

BROAD STREET Substation Inductor Project

Upgrading our power grid to meet growing demand and reduce outages

WELCOME!

What are we doing here tonight?

We're here to inform you about the proposed Broad Street Substation improvements AND get your input in some key areas:

- **Preliminary Design**
- **Street Vacation**
- **Public Benefits**

How can you participate?

Talk with project staff

We're here to answer questions and listen

Put pen to paper

Share your input on flip charts or the comment board, or use a comment form

Need to think about it?

You can always send us an email:

SCL_BroadSub@seattle.gov.



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PROJECT DESCRIPTION

Seattle City Light is committed to producing and delivering environmentally responsible, safe, low-cost, and reliable power. As part of this commitment, City Light plans to construct transmission system improvements that will increase reliability of the Puget Sound Area and Northern Intertie (PSANI) power grid.

The Broad Street Substation Inductor Project is one of three planned system improvements.

Project benefits

- Improve reliability of the regional electric transmission grid
- Meet energy demands of our growing region
- Reduce the likelihood of power outages



Technical components:

- Install a 6 Ohm oil insulated series inductor on the existing MA-US-BR transmission line
- Install a 21.3 MVAR 115kV capacitor bank
- Install a 115kV 2000A breaker, gas insulated switchgear (GIS) system

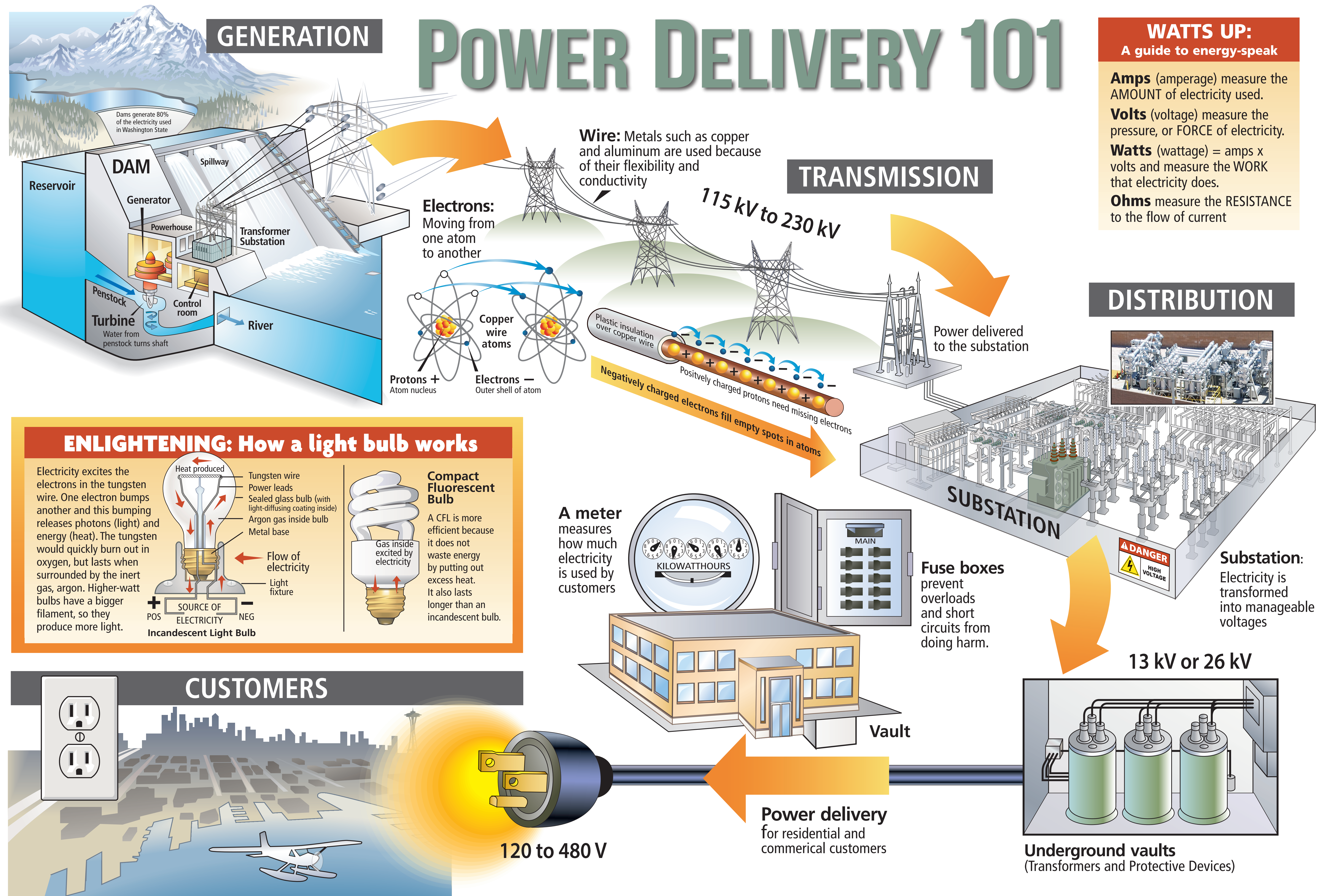


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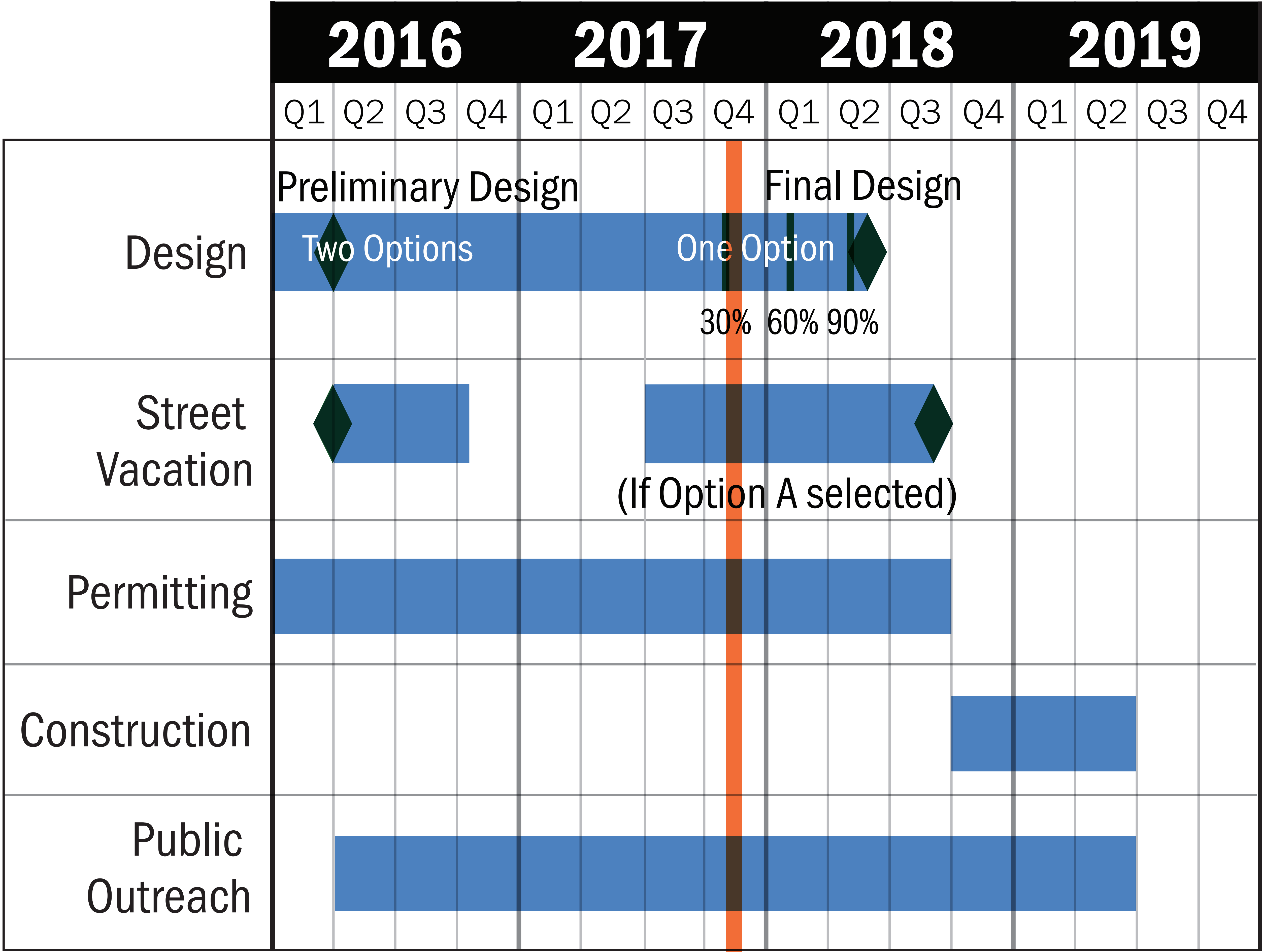
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SCHEDULE



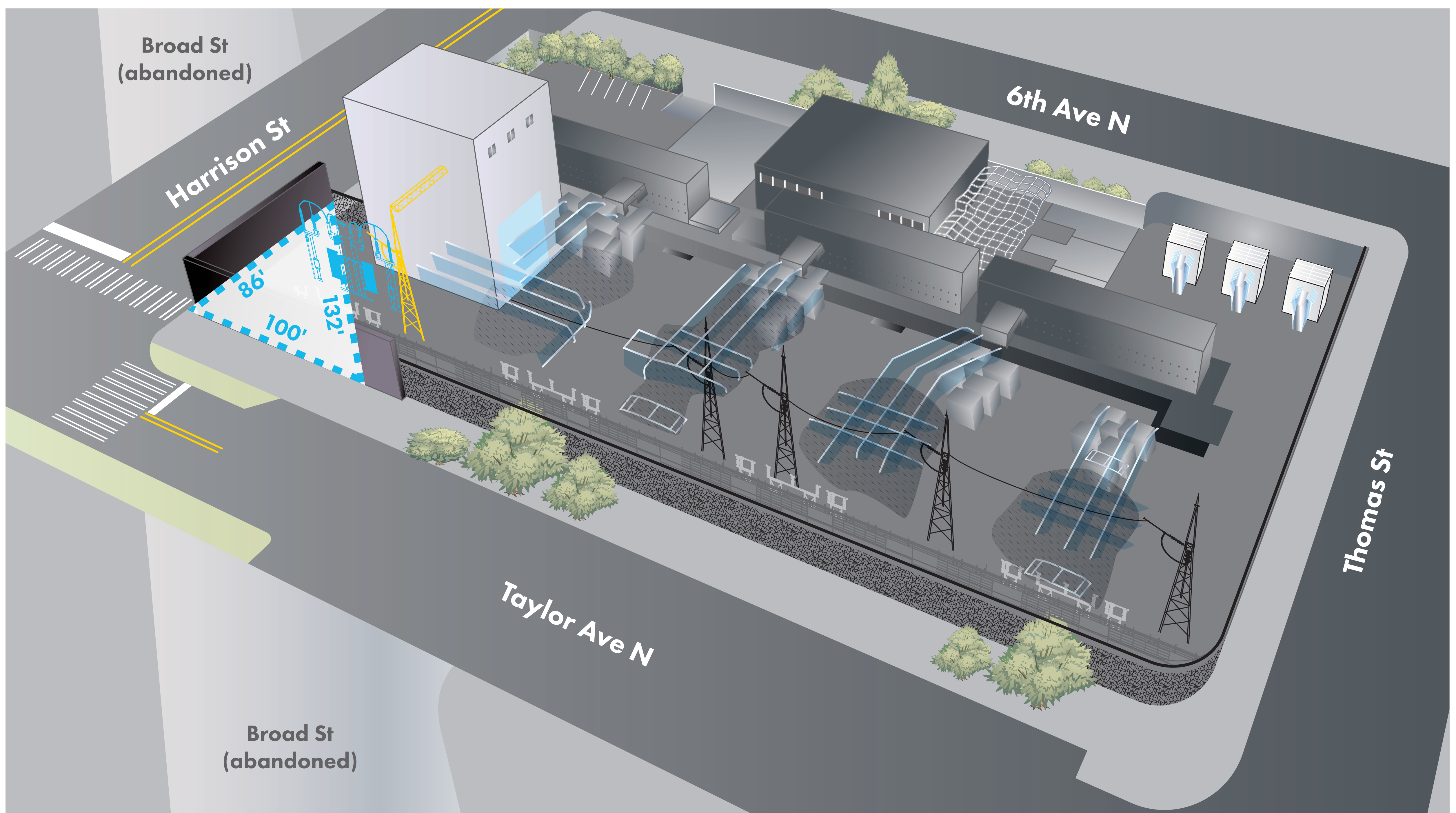
We are here.



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DESIGN



City Light also evaluated an alternative that would not expand the substation's footprint. This alternative was not selected because it would require:

- Locating some equipment on top of the crane tower, requiring structural improvements and an increase in height from 65 feet to 85 feet
- Relocating existing equipment closer to the sidewalk along Taylor Ave N and installing 25-foot-high firewalls

Preferred alternative

City Light has selected a preferred alternative for substation improvements. This alternative expands the substation's boundary at its northwest corner and provides a number of benefits, including:

- More efficient equipment layout
- Greater safety for workers
- Improved long-term flexibility
- Preserved views



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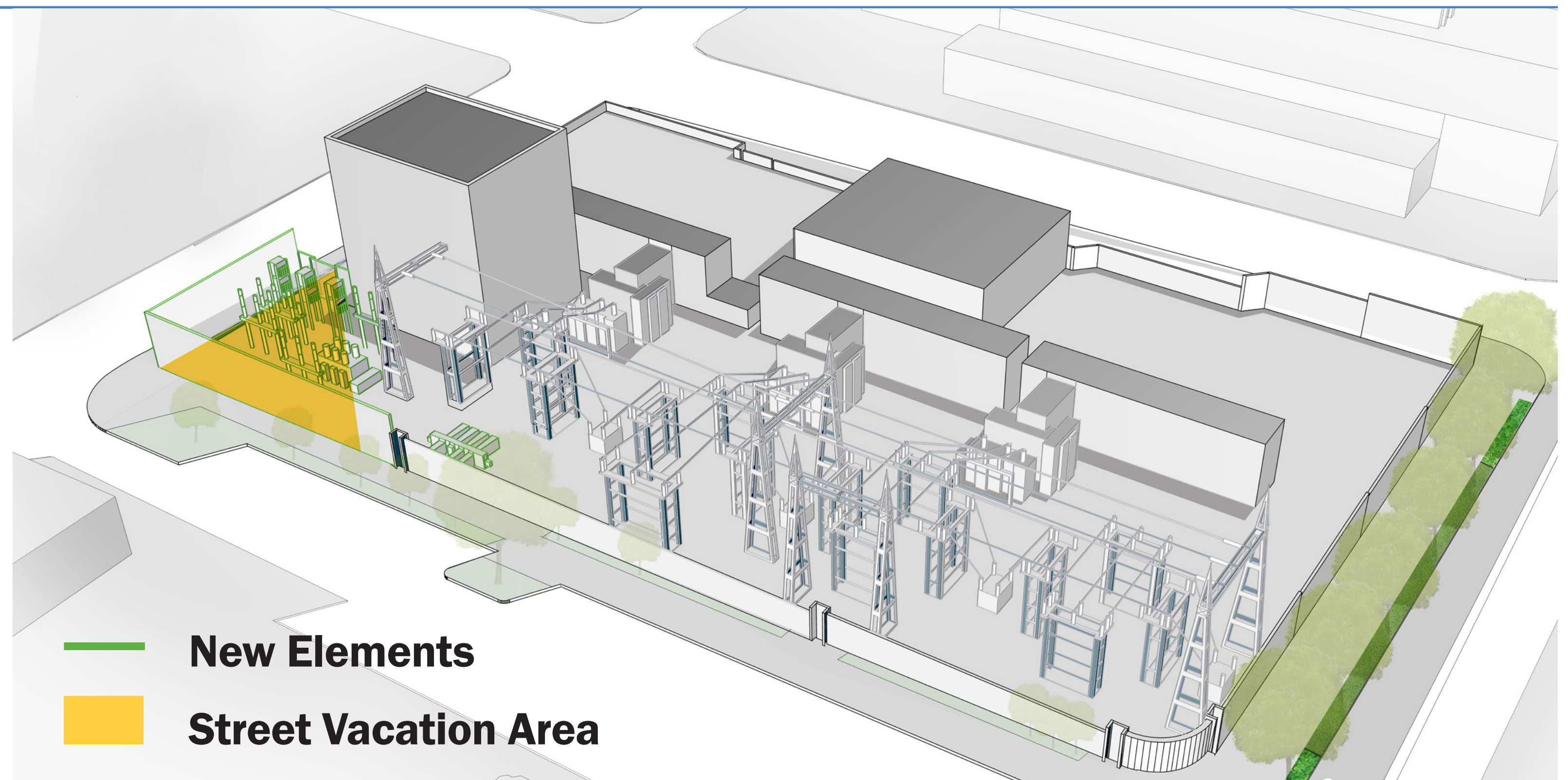
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SUBSTATION OPTIONS

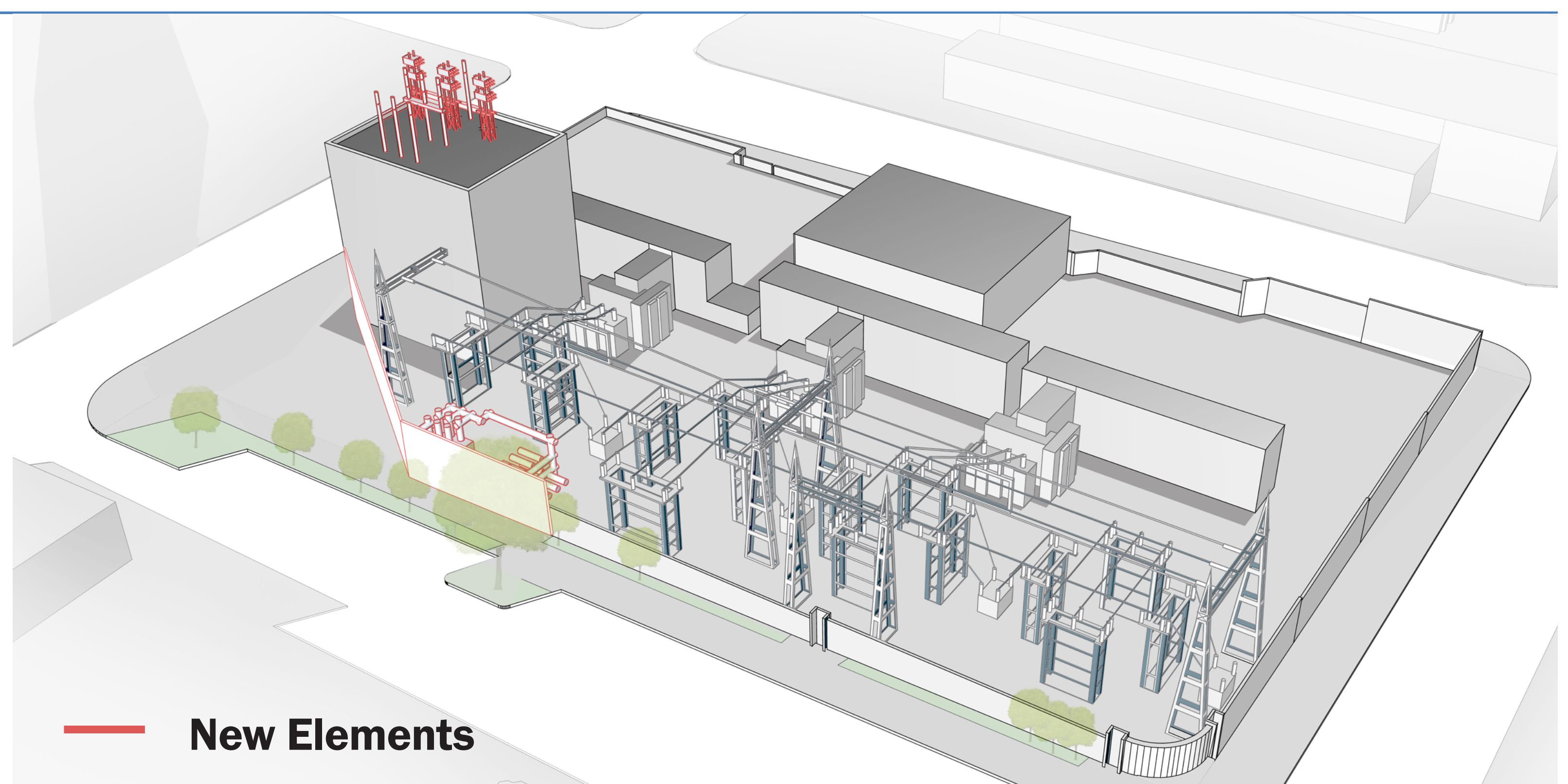
Vacation Option (preferred)

- Requires street vacation
- Provides public benefits (as part of street vacation)
- New equipment is 20 ft tall
- New walls about 20 ft tall
- New equipment is accessible



No-Vacation Option

- No public benefits provided
- Some equipment installed on crane tower roof (for total height of 85 ft)
- Requires structural upgrades to crane tower
- Ground level equipment requires new firewall
- Some new equipment not easily accessible
- Landmark status constrains ability to put equipment on crane tower



Site Constraints

Area streets are congested with underground transmission and distribution lines, limiting possible areas for expansion outside of the substation boundary



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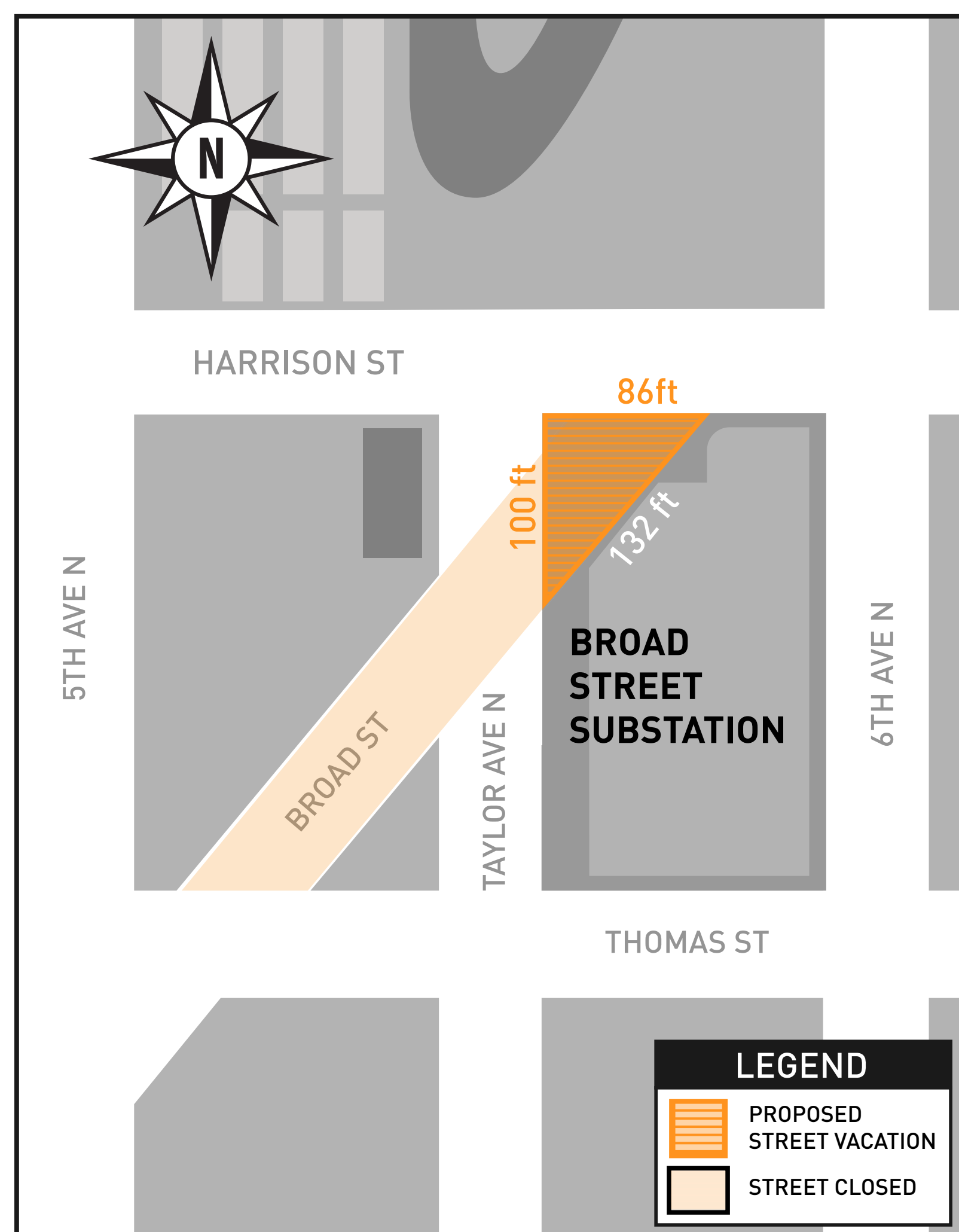
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STREET VACATION

What is Street Vacation?

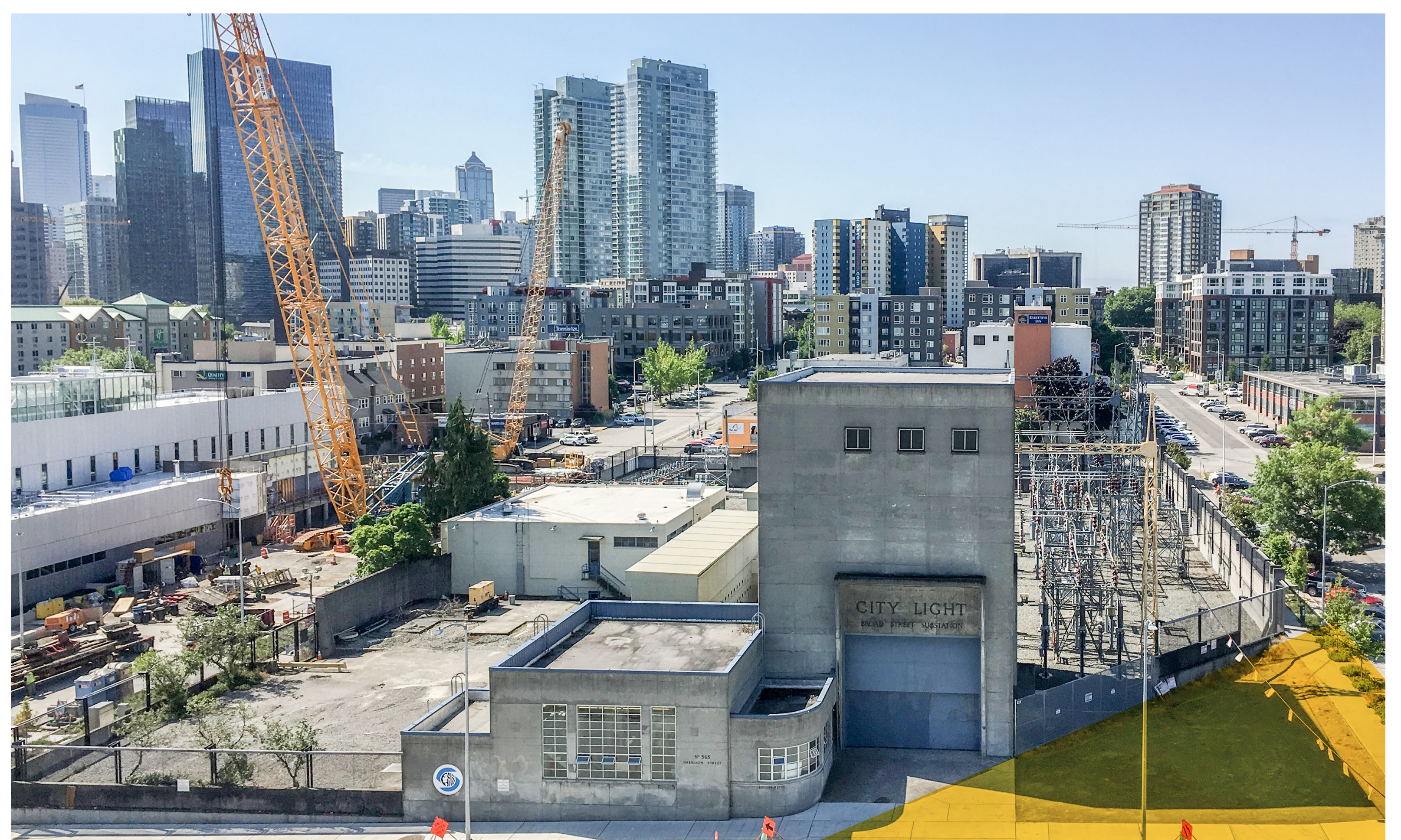


City Light seeks to acquire about 4,000 square feet for substation improvements.

Street vacation refers to the process whereby a property owner (in this case, City Light) petitions City Council to acquire adjacent street right-of-way for use other than as a public roadway. The portion of Broad Street proposed for street vacation is a permanently closed road that is no longer in use and would be used for substation expansion.

Where are we in the process?

- Street vacation petition submitted to SDOT for review
- Seeking public input on proposed public benefits
- Public hearing to be held in mid-2018



The existing substation and the proposed vacation area



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PROPOSED PUBLIC BENEFITS

Why are we proposing public benefits?

- Street vacations require that the property owner provide public benefits to compensate for the loss of use of the public right-of-way
- Benefits should be long-term and equal to the value of the right-of-way that is being vacated

What are we proposing?

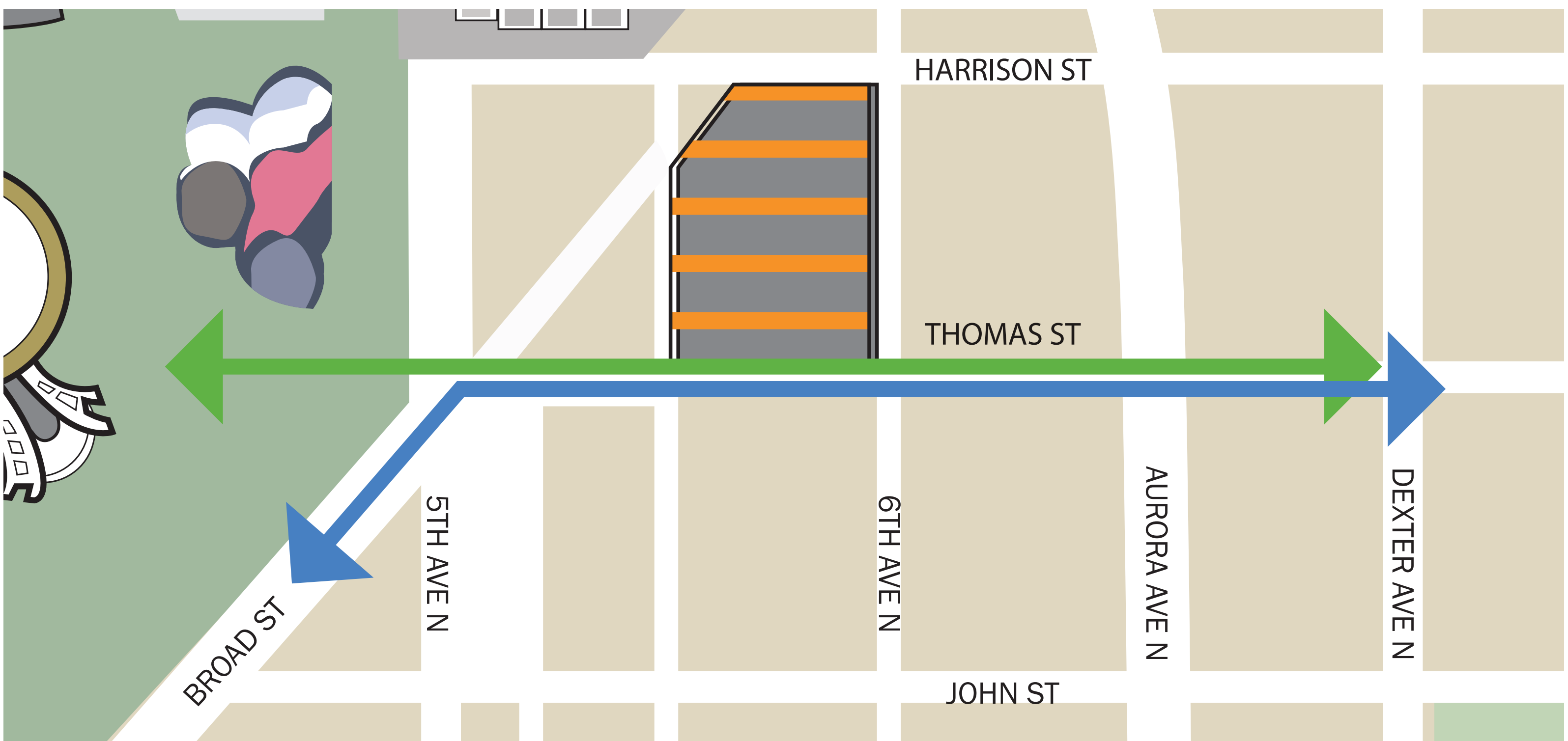
- City Light is proposing public benefits it feels are in alignment with the vacated area
- The proposed benefits include a number of improvements to the streetscape on Thomas St between 6th Ave N and Taylor Ave N
- Seattle City Council will ultimately determine if the proposal is sufficient

How did we come up with the proposed benefits?

- Thomas Street will be reconnected after the tunnel is opened
- To date there has been little investment in the public realm in this area
- There are existing plans that identify improvements on Thomas and that have the public’s support
- The proposed benefits would help implement parts of these plans



Thomas St currently has a 6-foot-wide sidewalk with no amenities.



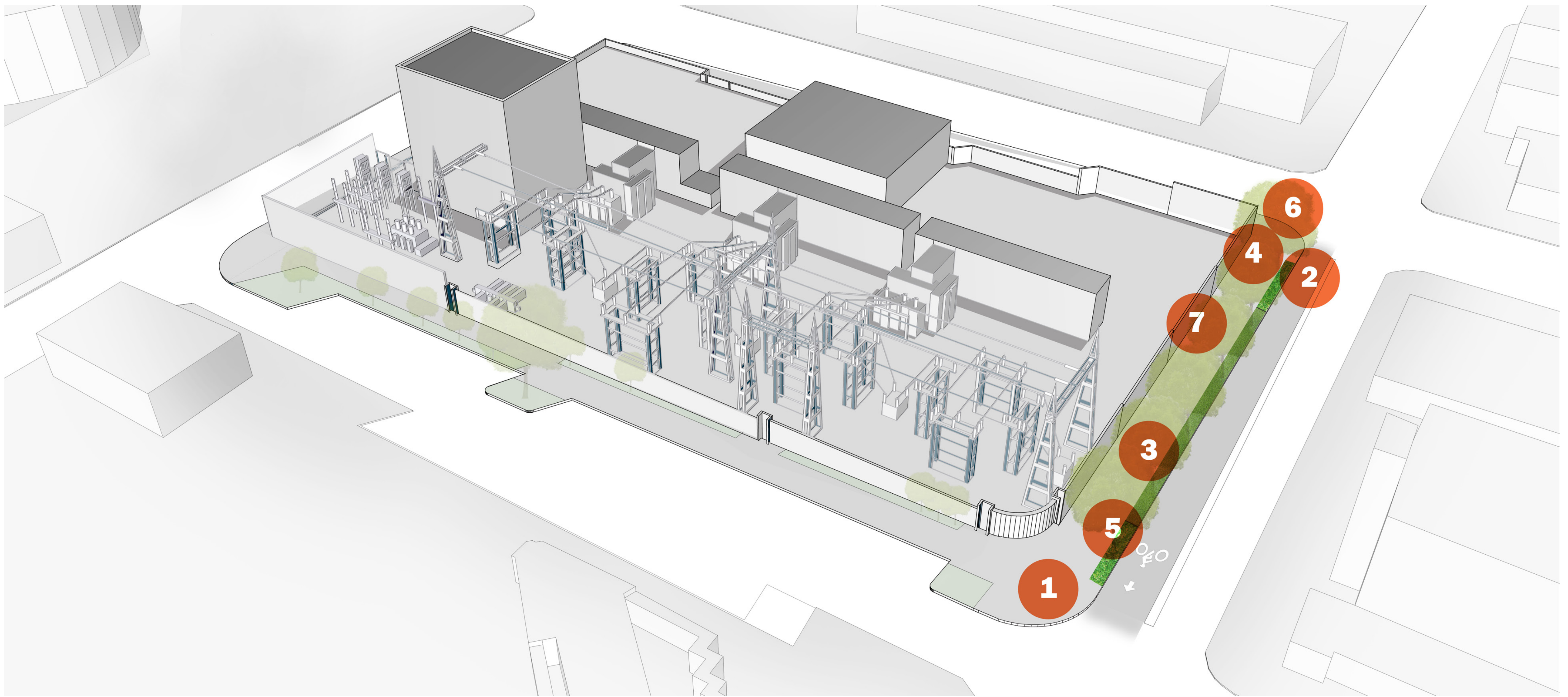
The **Thomas Street Concept Plan** (↔) and the **Lake2Bay Concept Plan** (↔) identify improvements next to the substation.



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PROPOSED PUBLIC BENEFITS



The proposed public benefits on Thomas Street include:



*Proposed benefit #4:
Silva Cells promote tree
growth and treat stormwater*

- 1 Street improvements:** Widen the sidewalk
- 2 Bike lane:** Add a protected bike lane, with curbed protection and pavement markings
- 3 Landscaping:** Add new street trees and irrigated planting areas
- 4 Green stormwater infrastructure:** Add bioretention cells and Silva Cells
- 5 Pedestrian lighting:** Improve lighting with pedestrian lights and streetlights
- 6 Wayfinding signage:** Add signs to promote Lake2Bay Loop
- 7 Furnishings:** Add benches and bike racks



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PROPOSED PUBLIC BENEFITS

What do you think of the proposed public benefits?



Do you have other ideas for public benefits?



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HOW CAN YOU STAY INVOLVED?

There are a number of ways to stay involved with the Broad Street Substation Inductor Project

Website

Stay up to date and sign up to receive email updates at:
www.seattle.gov/light/broadsub

Email

Send us your comments and questions via email to:

SCL_BroadSub@seattle.gov

Hotline

Listen to project updates and record your comments or questions at:

[\(206\) 801-3528](tel:(206)801-3528)

Social media

Follow us on social media:

facebook.com/SeattleCityLight

twitter.com/SEACityLight



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