UNIVERSITY OF CHICAGO DEMOLITION VIRTUAL BRIEFING

April 30, 2025

MEETING AGENDA

- **WELCOME & ZOOM INSTRUCTIONS**
- **CITY OF CHICAGO PRESENTATION**
  - Site background
  - Ensuring safe demolition, including environmental and health protections
  - Demolition oversight plans
- **DEMOLITION CONTRACTOR PRESENTATION**
- **COMMUNITY COMMENTS & QUESTIONS**

MEETING OBJECTIVES

- Provide information to the community about the **reviews and pre-demolition inspections** performed by CDPH and the Department of Buildings for the demolition of two buildings
- Provide information about the method of demolition and plans **to protect the community from potential environmental and health impacts**
- Respond to questions or concerns **about the demolition process**

DEPARTMENT OF BUILDINGS PRESENTATION

UNIVERSITY OF CHICAGO DEMOLITION

- **SITE ADDRESSES:**
  - 5604 South Ellis Avenue (Accelerator Building)
  - 935 East 56th Street (High Energy Physics Building)
- **PROPERTY OWNER:**
  - University of Chicago
- **DEMOLITION CONTRACTOR:**
  - Brandenburg Industrial Service Company
- **DEMOLITION TIMEFRAME:**
  - Approximately six months (weather dependent)

FORMER SITE USE AND OCCUPANTS

- The University of Chicago Accelerator Building was constructed in 1949. The High Energy Physics Building was constructed in 1967.
- The buildings housed two particle accelerators:
  - One betatron that generated gamma rays and other particles for physics research
  - One cyclotron that was at one point the world's most powerful particle accelerator
- The betatron was decommissioned in 1965. The cyclotron was decommissioned in 1972.
- The buildings have since been repurposed for other science projects, office space, etc.

DEMOLITION REQUIREMENTS

DOB required the contractor to submit:

- Structural Condition Report which details the current structural integrity of the building*
- Safety and Operation Plan that details compliance with describing how the project how the project will comply with applicable requirements of Chapter 33 of the Chicago Building Code.*
- Preliminary Inspection (pre-demo)
- Inspector onsite during demolition
- Final Inspection (post-demo)

**Stamped and signed or designed by an Illinois licensed architect or structural engineer (site operation plan may be prepared by the demolition contractor)*

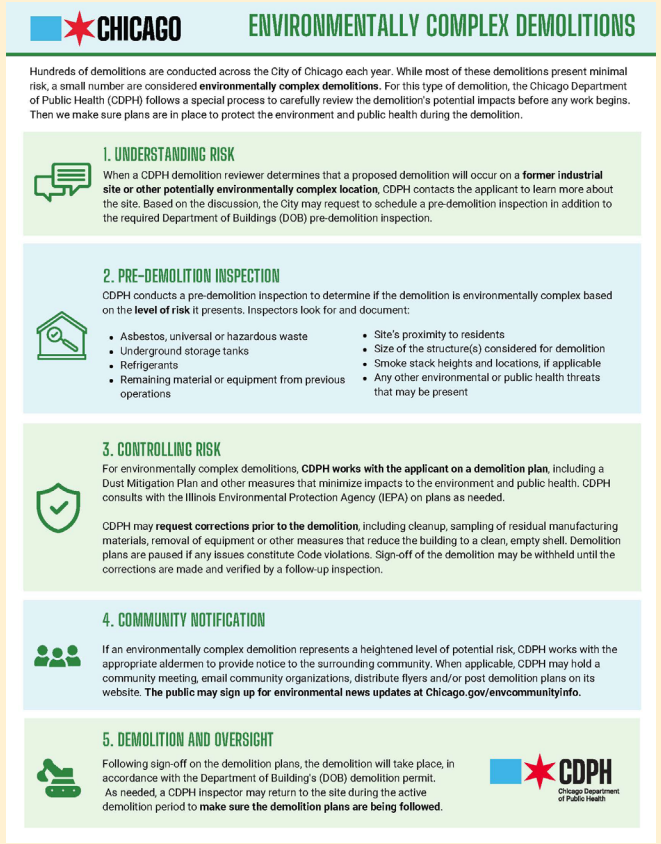
TECHNIQUE & PROCESS OF DEMOLITION

- This is a reinforced concrete building with a steel clerestory crane bay running the length of the structure.
- This will be a mechanical demolition using conventional equipment including hydraulic excavators equipped with a combination of shears, hydraulic breakers, and grapple attachments, man lifts, skid steers, and front-end loaders.
- **This is <u>not</u> a demolition by implosion (no explosives will be used).**

DEPARTMENT OF PUBLIC HEALTH PRESENTATION

ENVIRONMENTALLY COMPLEX DEMOLITIONS

- **Designation created by CDPH** in response to community concerns about demolitions that present increased risk to environment and public health.
- Triggers **special process** to review potential impacts before work begins, notify community, and ensure appropriate protections are in place.



CHICAGO

ENVIRONMENTALLY COMPLEX DEMOLITIONS

Hundreds of demolitions are conducted across the City of Chicago each year. While most of these demolitions present minimal risk, a small number are considered **environmentally complex demolitions.** For this type of demolition, the Chicago Department of Public Health (CDPH) follows a special process to carefully review the demolition's potential impacts before any work begins. Then we make sure plans are in place to protect the environment and public health during the demolition.

1. UNDERSTANDING RISK

When a CDPH demolition reviewer determines that a proposed demolition will occur on a **former industrial site or other potentially environmentally complex location**, CDPH contacts the applicant to learn more about the site. Based on the discussion, the City may request to schedule a pre-demolition inspection in addition to the required Department of Buildings (DOB) pre-demolition inspection.

2. PRE-DEMOLITION INSPECTION

CDPH conducts a pre-demolition inspection to determine if the demolition is environmentally complex based on the **level of risk** it presents. Inspectors look for and document:

- Asbestos, universal or hazardous waste
- Underground storage tanks
- Refrigerants
- Remaining material or equipment from previous operations
- Site's proximity to residents
- Size of the structure(s) considered for demolition
- Smoke stack heights and locations, if applicable
- Any other environmental or public health threats that may be present

3. CONTROLLING RISK

For environmentally complex demolitions, **CDPH works with the applicant on a demolition plan**, including a Dust Mitigation Plan and other measures that minimize impacts to the environment and public health. CDPH consults with the Illinois Environmental Protection Agency (IEPA) on plans as needed.

CDPH may **request corrections prior to the demolition**, including cleanup, sampling of residual manufacturing materials, removal of equipment or other measures that reduce the building to a clean, empty shell. Demolition plans are paused if any issues constitute Code violations. Sign-off of the demolition may be withheld until the corrections are made and verified by a follow-up inspection.

4. COMMUNITY NOTIFICATION

If an environmentally complex demolition represents a heightened level of potential risk, CDPH works with the appropriate aldermen to provide notice to the surrounding community. When applicable, CDPH may hold a community meeting, email community organizations, distribute flyers and/or post demolition plans on its website. **The public may sign up for environmental news updates at Chicago.gov/envcommunityinfo.**

5. DEMOLITION AND OVERSIGHT

Following sign-off on the demolition plans, the demolition will take place, in accordance with the Department of Building's (DOB) demolition permit. As needed, a CDPH inspector may return to the site during the active demolition period to **make sure the demolition plans are being followed.**

CDPH
Chicago Department of Public Health

ENVIRONMENTALLY COMPLEX DEMOLITION DESIGNATION

Why is this considered an environmentally complex demolition?

- Past use and potential radiological concerns

What was its past use?

- Originally constructed for Enrico Fermi's particle accelerator
- Housed two massive particle accelerators (i.e., "atom smashers")

ENVIRONMENTAL AND HEALTH PROTECTIONS

The contractor is required to:

- Abate asbestos (completed)
- Remove/dispose of hazardous waste (completed)
- Inspect for lead (completed)
- Recycle or reuse at least 50% of uncontaminated construction and demolition debris (to be completed during the demolition)

In this instance, the property owner is required to receive final confirmatory release letters from the Illinois Emergency Management Agency (IEMA) for the buildings to be fully released from radiological control and removed from the University's Radiological License (in progress).

DUST CONTROL MEASURES

- **All dust will be controlled.**
- Four air monitoring devices will report data at 15-minute intervals to ensure air quality is safe per EPA requirements.
- Exact air monitoring device locations will be adjusted along the perimeters to ensure continuous monitoring at a minimum of one upwind and one downwind location.
- When available, equipment and vehicles will use integrated dust suppressant systems in the area in which active demolition is taking place.
- Charged water hoses and/or dust boss mobile misters will be used.
- Perimeter walls will be up as long as possible to keep debris and dust enclosed.

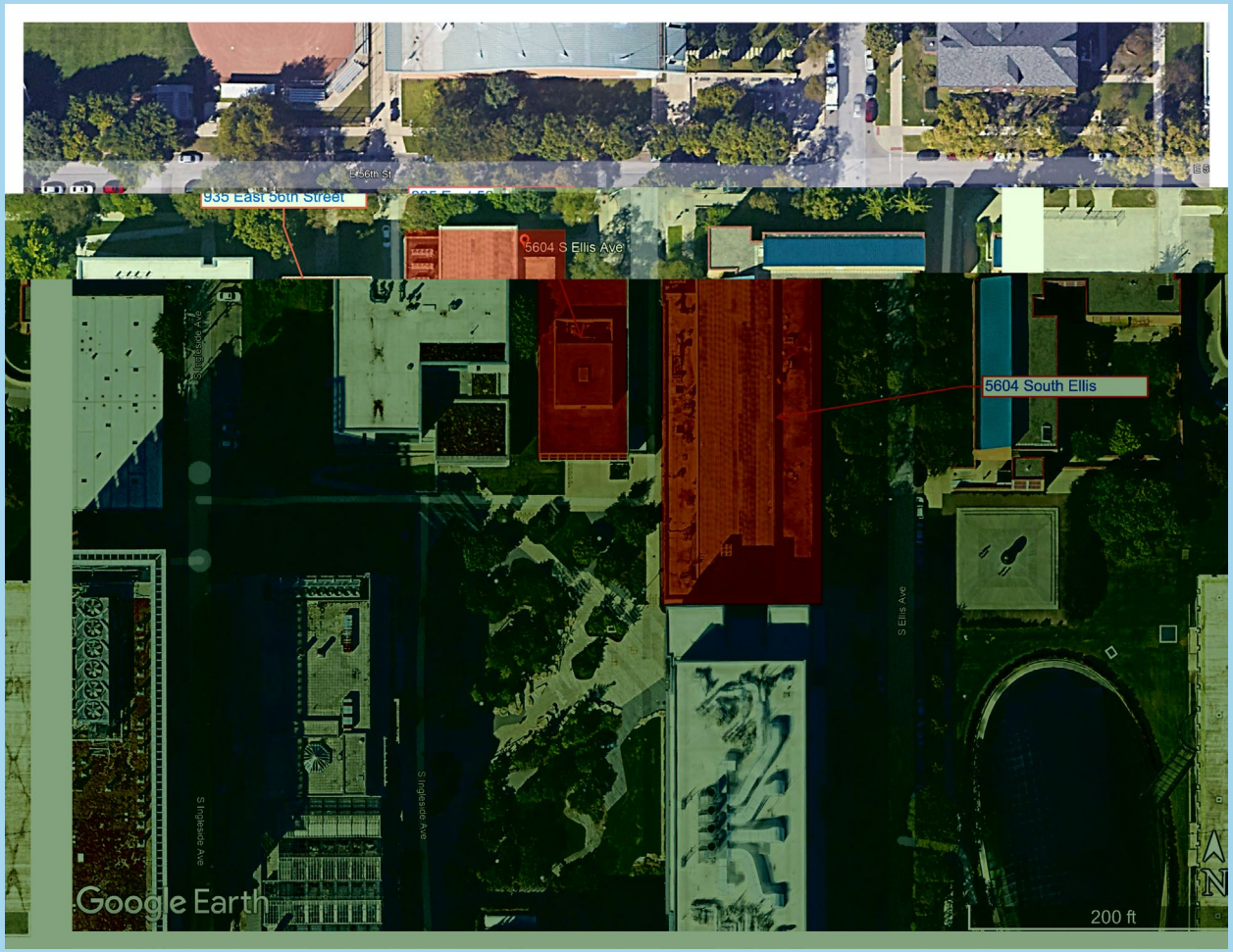
OVERSIGHT PLANS

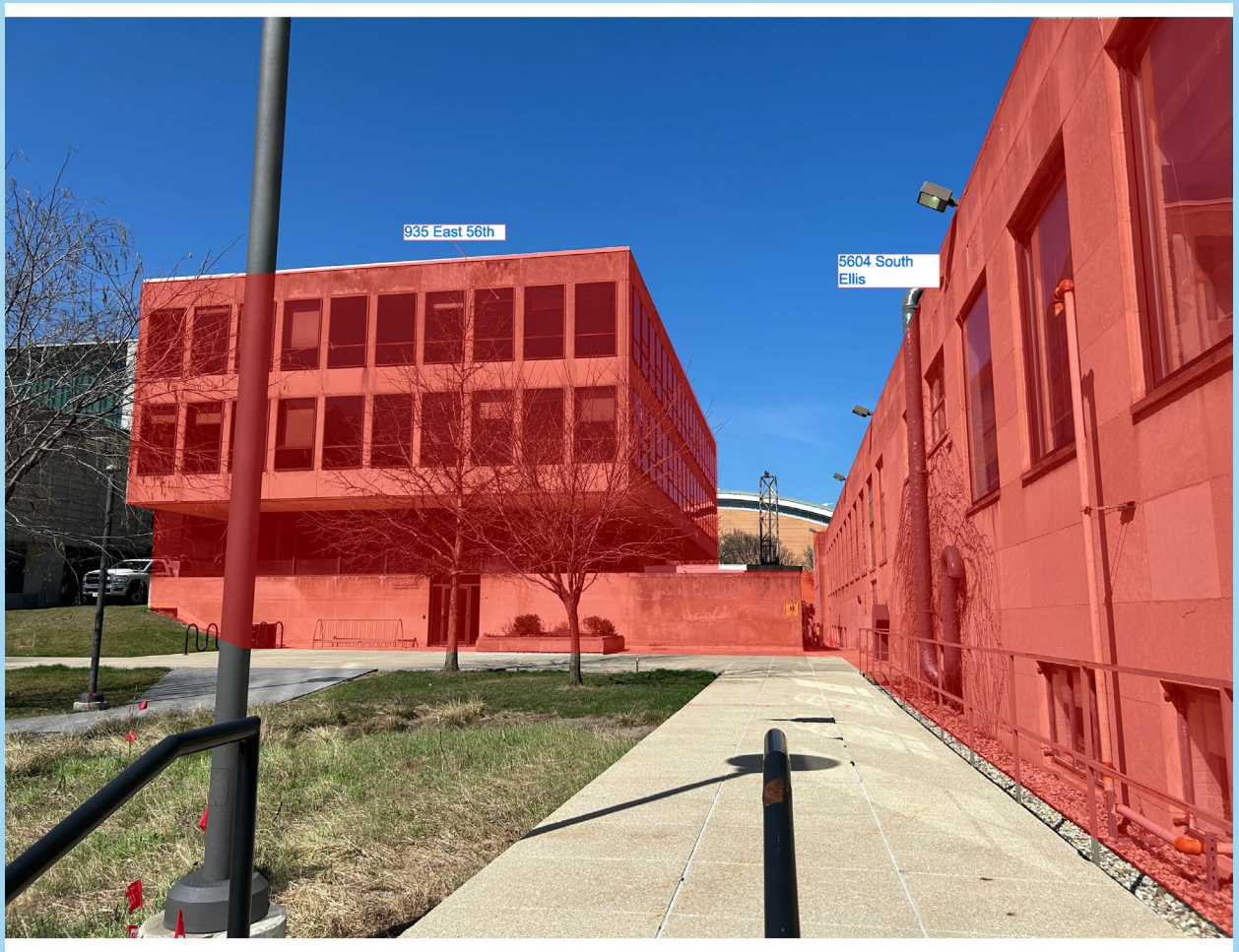
- DOB and CDPH ***inspectors will be on site*** before any demolition to make sure all required controls are in place.
- DOB and CDPH inspectors ***will also be on site daily*** during any active demolition to observe.
- **DOB and CDPH have the authority *to stop any work and correct issues* as needed.**

CONTRACTOR PRESENTATION

DEMOLITION PERMIT APPLICATIONS

5604 South Ellis Avenue and 935 East 56th Street





OVERVIEW OF BUILDINGS

	5604 SOUTH ELLIS AVE	935 EAST 56TH STREET
Type of Construction	Reinforced concrete construction	Reinforced concrete construction
Square Feet	~35,000	~26,000
Year Built	1951	1967

HAZARDOUS MATERIALS AND UNIVERSAL WASTE STATUS

- Both buildings were surveyed for the presence of hazardous chemical waste and universal waste materials.
  - All chemical and universal waste were removed for proper disposal in 2024.

- In 2023, both buildings were surveyed by a qualified licensed asbestos professional for the presence of asbestos containing building materials.
  - All asbestos containing building materials were abated licensed asbestos abatement contractors in 2024 and early 2025.

- In 2024, pre-demolition lead assessment surveys were conducted by qualified licensed lead professionals for both buildings.
  - These surveys are used during demolition to identify and segregate lead contaminated materials from uncontaminated materials and ensure contaminated materials are appropriately handled and disposed of.

RADIOLOGICAL SAFETY STATUS

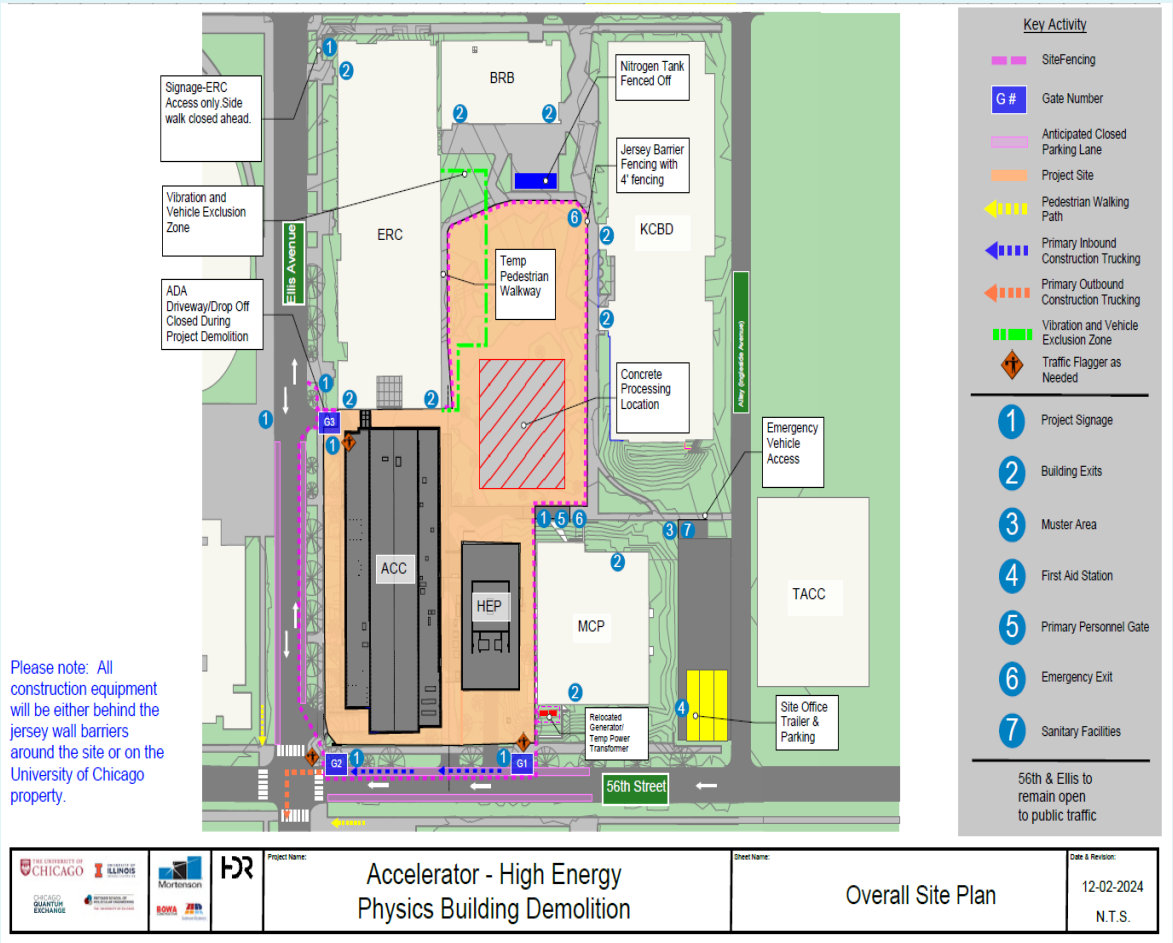
- The University of Chicago has conducted all required comprehensive radiological surveys of the High Energy Physics (HEP) Building and the Accelerator Building, verifying that both buildings meet the criteria for unrestricted release from radiological control.
- For a building to be fully released from radiological control and removed from the University's Radiological License, the Illinois Emergency Management Agency (IEMA) reviews submitted survey documentation and conducts their own confirmatory release survey, prior to providing a final confirmatory release letter.
- The University of Chicago has received IEMA-OHS Amendment #22 releasing High Energy Physics Building from the University's Radioactive Material License.
- IEMA is reviewing the University's unrestricted release survey, and IEMA's confirmatory release survey is pending.
- **University understands demolition of the buildings may not begin until the University of Chicago receives an IEMA license amendment releasing the Accelerator Building from the University's Radioactive Material License.**

DEMOLITION ACTIVITIES

- Controlled demolition of the existing structures via hand labor and heavy machinery, followed by selective removal of below-grade concrete and foundations. Concrete generated to be processed for temporary backfill to be used to support future construction.
- Process to take approximately 6 months to complete.
- No soils removal will be performed.
- Charged water hoses and/or dust boss mobile misters will be used to control dust.
- Four air monitoring stations will be on-site and will report data at 15-minute intervals to ensure air quality is safe per EPA requirements.
- **This project will not use implosion method.**

DEMOLITION ACTIVITIES

- Demolition activities will occur M-F between 7:30am and 4pm.
- Demolition truck traffic in and out of the site will mainly occur at the designated entrances at East 56th Street.
- Site roadways and all vehicle access points will be adequately cleaned to prevent dust emission.
- Permits have bee obtained to close the sidewalk on the south side of East 56th Street and the west side of Ellis Ave in front of the buildings. Parking lane closures on the north and south sides of 56th Street and the east and west sides of Ellis Avenue will be in place for the length of the buildings during the demolition.



POST DEMOLITION

- The site will be temporary established with recycled concrete and backfill to support future construction.
- Development plans have been prepared for a future engineering and science building.
- The site will remain fenced to prevent unauthorized entry.

COMMUNITY COMMENTS & QUESTIONS

ADDITIONAL RESOURCES

- To learn more about demolition permits in Chicago, visit **CHICAGO.GOV/COMPLEXDEMOLITIONS**
- To learn more about asbestos and lead hazards in demolition and renovation projects, visit **CHICAGO.GOV/ASBESTOSLEAD**
- For the full additional environmental requirements, see **Section 11-4-2170 of the Chicago Municipal Code**
- **Any community concerns can be reported directly through 3-1-1.**