

# Duct Bank and Substation Work

March 2, 2026

# Overview

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- JHU will install a new electrical duct bank running up Howard Street entirely at the university's expense, with **no cost to BGE or the public**, and will construct a new substation on campus.
- **Work will occur in phases (one to three block increments)** on weekdays from 9 a.m. to 3 p.m. There will be no interruption to traffic or parking during rush hour.
- JHU will schedule the work to minimize disruption for local businesses, and we are working to identify parking alternatives for neighbors and businesses.
- The duct bank and substation will supply power to both **existing and new buildings** on the Homewood campus to help meet both JHU's sustainability goals and state requirements.
- JHU will install new, ADA-accessible curb ramps and sidewalk bump-outs at two intersections on Howard Street.

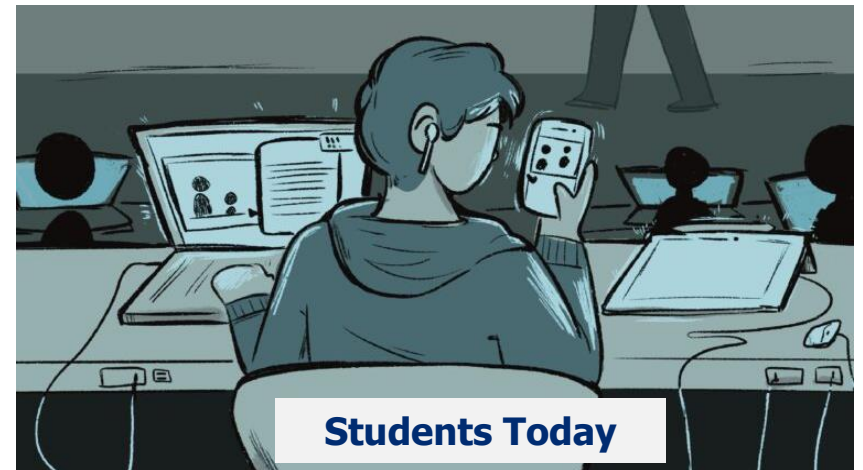


Example of underground conduit lines.

# Campus Electrification and Energy Needs

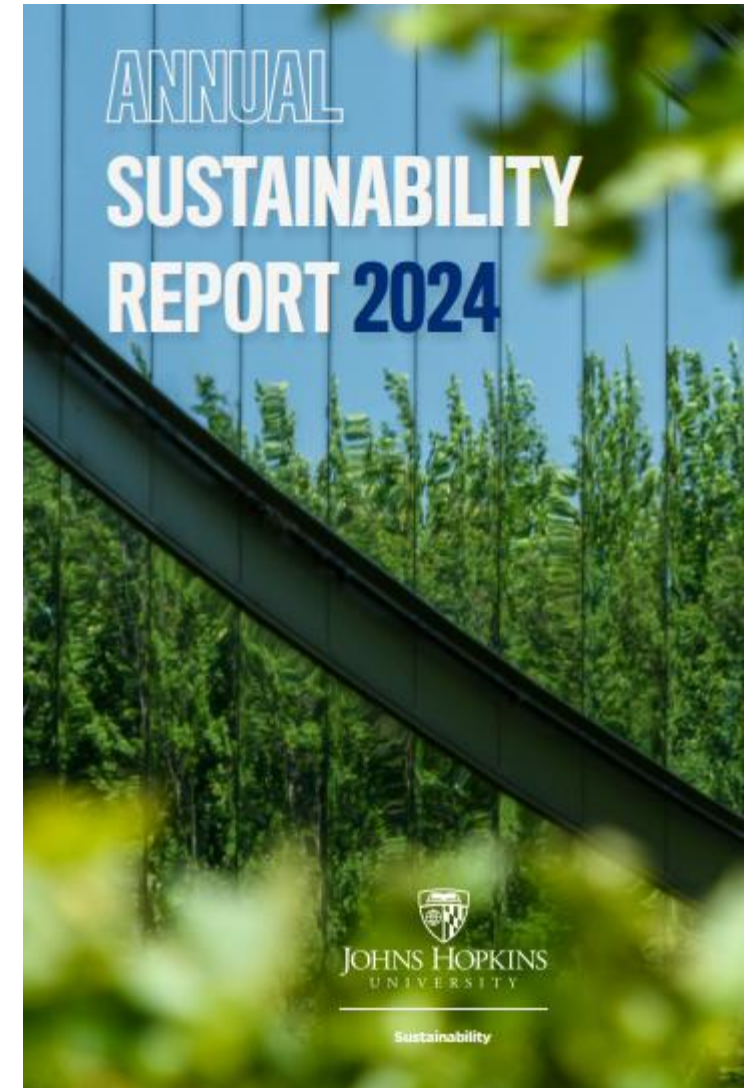
JHU is running new electrical service to the Homewood campus for the first time in 30 years because of three main reasons:

1. Energy needs have changed in **modern university buildings**
2. The **university's climate commitments** to eliminate fossil fuels and reach net-zero emissions by 2040
3. Meeting **Maryland's climate goals** and energy standards, requiring the electrification of buildings



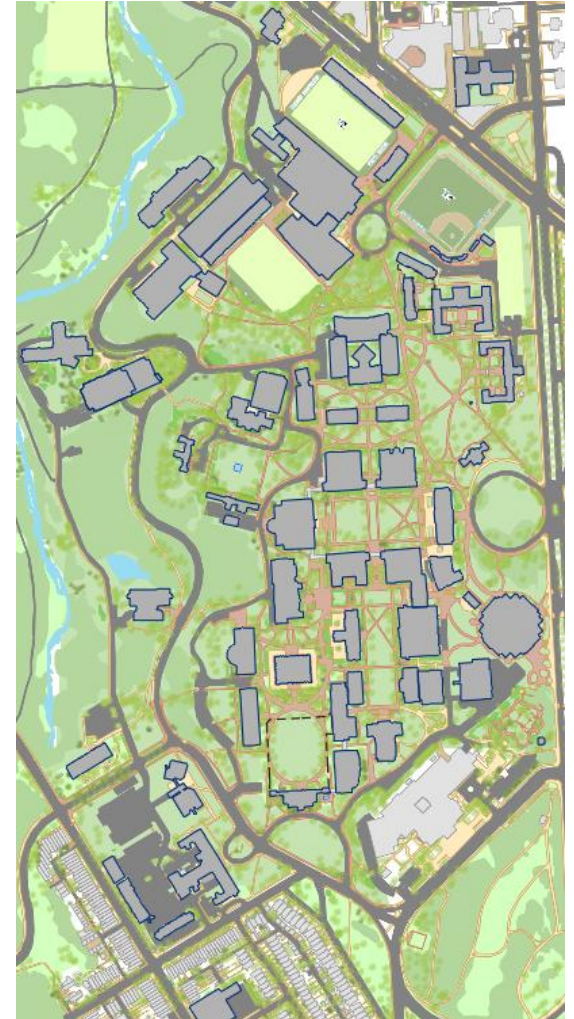
# JHU's Sustainability Commitments

- JHU is committed to achieving **net zero greenhouse gas emissions by 2040** as part of our [Climate Action and Sustainability Plan](#).
- In addition, the plan establishes commitments to:
  - Procure **100% of purchased electricity from renewable sources** by 2030—building on JHU’s existing Solar Agreement
  - Increase our **waste stream diversion from landfill and incineration to 50%** by 2030
  - Purchase **all new light-duty and passenger vehicles as electric** by 2030
  - **Electrify our heavy-duty vehicles**, as seen in the recent rollout of five electric buses for our Homewood-Peabody-JHMI route, the busiest route on campus.
- JHU also established **new High Performance and Healthy Building Requirements** for all capital projects as part of the plan’s framework. These requirements integrate sustainability into projects with a holistic emphasis on energy, resilience, water, landscape, materials, and health and well-being.



# Campus Electrification and Maryland Requirements

- The duct bank and substation work will support campus electrification, **decreasing greenhouse gas pollution and reducing reliance on fossil fuels.**
- **Maryland's Climate Solutions Now Act of 2022** established Building Energy Performance Standards requiring the phase-out of fossil fuels and building electrification to meet the state's target of a 60% reduction in greenhouse gas emissions by 2031 and net-zero emissions by 2045.
  - The law applies to the majority of buildings over 35,000 square feet across the entire state (e.g. grocery stores, apartment buildings, office buildings), **including most buildings at JHU.**
  - Building owners need to reduce greenhouse gas emissions from fossil fuel combustion or incur financial penalties, and over the next twenty-years thousands of buildings across the state will replace gas-fired equipment with electrical equipment, to reduce pollution, increase renewable power, and mitigate Maryland's impact on climate change.
- **Most buildings across JHU, including at the Homewood Campus,** will need to convert from natural gas to electrified heating in the coming years to meet JHU's sustainability goals and MD's state requirements.



# Duct Bank and Substation Installation

- **What is a Duct Bank?**

- Underground cable management system, often cast in concrete. Keeps wires & cables safe from environmental elements.

- **What is a Substation?**

- Electricity regulator safely "transforms" high voltage electricity service to the appropriate voltage for building operations.

- **Why does JHU need this?**

- This is the first time in 30 years that JHU has brought new electrical lines to the Homewood campus.
- Current substation is almost 40-years-old and outdated based on contemporary needs and modern expectations of a research university.
- This infrastructure will support multiple existing and new buildings on the Homewood campus – and is necessary to meet Maryland's electrification requirement and JHU's published sustainability goals.

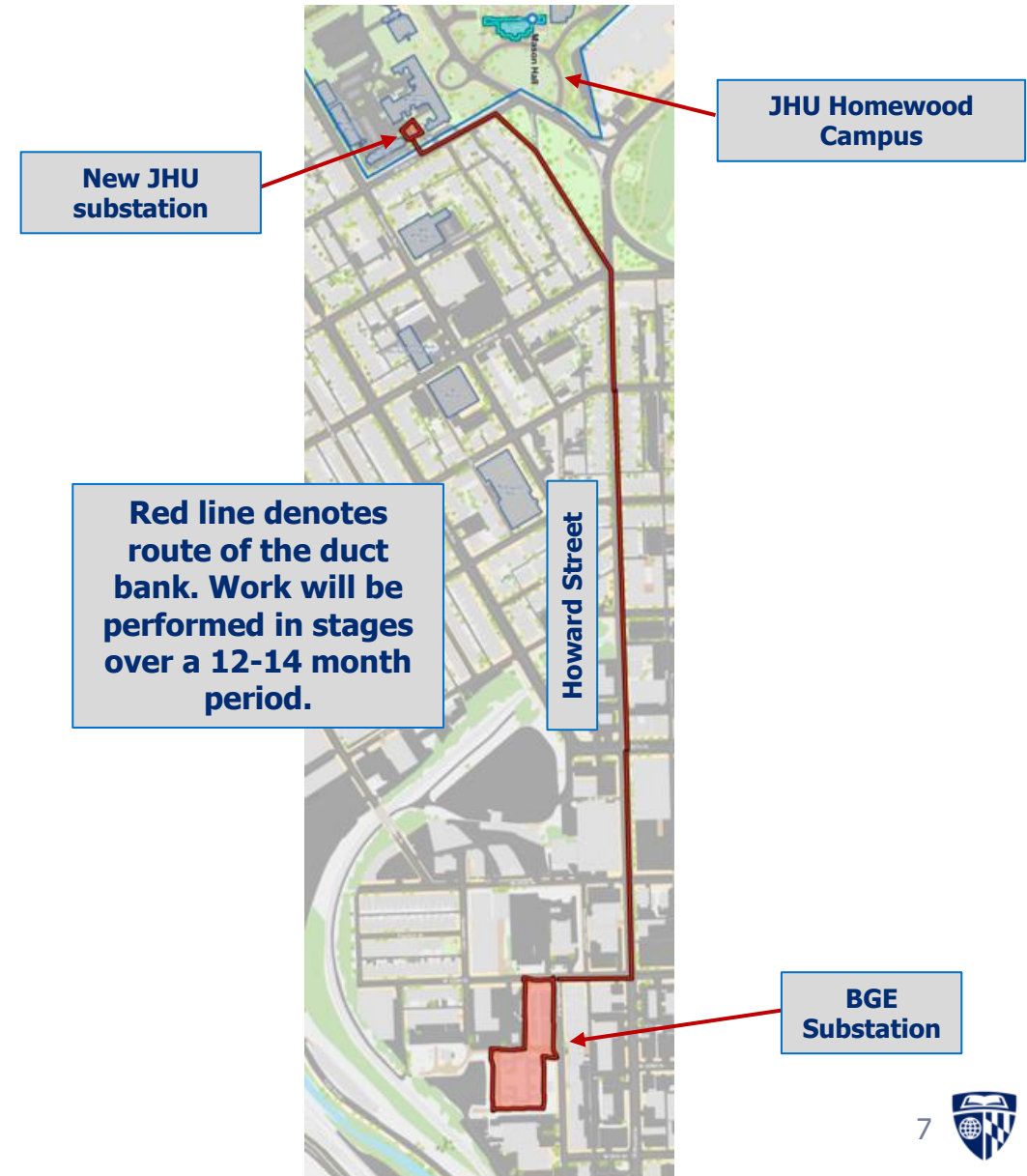


**Map shows duct bank route, but work will occur in phases**

# Overview of Phased Duct Bank Work

## Dates and Impact

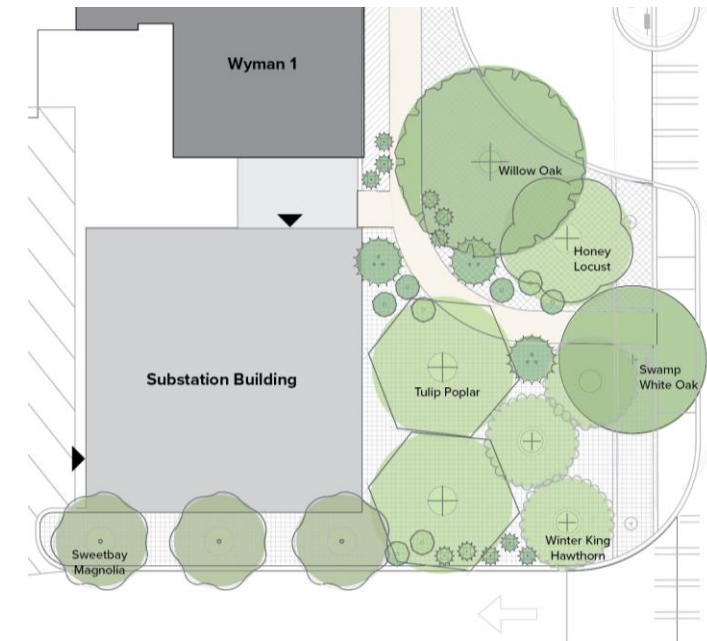
- Work is anticipated to begin in Spring 2026 and will take 12-14 months.
- Work will be done in segments of 1-3 blocks at a time and is projected to take approximately 8-9 weeks per block.
- Work hours are 9 a.m. - 3 p.m. Monday – Friday.
  - Normal traffic will be maintained during rush hour.
  - During work hours, flaggers or appropriate signage will be in place to direct traffic flow.
  - Parking restrictions are only in effect during work hours.
- Steel plates placed on top of road during off-hours to allow for regular traffic patterns and parking.
- Trenches are dug based on the location of existing utilities, which will vary from street to street.





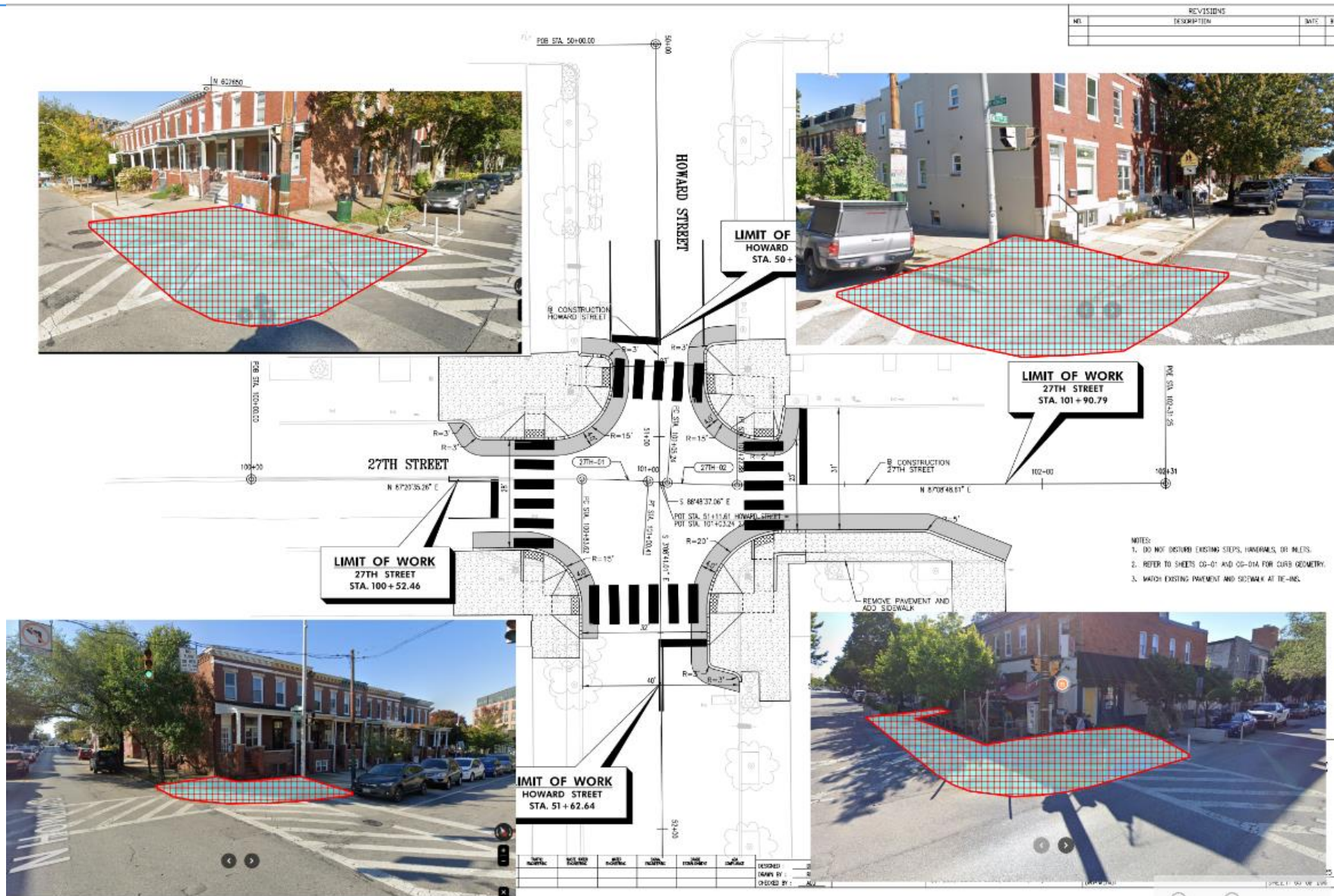
# Substation Detail

- Construction of the substation building will begin in summer 2026 and take roughly 12 months to complete.
- The substation building is 2,000 sq. ft.
- The front of the building is aligned with Wyman 1, and is 110 ft from residences across W. 31st St.
- The area between the building and W. 31st St will be landscaped with trees, shrubs, and ground cover.
- This will replace the current substation located inside Wyman 3, across from the 3100 block of Remington Avenue.
- The duct bank **does not** feed high transmission lines into the substation.



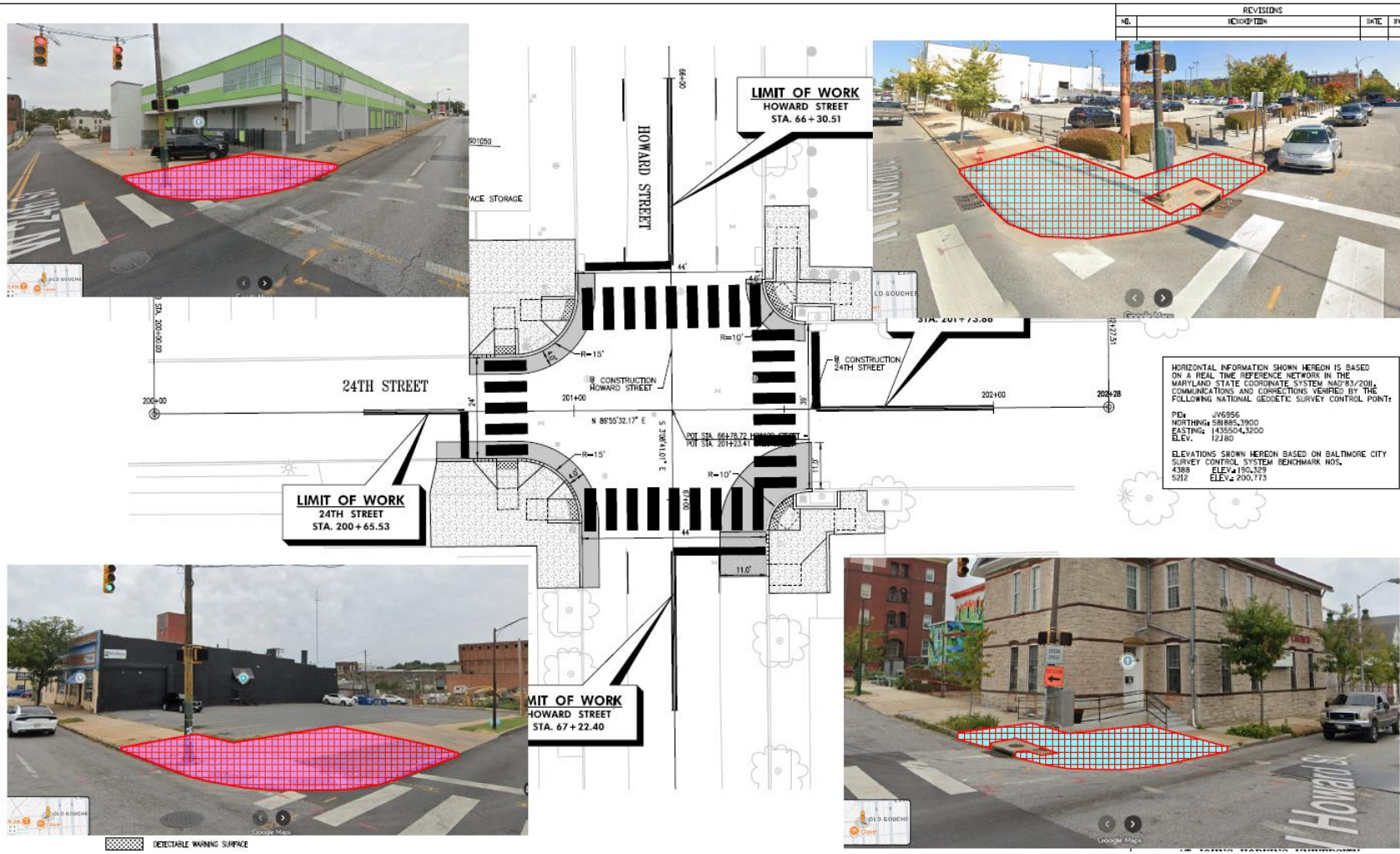
Secured entrances to the substation building will be located in the breezeway between Wyman 1 and on the interior side of JHU's campus.

# Intersection Improvements | 27th and Howard St.



Intersection improvements include new ADA curb ramps, sidewalk bump outs to improve pedestrian safety, and repainted crosswalk stripes.

# Intersection Improvements | 24th and Howard St.



Intersection improvements include new ADA curb ramps, sidewalk bump outs to improve pedestrian safety, and repainted crosswalk stripes.

# City Benefit and Infrastructure Upgrades

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## **Duct Bank and Wiring**

- JHU will pay to construct the duct bank and transfer ownership to the City.
- The wire within the conduit will be transferred to BGE.

## **Electrical Grid Capacity**

- The project will move a portion of the Homewood campus off of the local electrical grid.

## **City Streets**

- Work areas will be repaved.
- Wyman Parkway will be repaved curb-to-curb.

## **Curbs and Sidewalk Upgrades**

- ADA compliant curbs, sidewalk bump outs, and repainted crosswalk stripes will be provided at 27th & Howard St. and 24th & Howard Street.

*This type of work is routine in the City and does not require vibration or noise monitoring.*

# Support During Construction

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## Support for Neighbors

- Neighbors in the affected area were notified of the planned work in September 2025
- JHU will proactively reach out to residential and commercial property owners on the affected block in advance of the start of work on each phase

## Parking

- Contractors will not be allowed to park personal vehicles in the neighborhood.
- Exploring local parking options for residents during construction.

## Businesses

- The anticipated phased schedule is designed to minimize disruption to businesses with seasonal outdoor dining during months of peak use.



# Next Steps

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- Dedicated website with information.



