Monitoring – City of Chicago Department of Transportation (CDOT)
CDOT Permit: 1720446 – 303 E. Sub-Lower Wacker Dr.

Dear Mr. Camacho:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the removal of concrete for various CDOT improvements such as sidewalks, bollards, and speed humps at 303 E. Sub-Lower Wacker Drive in Chicago, Illinois. The monitoring was performed by Aaron Morris, RSSI Health Physicist, on August 29 and 30, 2022. 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 193 Survey Meter (serial no. 149073) with attached Ludlum Model 44-10 2"x2" NaI Detector (w/ 2" collimated lead shield). The instrument was calibrated on May 3, 2022. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for instrument 149073 is 6,248 counts per minute (cpm).

The average background count rate for this location was measured as 1,600 cpm.

Soil Gamma Scans

Gamma surface scans were performed in the excavations using the Ludlum Model 193 survey meter detailed above. Survey data was collected by monitoring the concrete areas prior to removal and then again after removal. All concrete was loaded directly into a truck for disposal.

The maximum gamma count rates for each area were recorded on the attached Radiation Survey Form. The count rates in the excavations ranged from 2,000 cpm to 3,400 cpm. No count rates were found at any time that exceeded the threshold limit of 6,248 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

TOTAL QUANTITIES:

SPEED HUMPS: 2 EA

6" CONCRETE BOLLARDS: 8 EA

CURB (14): 152 LF

SIDEWALK, 8" PCC: 670 SF

SAW CUT: 187 LF

CA-6: 7 CY

HMA SURFACE REMOVAL & REPLACEMENT, HAND METHOD: 31 SY

LEGEND

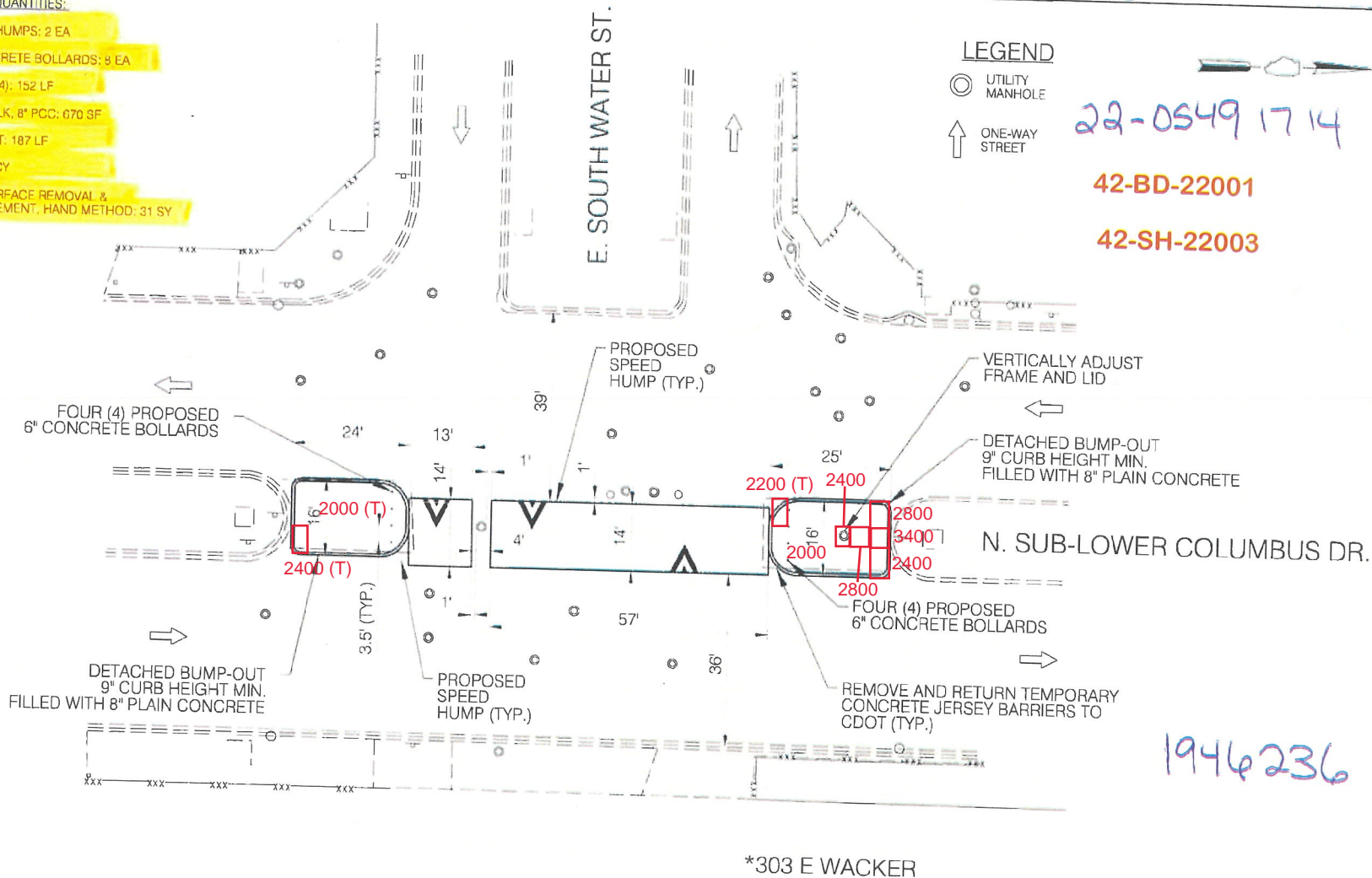
○ UTILITY MANHOLE

↑ ONE-WAY STREET

22-0549 17 14

42-BD-22001

42-SH-22003



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NO. 1	DATE	BY	DESCRIPTION

DATE: 06/10/22