



May 10, 2014

rev. 1 5/12/14 GAH

Pat Biehl  
MF Construction  
15725 S. Springfield Ave.  
Markham, Illinois 60428

RE: 110 E. Ohio St. – Thorium Monitoring for MF Construction

Dear Ms. Biehl:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during excavation activities at 110 E. Ohio St. in Chicago, Illinois. The monitoring was performed on May 7, 2014.

#### Instrumentation

Surface gamma scans were performed by Joel Ahrweiler using a Ludlum Model 2221 Scaled / Ratemeter (serial no. 127242) with attached Model 44-10 2"x2" NaI detector. The instrument was calibrated on October 18, 2013. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 18,643 counts per minute (cpm).

The average background count rate for this location was found to be between 5,800 and 6,200 cpm.

#### Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Data was collected by entering the excavation after each 18 inch lift and recording the highest count rate for the floors and walls to an excavation depth of 3 feet. After the excavation was 3 feet deep, surveys were performed of the buckets of soil as they were removed from the excavation, prior to loading. No soil was stockpiled during the project and all excavated soils were loaded directly into the truck after screening.

The maximum gamma count rate for each 1.5 foot lift was recorded on the attached Radiation Survey Form. The count rates in the excavation ranged from 6200 cpm to 6700 cpm. No count rates were found at any time that exceeded the threshold limit of 18,643 cpm.

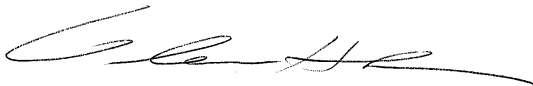
Additional Monitoring

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.

We will forward a copy of this report to the City of Chicago Department of Public Health and USEPA, 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', written in a cursive style.

Glenn Huber, CHP  
President

### Radiation Survey Form

Location/ Project ID: MF Construction 110 E. OHIO Street

Date: 5/7/2014

Technician: Joel Ahrweiler

Inst Model: 2221

Serial No. : 127242

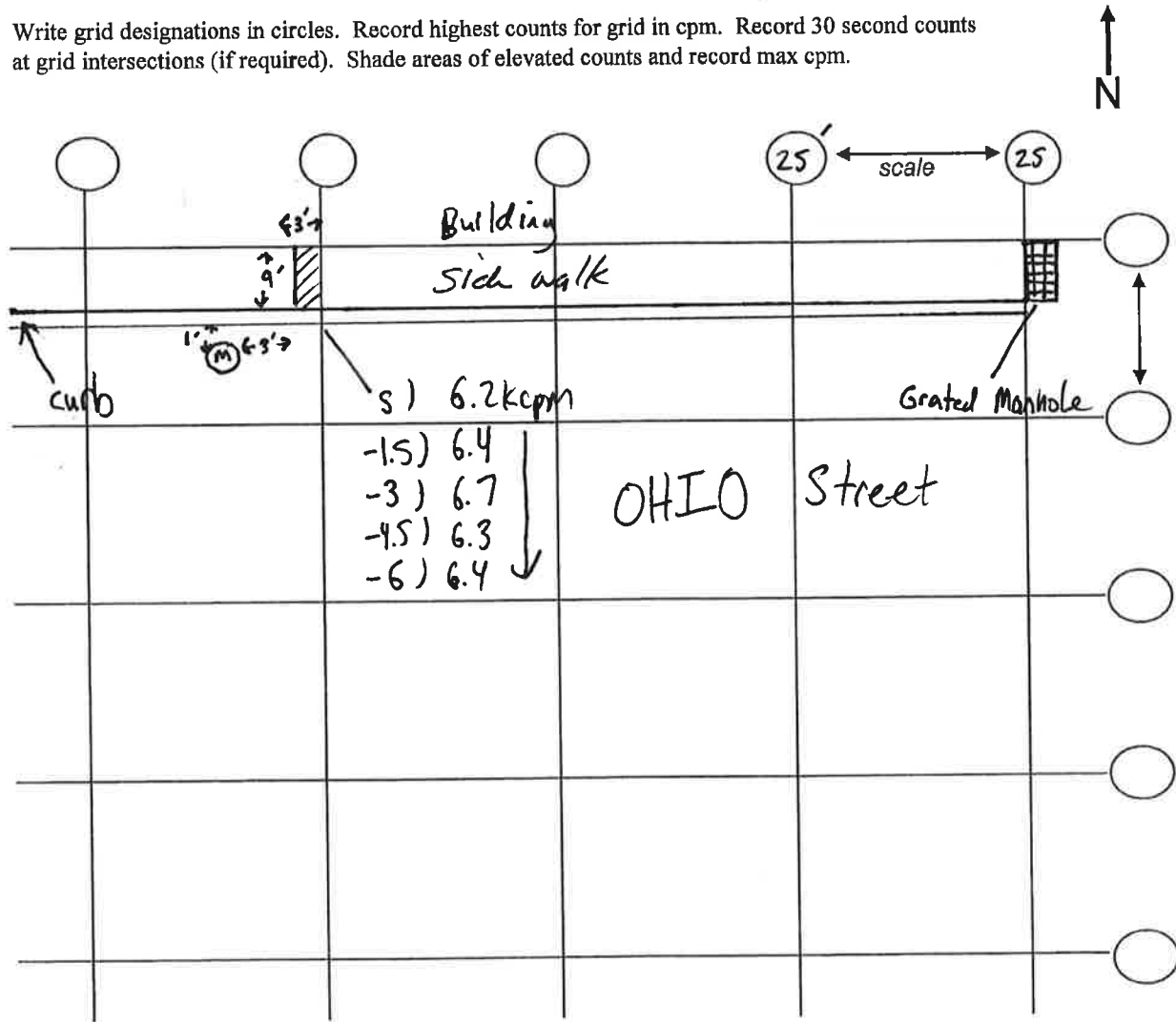
Probe Type: 1"x1" NaI / 2"x2" NaI  
Shielded / Not Shielded

Lift Elevation: max depth 6 feet depth

Background 5.8 - 6.2k cpm

Action Level: 18,643 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.



M = Manhole (sewer)

= Excavated Area