

221 Mount Auburn Street Riverview Condominiums

Community Meeting

October 22, 2025

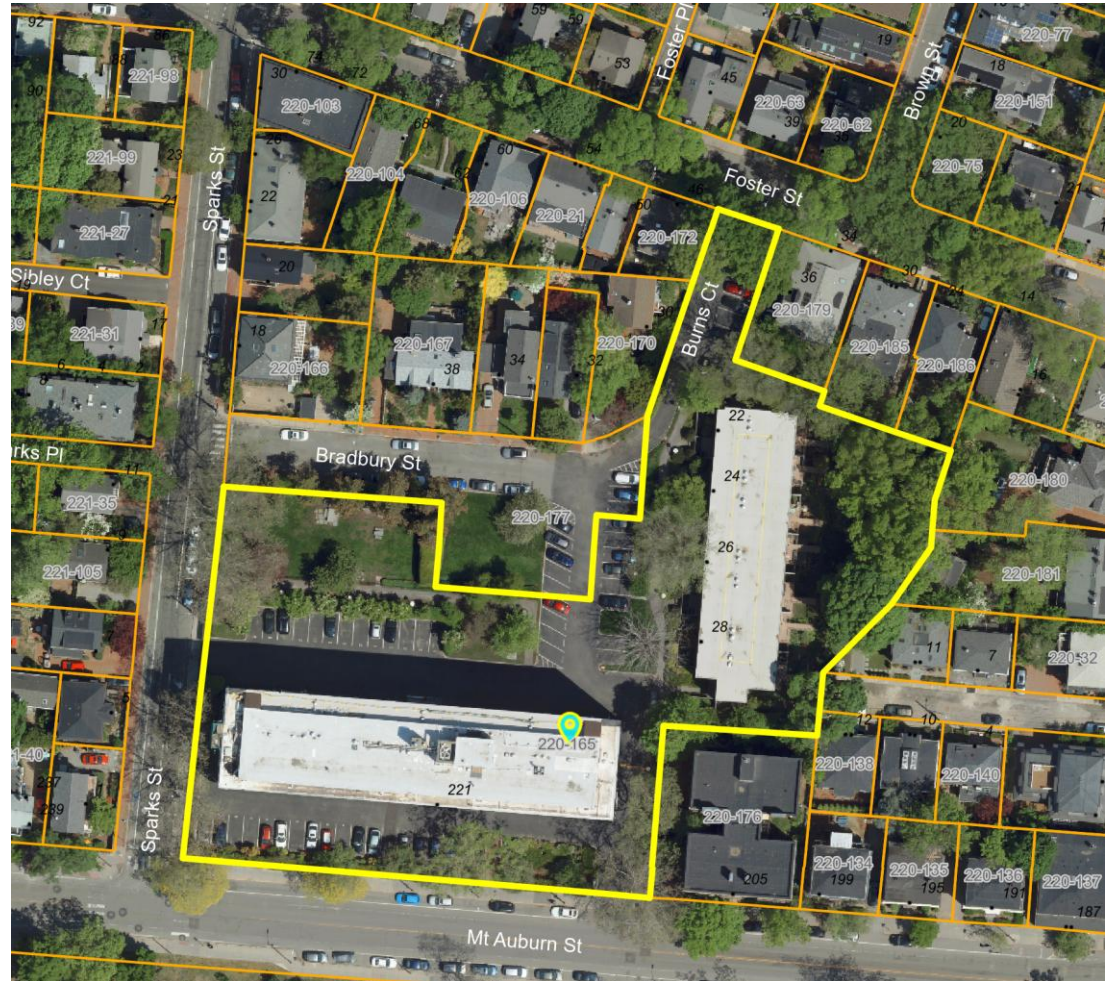
www.cambridgema.gov/221mtauburnst

221 Mt Auburn Street – Riverview Condominiums



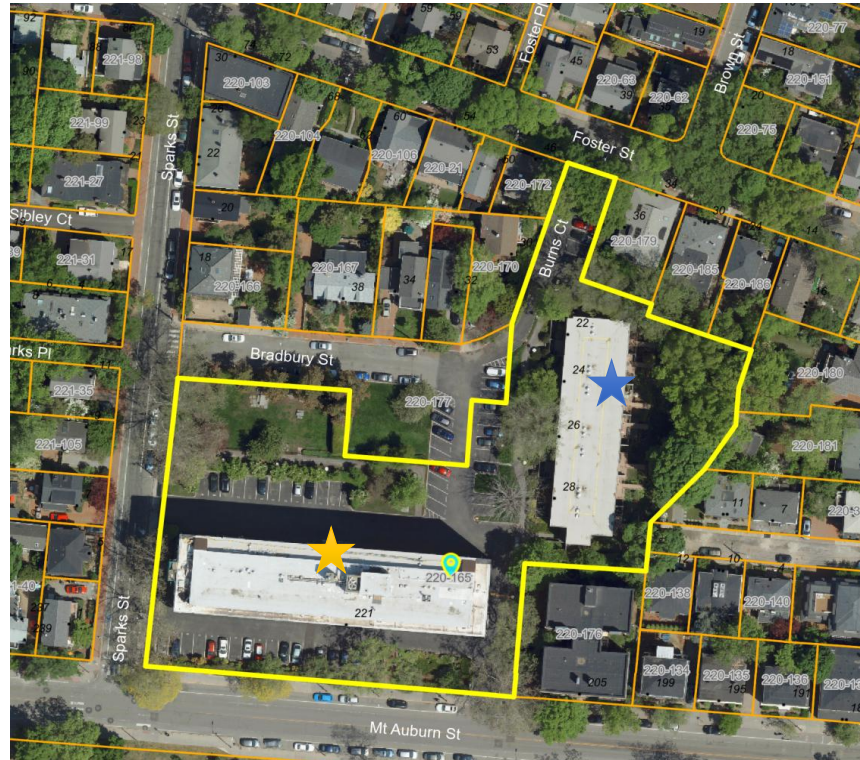
Agenda

- Overview of Structural Issues/Background
- Meet the Team
- Demolition Approach & Timeline
- Demolition Oversight & Monitoring
- Questions & Answers



Overview

History of Development



Overview

Structural Issues Identified

- 2023 preparatory work for roof and drainage improvements to address leakage and ponding issues included **coring new holes** in the **cantilevered balconies**.
- **SGH evaluated the capacity** of the slabs throughout the building
 - **Low Reinforcement**
 - **Low Concrete Compressive Strength**
 - **Utility Penetrations**
 - Deterioration from **Leakage and Corrosion**
 - Previous **Concrete Repair Work**



SGH

SLAB EVALUATION

Riverview Condominiums
221 Mt. Auburn Street
Cambridge, MA
7 February 2025
(Revised 25 April 2025)

SGH Project 200609.04



PREPARED FOR
Thayer & Associates, Inc.
1812 Massachusetts Avenue
Cambridge, MA 02140

PREPARED BY
Simpson Gumpertz & Heger Inc.
480 Totten Pond Road
Waltham, MA 02451
o: 781.907.9000

Delivered to the
City April 28, 2025

Report available on City
website:

www.cambridgema.gov/221MtAuburnSt

Overview

Asbestos

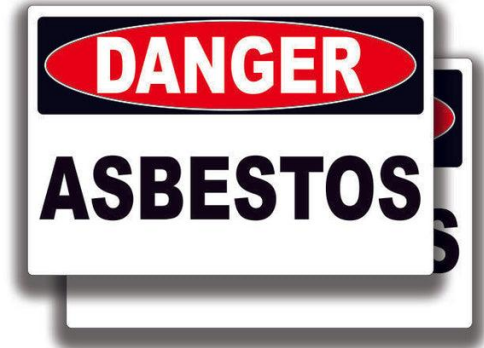


Asbestos is a **naturally occurring mineral** found in the ground. Widely used in buildings due to its **fire and heat resistance**, durability and insulation until **health risks associated with airborne asbestos** became apparent.

Individual asbestos fibers are **too small to see** with the human eye.

- **Serpentine** asbestos fibers are longer and about 95% of asbestos containing materials are the serpentine variety.
 - **Chrysotile** is the most recognized form of serpentine asbestos.
- **Amphibole** asbestos fibers are shorter and straighter than the serpentine form. Amphibole fibers end up deeper in the airways and are trapped inside tissue cells. Actinolite, anthophyllite, amosite, crocidolite, and tremolite are forms of amphibole fibers.

www.mesotheliomahub.com/mesothelioma/asbestos/types-of-asbestos/



Overview

Asbestos



Consistent with buildings of this era, **chrysotile asbestos** has been identified in joint compound, floor tiles and popcorn ceilings.

POLARIZED LIGHT MICROSCOPY by EPA 600/R-93/116

Sample No.	Sample Location	Homogeneous Material Description	Other Matrix Materials	Asbestos %	Asbestos Type
01a	Balcony	Grey exterior window caulk	---	ND	None
01b	Balcony	Grey exterior window caulk	---	ND	None
02a	Living room	Tan joint compound	---	2%	Chrysotile
02b	Bedroom downstairs	--	--	NA/PS	--
02c	Bedroom upstairs	--	--	NA/PS	--
03a	Bedroom upstairs	Grey 9x9 floor tile	---	10%	Chrysotile
03b	Bedroom upstairs	--	--	NA/PS	--
04a	Bedroom upstairs	Black mastic assoc. with grey floor tile	---	10%	Chrysotile
04b	Bedroom upstairs	--	--	NA/PS	--
05a	Hallway	Grey/White popcorn ceiling	---	3%	Chrysotile
05b	Hallway	--	--	NA/PS	--

Asbestos information from TRC Report to Riverview, dated January 13, 2025 and posted on project website.

Overview

Reducing Risk, and a Path to Demolition



- Consensus – building must be **demolished**
- City's involvement is based on **public health and safety**
- In-person **meeting July 10th** – 80 people in attendance
- Zoom **meeting July 24th** – over 200 people in attendance
- **Closed** adjacent streets July 19th – **Mt. Auburn & Sparks** streets
- City, in collaboration with the Riverview Condominiums, have taken necessary steps for the **City to undertake the demolition.**
- City Council **appropriated \$20M** on July 23rd. Bills will be issued and liens placed on properties to recover these expenses.



Overview

Reducing Risk, and a Path to Demolition

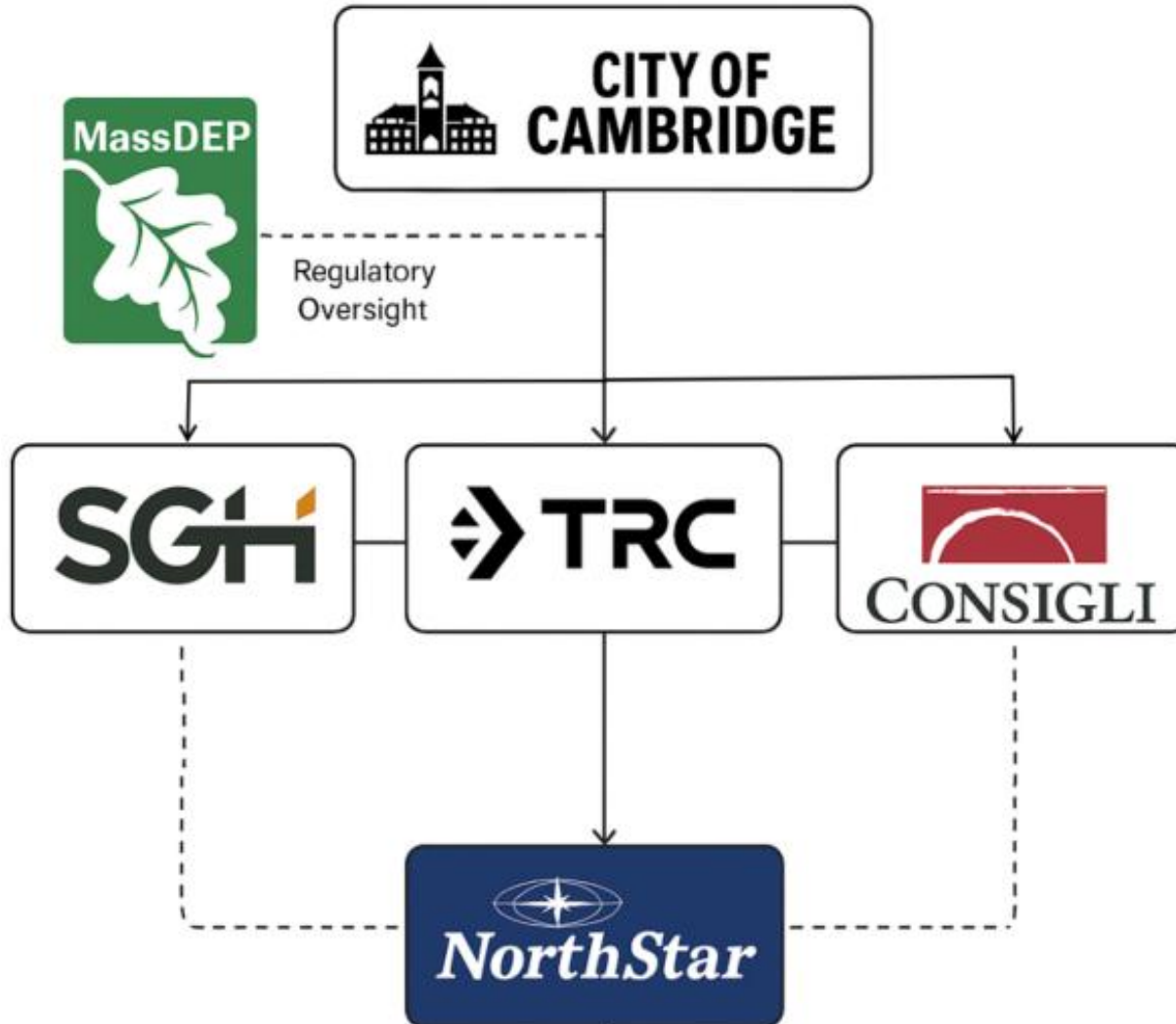


- Exterior **drone surveys** every 2 weeks
- City contracted with **qualified team** to oversee and implement the **demolition** of the building
- **Demolition process** is the focus of tonight's meeting
- For more information about the background on structural issues, please visit website and view **recording of the July 24th meeting**



Meet the Team

Highly qualified and dedicated



Meet the Team

City



- Project led by City Manager's Office and Capital Building Projects Department
- Responsible for consultant and construction teams, and keeping community informed.
- Capital Building Projects Department manages design and construction of school and municipal buildings.



Meet the Team

City



Examples of Demolition phases of past projects.





- MassDEP Responsible for permitting associated with asbestos removal in buildings
- Typically involves Pre-Abatement (removing asbestos before demolition)

- For situations where pre-abatement is not possible, MassDEP has a Non-Traditional Work Plan (NTWP)



Massachusetts Department of Environmental Protection

**Application for a Non-Traditional Asbestos
Abatement Work Practice Approval,
BWP AQ 36**
Instructions and Supporting Materials

- Asbestos Professional Licensing administered by the Department of Labor Standards MassDLS
 - Asbestos Certifications issued for contractors, consultants, laboratories and trainers involved in asbestos abatement.
 - Asbestos Licenses issued for personnel involved in asbestos abatement such as supervisors, workers, project monitors, designers, inspectors, etc.

Meet the Team

MassDEP



- NTWP:

“When demolition of a facility is done under an order issued by a state or local agency because the facility is structurally unsound and in danger of imminent collapse.”

- Team has been meeting and coordinating with MassDEP.
- **MassDEP** reviews and permits the strategies to manage the demolition; and will be **actively involved** throughout the process.
- MassDEP confirms that the contractors, consultants, and designers on the project have the **active MassDLS certifications and personnel licenses** required.
- **Pre-Inspection** with MassDEP required ***before* demolition begins** to confirm all safety protocols are in place.
- Share data with MassDEP throughout the process.
- Conduct **periodic (unannounced) inspections** throughout the demolition.
- **Post-inspection** with MassDEP before site is considered complete.

Simpson Gumpertz & Heger is a national engineering firm committed to delivering holistic advice for its clients' most complex challenges.

SOLUTIONS



**New
Construction**



Evaluation



**Failure
Investigation**



**Repair +
Rehabilitation**



Preservation

PRIMARY SERVICES

- | Structures
- | Building Enclosures
- | Advanced Analysis
- | Performance & Code Consulting
- | Applied Science & Research

MARKETS

- | Commercial
- | Culture & entertainment
- | Education
- | Energy
- | Government
- | Health care & life sciences
- | Industrial
- | Infrastructure & transportation
- | Residential
- | Science & defense

FACTS

YEAR FOUNDED

1956

EMPLOYEES

750

TECHNICAL STAFF

600+

FACT SHEET

About TRC

TRC stands for adaptability. With direction setting perspectives and partnerships, our **8,000+ tested practitioners in advisory, consulting, construction, engineering and management services** deliver unique resolutions that answer any built or natural imperative.

By creating new pathways for the world to thrive, we help our clients adapt to change and achieve long-lasting results while solving the challenges of making the Earth a better place to live — community by community and project by project.



Employees: ~8,000



Offices: 150+



Headquarters: Windsor, Connecticut



Locations: Multiple offices across the U.S., U.K., China & India



Revenue: \$1B+ Gross Revenue



Meet the Team

Consigli

- In **1905 Peter Consigli**, a skilled mason, established Peter Consigli & Sons in **Milford, MA**, on the cornerstones of hard work, integrity and pride in craftsmanship.
- Over a century later, Consigli has grown from a local business into **one of the largest employee-owned construction managers** in the Northeast and Mid-Atlantic.
- **2,200 employees**; 15 regional offices; and **\$3.7+ billion in annual volume**.



John F. Kennedy Library Foundation, JFK Library Legacy Gallery Renovation
BOSTON, MA



Novartis Institutes for Biomedical Research, Inc., Cambridge Campus Expansion
CAMBRIDGE, MA



Old South Church, Exterior and Interior Restoration and System Upgrades
BOSTON, MA



Society for the Preservation of New England Antiquities, Harrison Gray Otis House - Stone Retaining Wall Restoration
BOSTON, MA



St. Paul's Parish, Vestibule Restoration
MALDEN, MA



The Trustees of Reservations, Castle Hill Crane Estate Casino Restoration
IPSWICH, MA



Trinity Church Boston, West Wall and Southwest Tower
BOSTON, MA



UMass Medical School, Cryo-Electron Microscopy Facility
WORCESTER, MA



Worcester Polytechnic Institute, Washburn Nuclear Reactor Demolition
WORCESTER, MA

Meet the Team

Consigli





AWARDS & RANKINGS



2024
BEST PLACE
TO WORK





2023

Forbes Best Midsize Employer

#3

Largest General Contractor in Massachusetts (BBJ)

#15

Ranking on ENR's Top 100 Green Building Contractors

120+

Historic Preservation Awards

200+

Project-related Awards

- Premier facility services and environmental contractor in the United States and **world's largest demolition and abatement firm.**
- **Annual revenues \$850 million** and bonding capacity of \$350 million.
- Since 1988, NorthStar has established an impeccable **track record of safety** and experience completing complex demolition projects in **dense, urban areas.**
- Work includes **Abatement, Demolition, Environmental Remediation, Industrial Facility Deconstruction, and Nuclear Decommissioning.**
- Experienced team of executives, managers and field personnel.
- Review some **similar scale projects** before we get into some of the specifics for the 221 Mt Auburn St demolition.

Meet the Team

NorthStar – St John Tower, Stamford, CT



- Demolition of **17 story** (185' tall) **apartment** structure.
- Located within 30' of the two main city artery roadways & directly across from city hall.
- Explosive demolition not an option due to proximity to other newly constructed high-rise office & apartment buildings.
- Used **145' and 200' High-Reach excavators** to permit structural demolition of the tower building.



Meet the Team

NorthStar – St John Tower, Stamford, CT



Meet the Team

NorthStar – One Post Office Square, Boston, MA*



- Completed **asbestos abatement, demolition** and exterior façade removal from an occupied 41 story 525' skyscraper in Boston's Financial District.
- The project included the complete demolition of adjacent **11-story parking garage**.
- Project located in **downtown Boston** with significant safety precautions.



* Not to be confused with the Gov't Center Garage Demo.

Meet the Team

NorthStar – One Post Office Square, Boston, MA



Meet the Team

NorthStar – College Buildings, Cambridge, MA

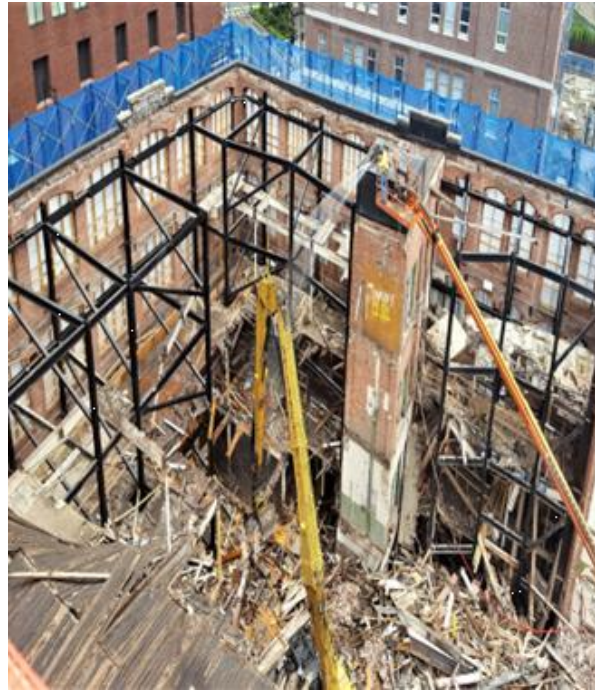


- Completed several contracts for **asbestos abatement and demolition** of various college-owned buildings in **active urban areas** throughout **Cambridge**.
- Completed structural demolition as well as interior gut out and abatement.
- **High-Reach Excavators** and **Cannons** were used extensively in tight proximity to neighboring buildings as well as pedestrian walkways.



Meet the Team

NorthStar – College Buildings, Cambridge, MA



Meet the Team

NorthStar – UMass Health Hospital, Fitchburg, MA



- Completed structural demolition of the **Burbank Wing** of the UMass Health Alliance **Hospital**.
- Building **shared a common wall** to the adjacent hospital.
- Deployed a **High-Reach Excavator** and **Cannon** to ensure the project was completed safely and effectively - given the complexity of working in an **active hospital setting**.



Meet the Team

NorthStar – UMass Health Hospital, Fitchburg, MA



Meet the Team

NorthStar – 10 Waldo St, Brookline, MA



- Completed the strategic **demolition and asbestos abatement** of a 26,000-square-foot reinforced concrete and brick warehouse.
- Similar to this project, the work was conducted under a **Non-Traditional Work Plan (NTWP)**.
- All resulting **debris was safely managed**, bulk-loaded, and disposed of as asbestos-containing material **in full compliance** with the MassDEP approved NTWP.



Demolition Approach



Demolition Approach

Key Pieces of Equipment for 221 Mt Auburn



Qualified and experienced **personnel**

High-Reach Excavator

- 145' reach
- With water nozzle mounted on the excavator boom
- Directs water to the active point of demolition



Demolition Approach

Key Pieces of Equipment for 221 Mt Auburn



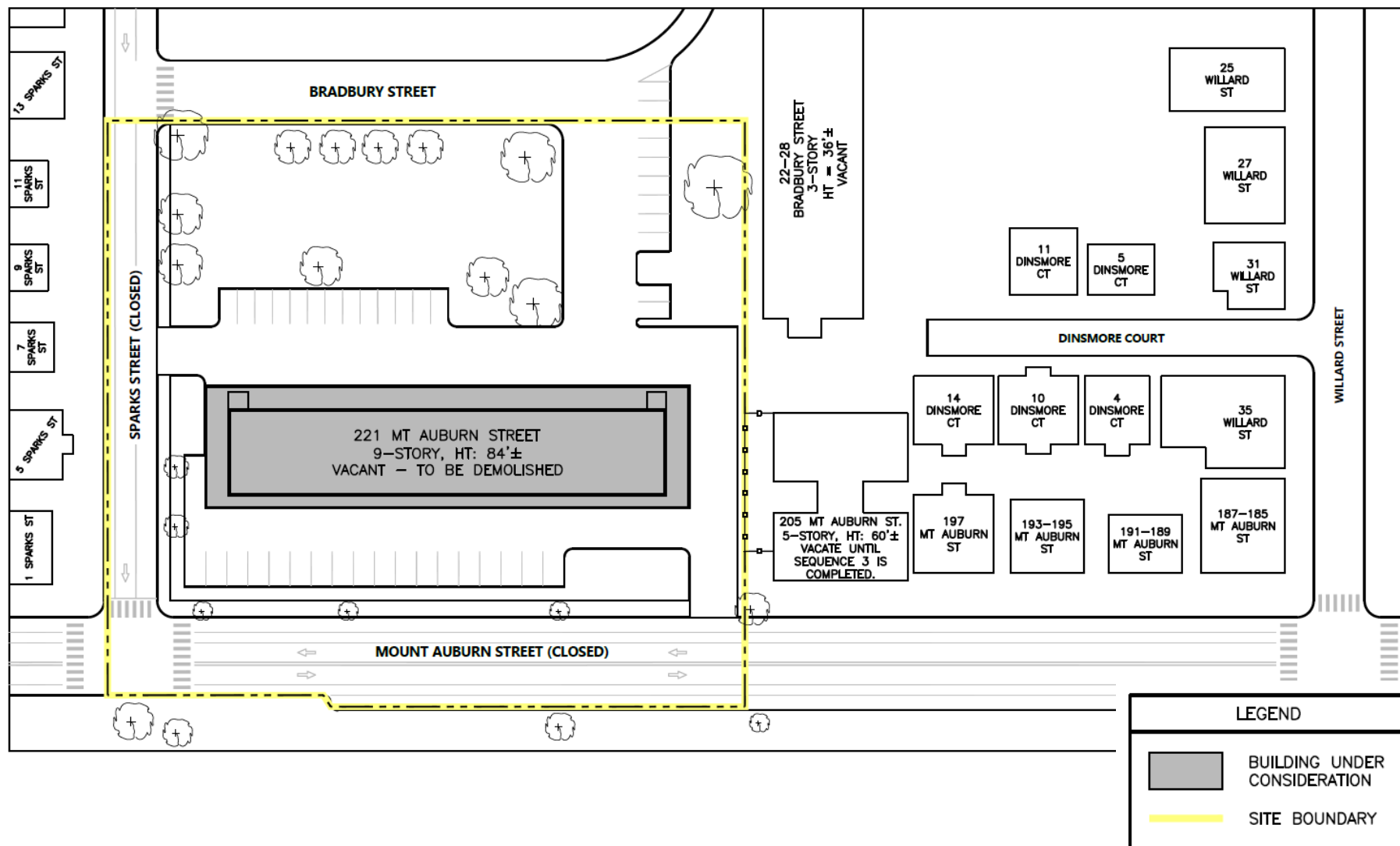
Qualified and experienced **personnel**

- **Large Cannon** for consistent water coverage, HKD Blue V400S
 - Project 250', coverage up to 145,000 sq ft
 - Controlled remotely or manually
 - 330 degrees of programmable oscillation
 - Easily relocated on site
 - 10+ years experience with equipment and winter operations
 - Water captured & re-used to wet debris



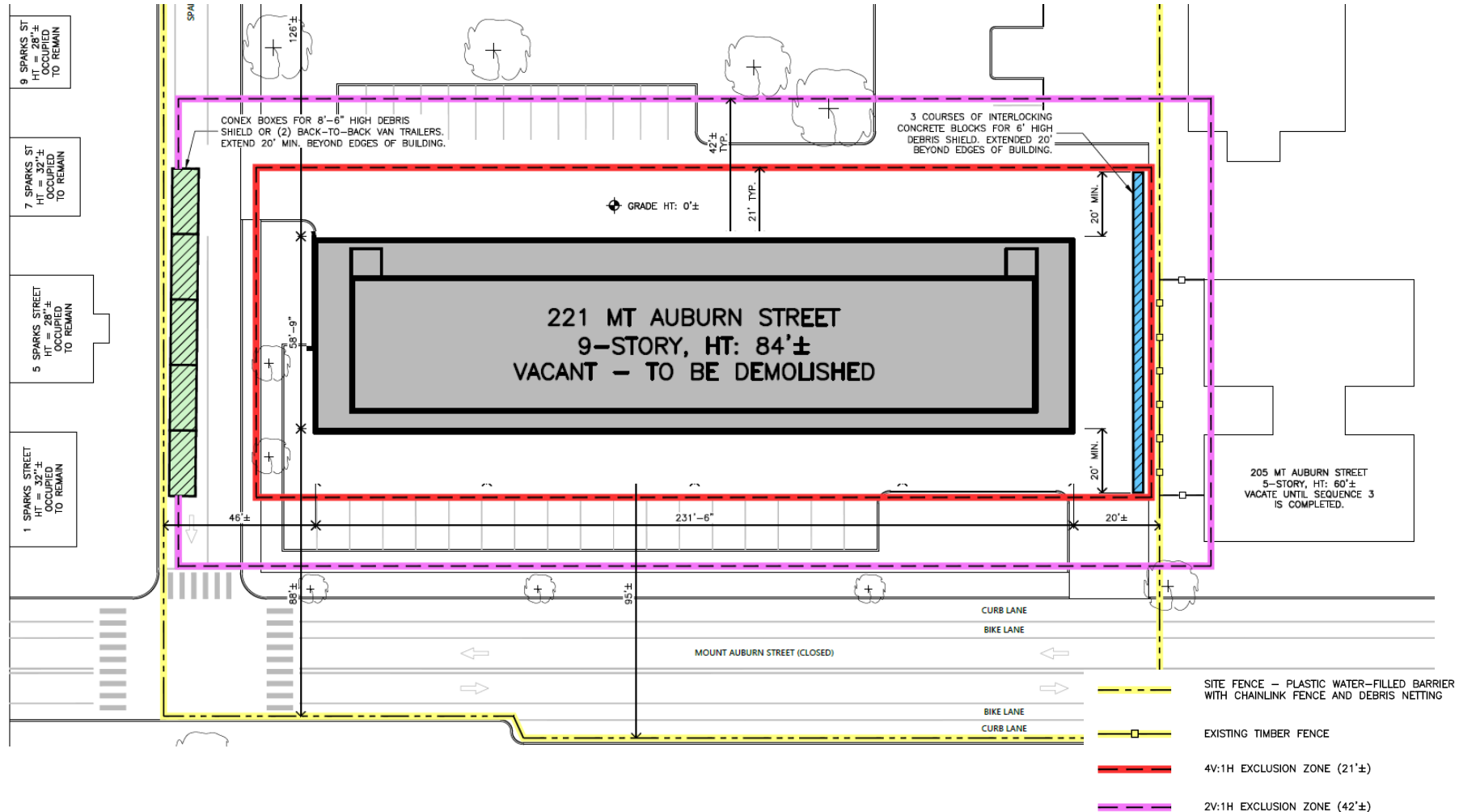
Demolition Approach

Approximate Site Boundary



Demolition Approach

Exclusion Zones ($\frac{1}{4}$ and $\frac{1}{2}$ the Height)



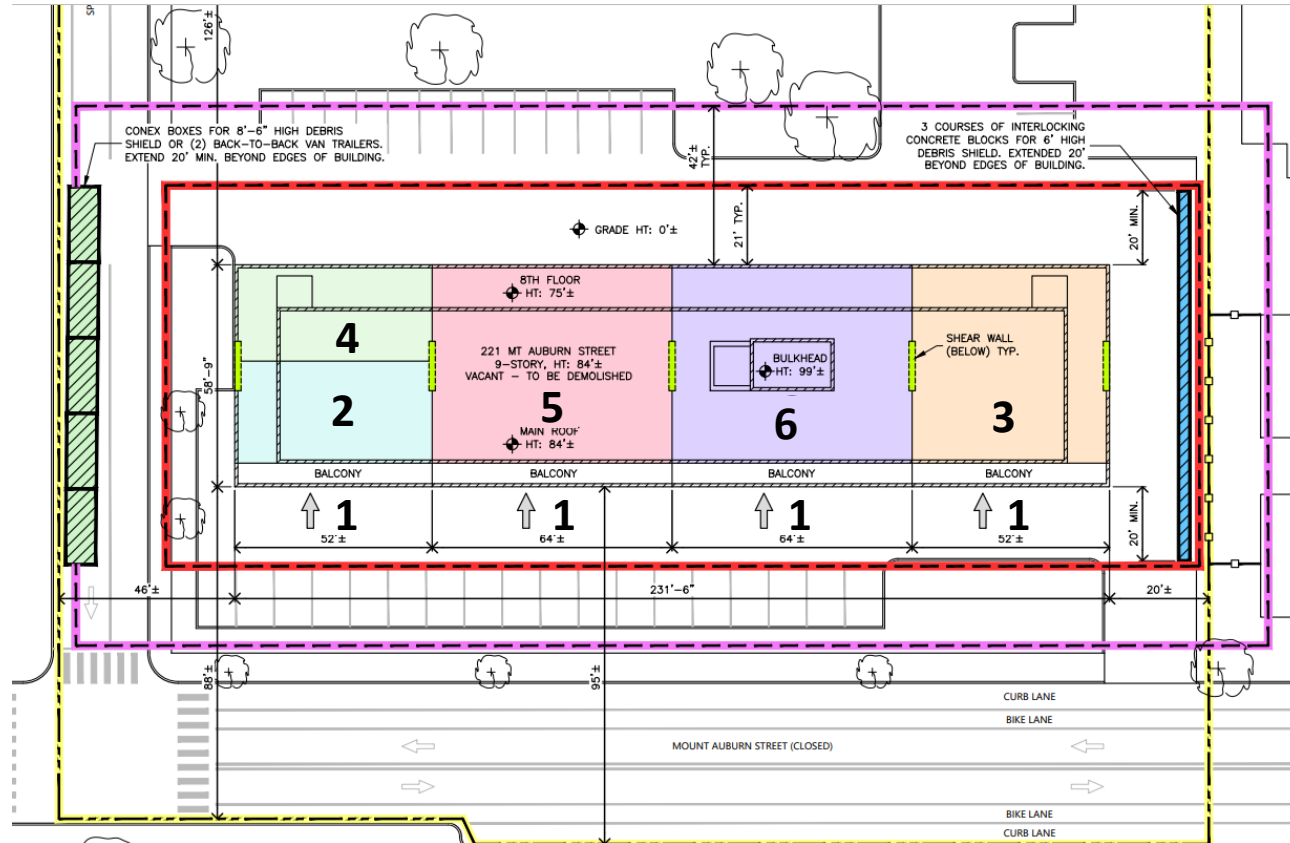
Demolition Approach

Phasing

How will demolition be phased?

- Balconies (1)
- West Side (2)
- East Side (3)
- West Side (4)
- Middle Sections (5 & 6)

Continue to evaluate exclusions zones as demolition proceeds



Demolition Approach

Trucking



- Truck Routes – Mt Auburn St
 - From Harvard Sq toward Fresh Pond
 - Road closure helps simplify operations. Drive in and out, minimal backing and turning on site.
- Non-porous metals debris (beams, rebar, etc.) will be cleaned and then recycled.
- Remaining debris will be treated as asbestos containing material and properly managed, handled and disposed.
- Material will be wetted and loaded into lined, covered trucks.
- Containers will be **double lined** with **10-mil thickness** prefabricated **liners**. Each liner sealed on site before trucks depart.
- 15 trucks/day, maximum



Demolition Approach

What to Expect During Demolition



General Construction Activities

- Noisy, large equipment
- Anticipate general construction hours: Monday to Friday, 7 am to 4 pm
- Under noise ordinance, construction is allowed
 - Monday to Friday, 7 am to 6 pm, and Saturday, 9 am to 6 pm. Work outside those hours requires a variance through the License Commission.
- **Limited impacts to parking** beyond what is already blocked off
 - This operation is not personnel intensive. 15 to 20 contractor staff and 5 to 10 consultants and City staff.

Demolition Approach

Final Site Conditions



Commitment to **public health and safety**

- Focus on the demolition of the building & public health and public safety.
- Full **removal of 9-story concrete building**, but not the building foundation and not the units in the Bradbury Building.
- Evaluating the conflict between existing trees and safe demolition.
 - **No removal of street trees** or trees on other properties.
 - **2 street trees will be pruned** by City Arborist to ensure they aren't damaged by truck traffic.
 - **Evaluating 4 private trees** along the front of 221 Mt Auburn St.

Future Development

- No identified timeline for the redevelopment of the site.
- Once demo is completed, the owners will determine how to proceed with the site.
- Anticipate it will take approximately 1 year to obtain legal authority to sell/redevelop property.

Demolition Oversight and Monitoring

Summary of Approach



This project is a high priority for entire team. Safety involves significant upfront work and planning, as well as oversight and monitoring.

Upfront:

- Strong team **committed to safety**.
- Establishing Safety Protocols up front; **working closely with MassDEP**.

During:

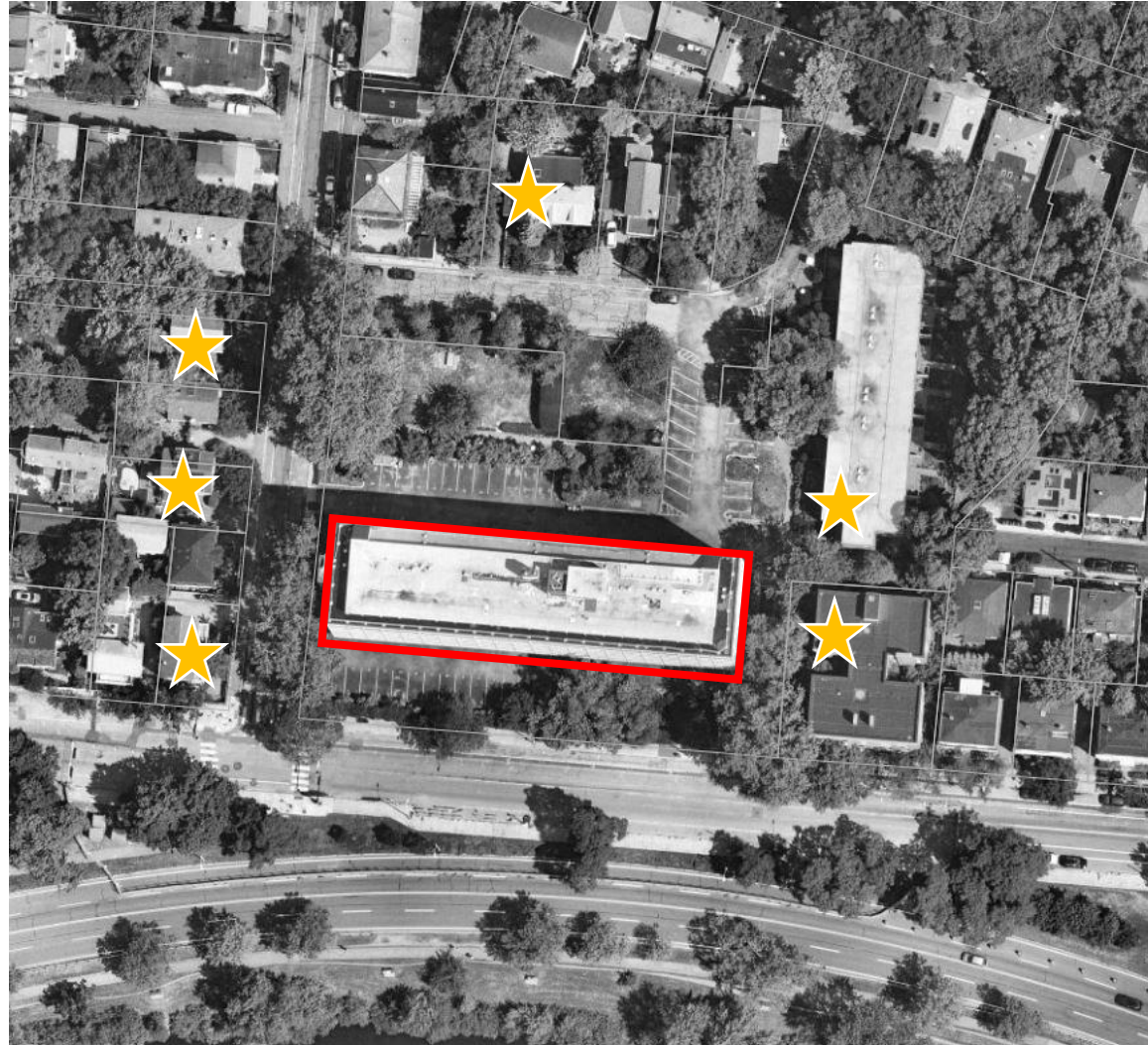
- **Consigli and NorthStar** follow safety protocols, use the right equipment and qualified personnel.
- **SGH** will be monitoring vibration data and structural progress on the building.
- **TRC** will have staff **on site daily** during demolition taking air samples and reporting data to MassDEP.
- **City** will have construction managers on site daily throughout the construction.
- **MassDEP** has oversight of NTWP and will conduct **pre and post inspections**, as well as **periodic (unannounced) inspections** during demolition.

Demolition Oversight and Monitoring

Vibration Monitoring



- **Objective:** Correlate construction activity with vibrations (if any) to adjacent structures
- Locations capture a range of distances to create a "perimeter"
- Weekly reporting (comparable to drone reports)
- Minimal excavation and not removing the foundation
- Begin installing the week of October 27th to establish baseline data

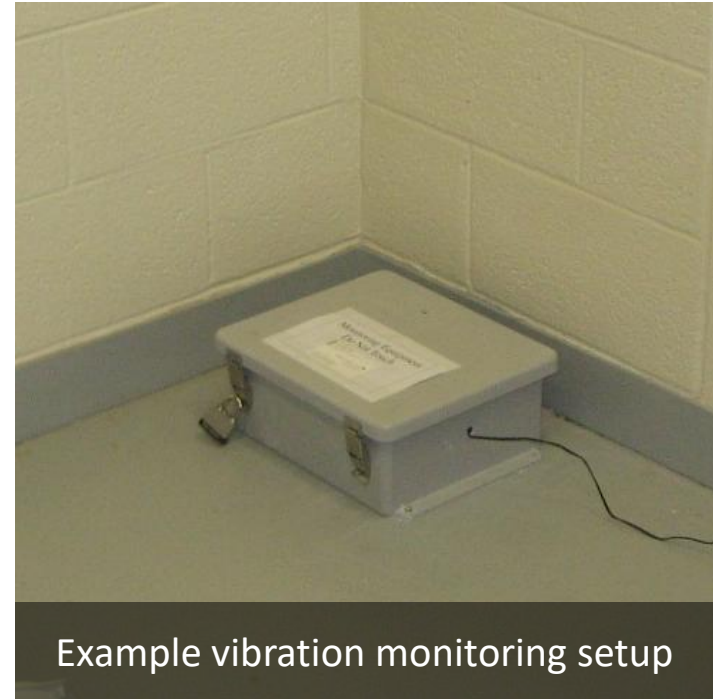


Demolition Oversight and Monitoring

Vibration Monitoring



- Devices directly attached to abutting structures' foundations
- Threshold based on “background” vibration level
- If event triggers threshold
 - Investigate cause
 - Implement corrective actions
 - Assess damage (if any)



Example vibration monitoring setup

Monitoring team notified of all triggering events.

Demolition Oversight and Monitoring

Construction Surveys



Objective: Correlate construction activity with any potential structural damage to buildings (if any)

Locations represent immediate abutters and those within a ~100 ft radius of Riverview building

Photo and video documentation of interior and exterior of structures



Demolition Oversight and Monitoring

Airborne Monitoring



- Clearly mark and manage **asbestos regulated area** – only people with appropriate equipment (PPE) are allowed to be within that zone.
- Proactive management of operations – **No visible emissions** of asbestos in the outside air. Keep asbestos containing **material wet**.
- MassDLS licensed **Asbestos Project Monitor** on site throughout demolition with authority to shutdown the operations.
- Ambient **air monitoring** at **6 fixed locations** surrounding the work area and **one to two additional units** that will be relocated daily.
- Two sets of air samples will be collected and analyzed each day at each location, **16 samples or more per workday** using NIOSH 7400 PCM supplemented by Transmission Electron Microscopy (TEM) methods.



Demolition Oversight and Monitoring

Summary of Approach



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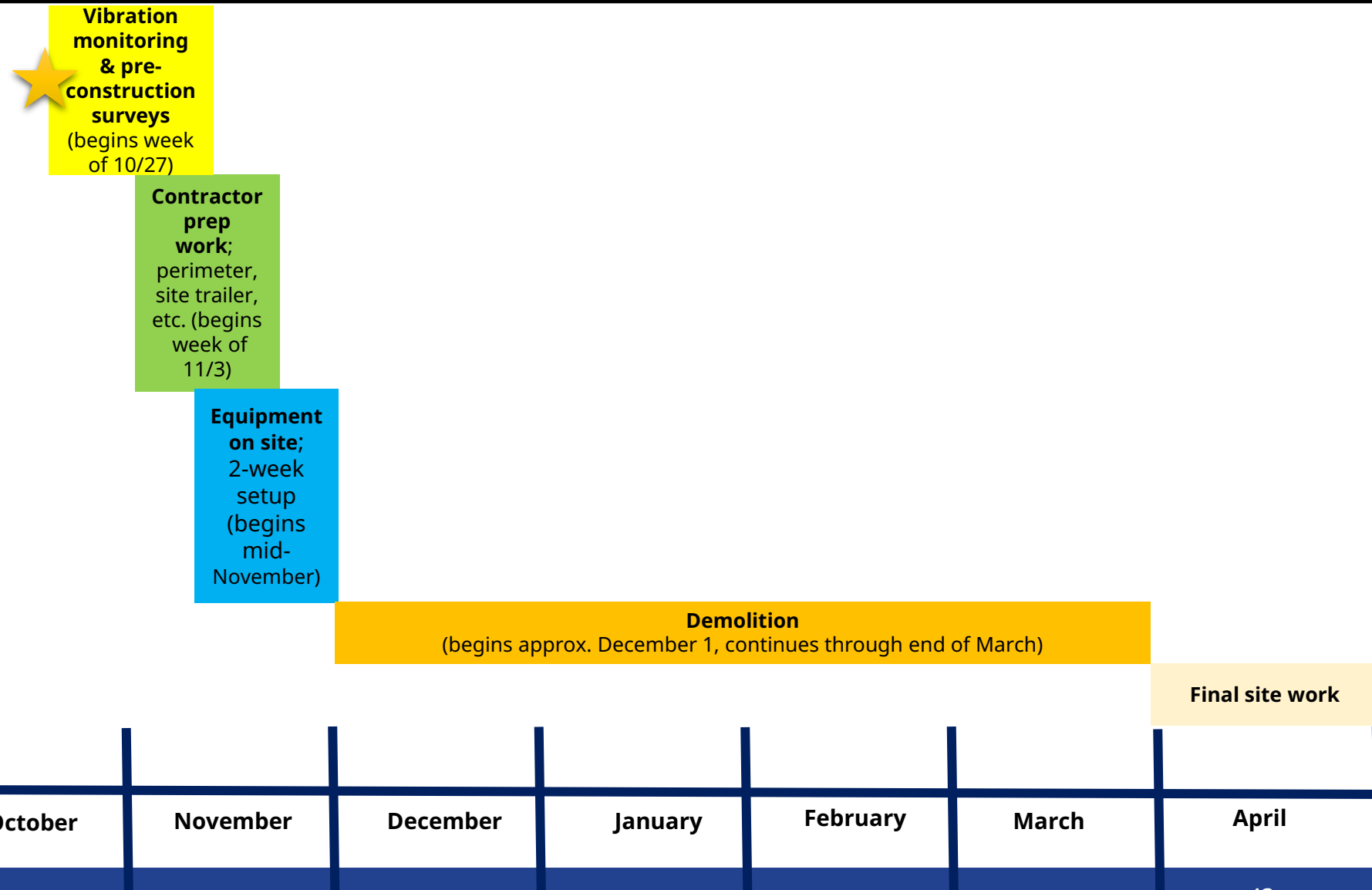
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Demolition Approach Schedule



What's Next for Residents



City continues its commitment to **protecting public safety** and **public health** and **clear communication**.

Check website – www.cambridgema.gov/221mtauburnst

- **Sign up for email notifications** on website
- NTWP posted on website upon MassDEP review/approval
- Schedule and monitoring reports will be posted weekly during demolition
- Check FAQs – will be updated
- Tonight's presentation will be posted soon



• Contact Kristen Kelleher, Community Relations Manager, with questions:

- 617-349-4825 | kkelleher@cambridgema.gov

For emergencies after hours please call 911 or the police non-emergency line at 617-349-3300



Questions?

- Type your question in the Q&A box: A small icon representing a Q&A box, showing the text "Q&A" in blue and red, followed by a speech bubble icon.
- We will try to get to as many questions as time allows
- We will be updating the FAQ document on the project website

*If you are unable to submit a question in the Q&A box, please email Kristen or leave a voicemail:

- kkelleher@cambridgema.gov
- 617-349-4825