

September 25, 2020

961351

Mike Lanenga
SET Environmental
450 Sumac Road
Wheeling, Illinois 60090

RE: 2400-2800 S. Dr. Martin Luther King Jr. Drive Radiation Monitoring
City of Chicago Department Transportation
Former Carnotite Reduction Company Permit Hold Area
CDOT Permit: 1273481

Dear Mr. Lanenga:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring for the City of Chicago Department of Transportation (CDOT) during excavation for replacement of 2 sidewalk sections at 2400-2800 S. Dr. Martin Luther King Jr. Drive in Chicago, Illinois. The potential radiological contaminants in the area surrounding the Former Carnotite Reduction Company site are uranium (U-234+U-235+U-238), thorium (Th-230), and radium (Ra-226). The monitoring was performed by Mark Dewald, SAHCI Health Physicist, on September 24, 2020.

Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 126497) with attached Ludlum Model 44-10 2"x2" NaI detector (w/ 6" collimated lead shield). The instrument was calibrated on October 18, 2019. The Illinois Emergency Management Agency (IEMA) field action level which would trigger additional monitoring and sampling is twice the average background count rate.

The average background count rate for this location was measured as 1,333 counts per minute (cpm). The field action level was calculated as 2,666 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Survey data was collected surveying the sidewalk surface prior to removal and then again after the single 10-inch lift and recording the highest count rate for each section. No soil was excavated and only concrete was removed.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Form. The count rates in the excavation ranged from 1,800 cpm to 2,400 cpm. No count rates were found at any time that exceeded the field action level of 2,666 cpm.

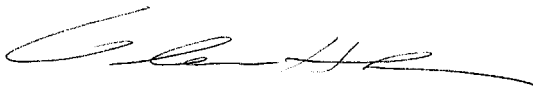
Additional Monitoring

Since no count rates were identified above the field action level, no additional soil sampling, air monitoring, or personnel monitoring were performed.

As required by IEMA, I will submit this report to Abby Mazza at the City of Chicago, Department of Assets, Information and Services (AIS).

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: MLK - 24 → 28 st

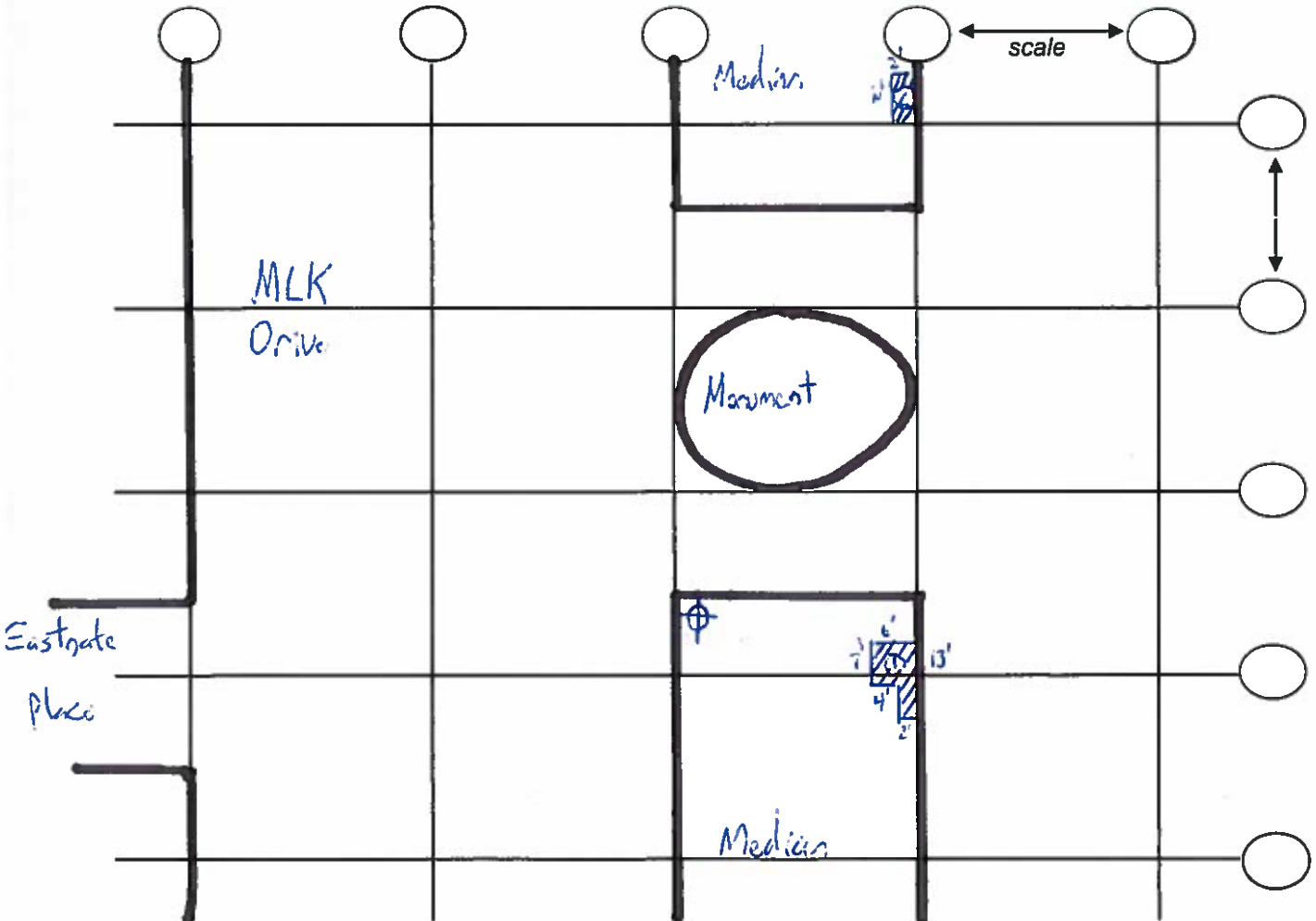
Date: 9/24/2020 Technician: Mark Dewald

Inst Model: Ludlum 2221 Serial No.: 126497

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

Background 1333 cpm Action Level: 2666 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	0-10"	10-28"
1	2200	2200
2	1800	1900

⊕ → background location

▨ → excavated area

Radiation Survey Form

Location/ Project ID: MLK - 24 - 28st

Date: 9/24/2020

Technician: Mark Dewald

Inst Model: Lvivum 2221

Serial No. : 126497

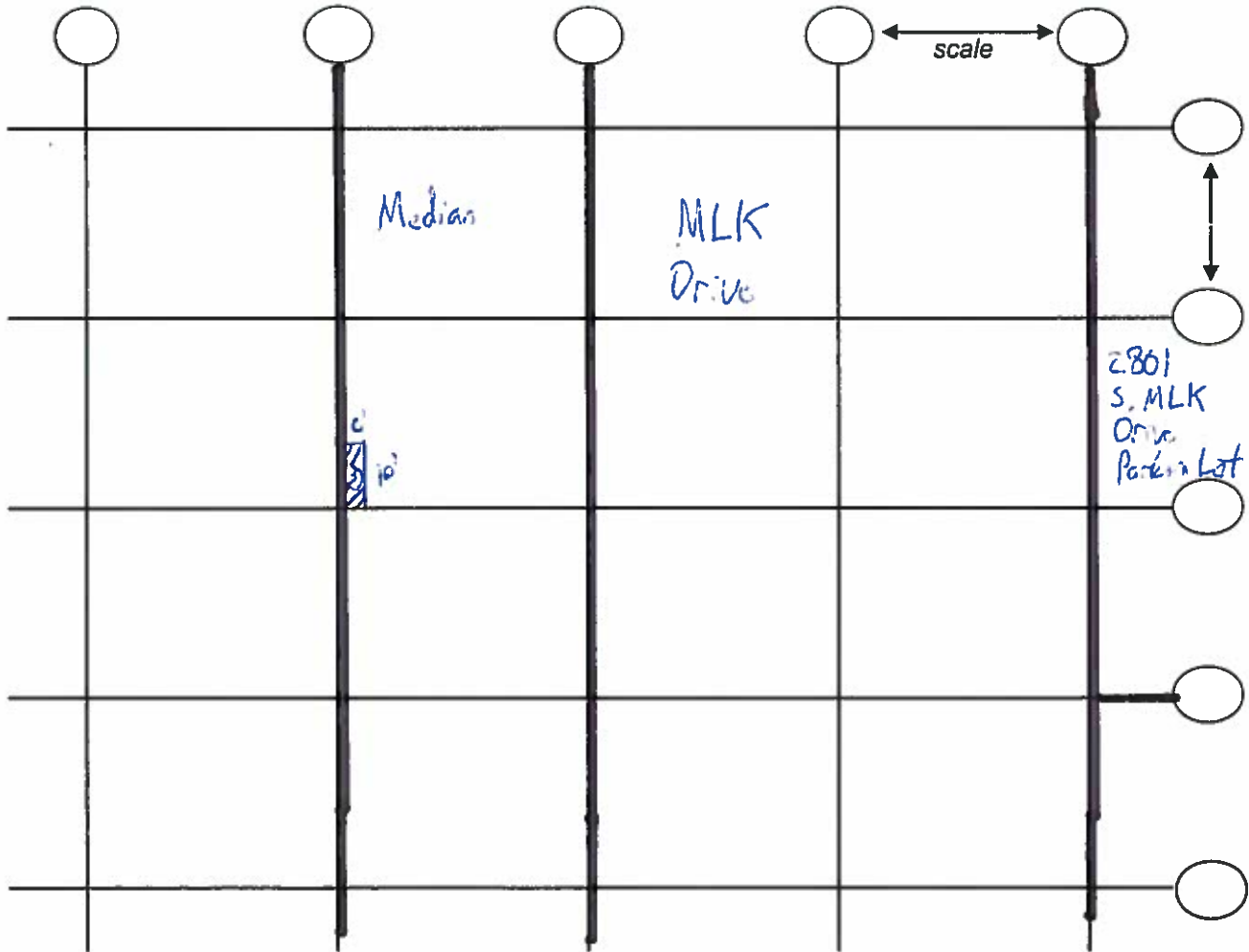
Probe Type: 1"x1" NaI / ~~2"x2" NaI~~
Shielded / Not Shielded

Lift Elevation: 0-10"

Background 1333 cpm

Action Level: 2666 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	0-10"	10-28"
3	1800	2400

→ excavated area