

Replacement of Signal Substations

Cos Cob and New Haven

Public Information Meeting

February 29, 2024

6:00 – 7:30 PM

Website: <https://portal.ct.gov/DOTNHLPower301-520>



Opening Remarks



Zoom Webinar Platform

- Meeting is live and recorded
- Close apps and programs / limit other streaming or downloads
- Get help with Zoom platform:
 - Use the Q + A at bottom of screen
 - Send email to lnagle@fhistudio.com
- Call into meeting:
 - Phone number: 1 (646) 931-3860 toll-free
 - Webinar ID: 846 3771 3338
 - Passcode: 594444
- Closed captions for English and several other languages available

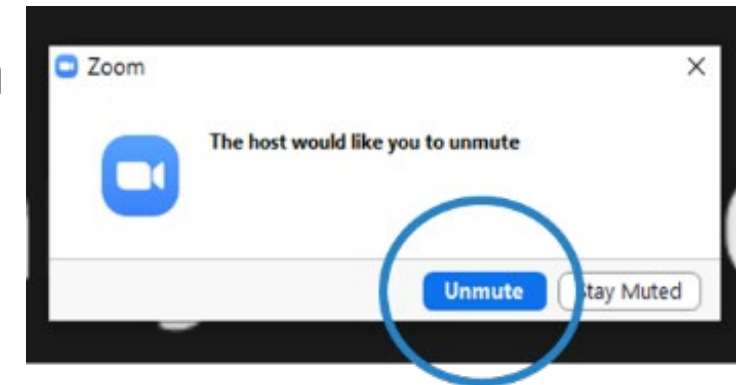
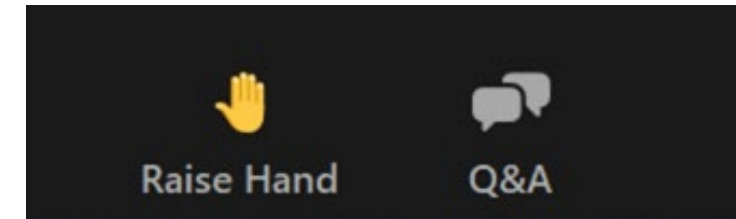


How To Participate

- All attendees are muted during presentation
- Discussion will follow presentation
- Two ways to participate during discussion:
 - Raise your hand to speak
 - Type your comment or question through Zoom Q&A button

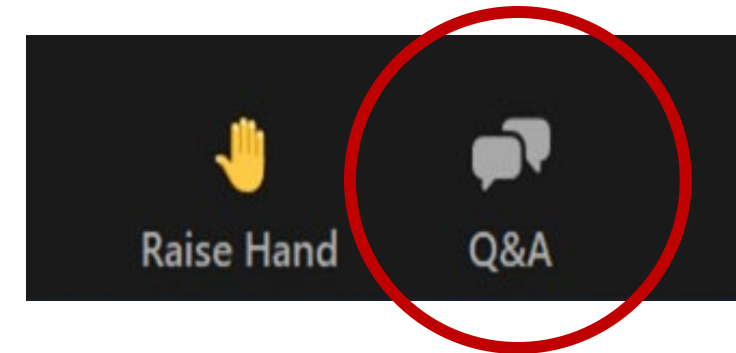
Verbal Comments

- To comment, use the “raise hand” button in Zoom (*9 for phone-in participants)
- Will call on speakers in order hands are raised
- When called upon, the facilitator will invite that person to unmute
- State and spell full name when beginning
- Limit comments to 5 minutes



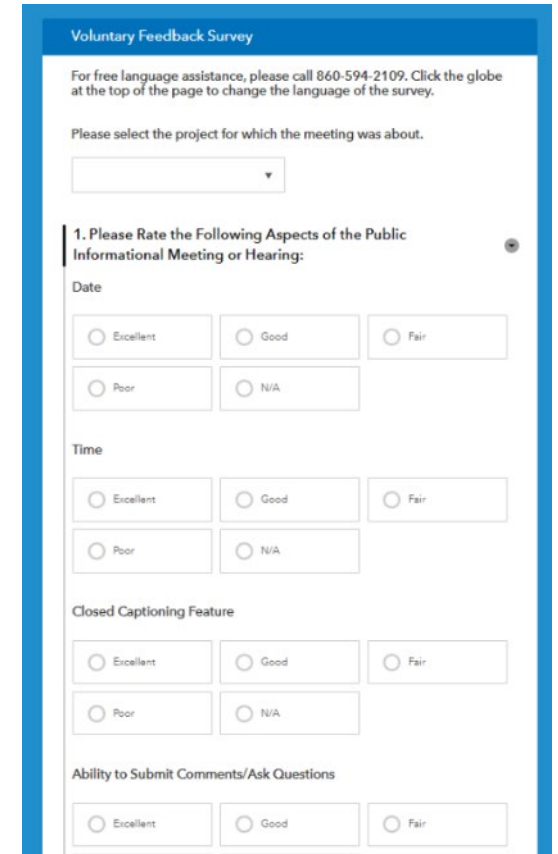
Written Q & A

- Click on and type questions or comments in Q & A box at bottom of screen
- Questions can be entered in Q & A throughout presentation and discussion session
- Study team may respond in writing in Q & A or verbally during discussion



Title VI – Civil Rights Act of 1964

- No Person, on the basis of race, color or national origin, shall be excluded from participation or subject to discrimination in the development of this project
- Civil Rights flyer available at <https://bit.ly/CTDOTCivilRights>
- Post-meeting feedback survey at <https://bit.ly/CTDOT-Feedback>



The image shows a screenshot of a web-based survey titled "Voluntary Feedback Survey". At the top, there is a blue header with the title. Below the header, there is a line of text: "For free language assistance, please call 860-594-2109. Click the globe at the top of the page to change the language of the survey." Below this is a prompt: "Please select the project for which the meeting was about." followed by a dropdown menu. The main section of the survey is titled "1. Please Rate the Following Aspects of the Public Informational Meeting or Hearing:". It contains four sections, each with a title and a set of radio button options: "Date", "Time", "Closed Captioning Feature", and "Ability to Submit Comments/Ask Questions". Each section has three rows of options: "Excellent", "Good", and "Fair" in the first row, and "Poor" and "N/A" in the second row.

Media Inquiries



Media representatives, please contact:

CTDOT Office of Communications

Email: CTDOTMedia@ct.gov



Meeting Agenda

1. Opening Remarks (FHI Studio)
2. General Project Overview (Garg Consulting Services, Inc. (Garg))
3. Cos Cob Substation Overview (Garg)
 - Site Design
 - Impacts
4. New Haven Substation Overview (Garg)
 - Site Design
 - Impacts
5. Q & A Session (Project Team)
6. Adjournment (FHI Studio)

Project Team



Yure Kuljis, PE
CTDOT Assistant Rail Administrator



Richard Jankovich
CTDOT Rail Administrator



Nabil Chowdhury
CTDOT Project Engineer



Seamus Flannery, PE
CTDOT Project Manager



Ashish Patel, PE
Garg Project Manager



Rodney Bascom
Garg QA/QC Manager / Design Delivery



Eugene Chuang, PhD, PE
Garg CEO and Principal-in-Charge



Marcy Miller, AICP
FHI Studio, Engagement



General Project Overview



Overview

- Federally funded program to replace / upgrade railroad signal power infrastructure on Metro North Railroad, New Haven Main Line at Cos Cob and New Haven
- Both substations are past their useful life and require replacement
 - Outdated technology and equipment
 - Problem with operational reliability
 - Adverse impact on train service



Cos Cob Substation Overview



Replacement of Signal Substations, State Project No. 0301-0520

Existing Cos Cob Site



Image credit: Google Earth, 6/1/2019



Replacement of Signal Substations, State Project No. 0301-0520

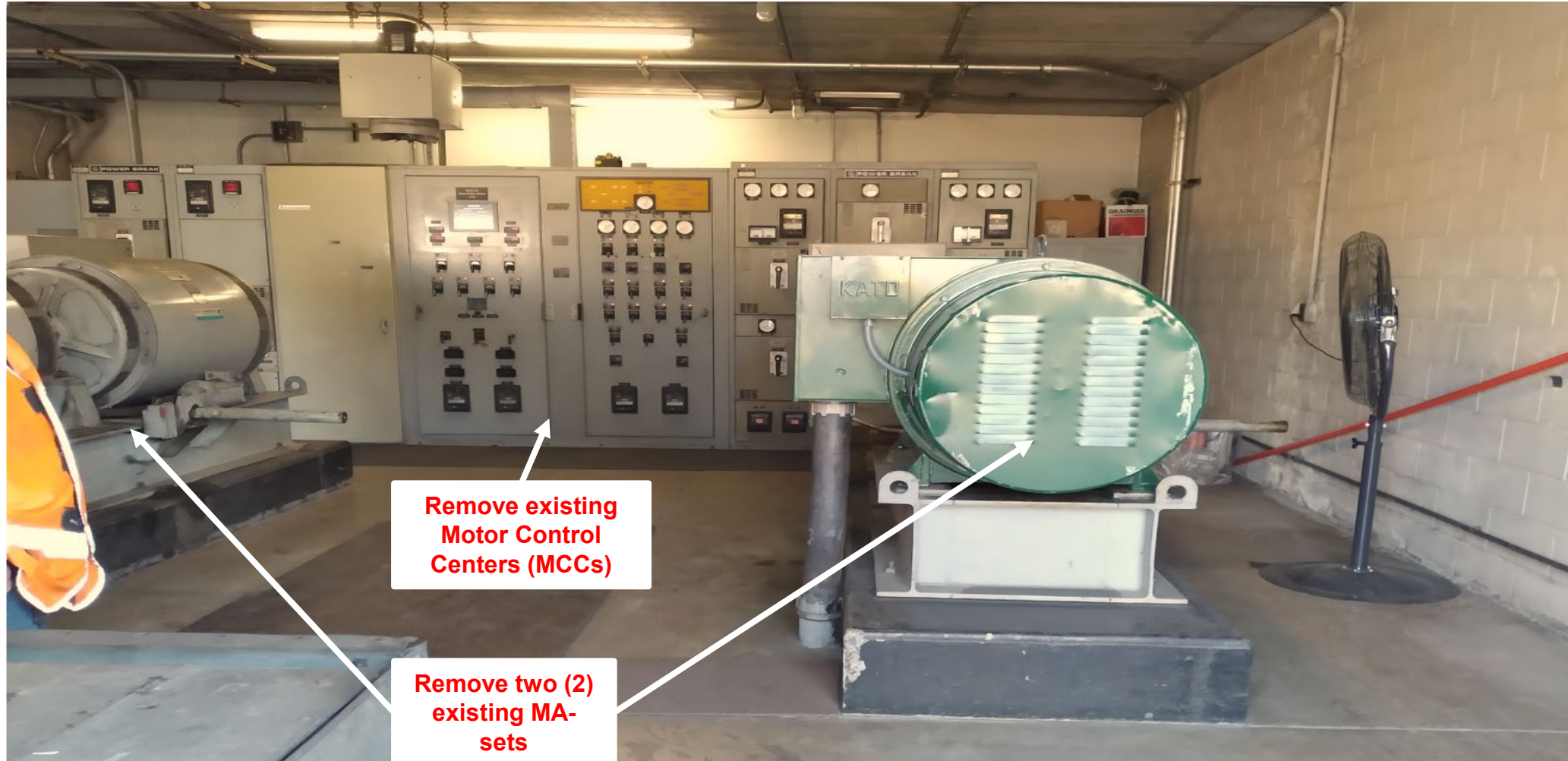
GS Garg Consulting
Services, Inc.

Cos Cob Substation Existing Conditions

- Has two motor-alternator sets:
 - One (1) feeder feeds 100 Hz signal power from Cos Cob to Woodlawn, NY
 - Second feeder feeds 100 Hz signal power from Cos Cob to New Haven, CT
 - Existing brick and mortar building shall remain in place



Electrical Apparatuses Upgrades



Cos Cob Proposed Site Design



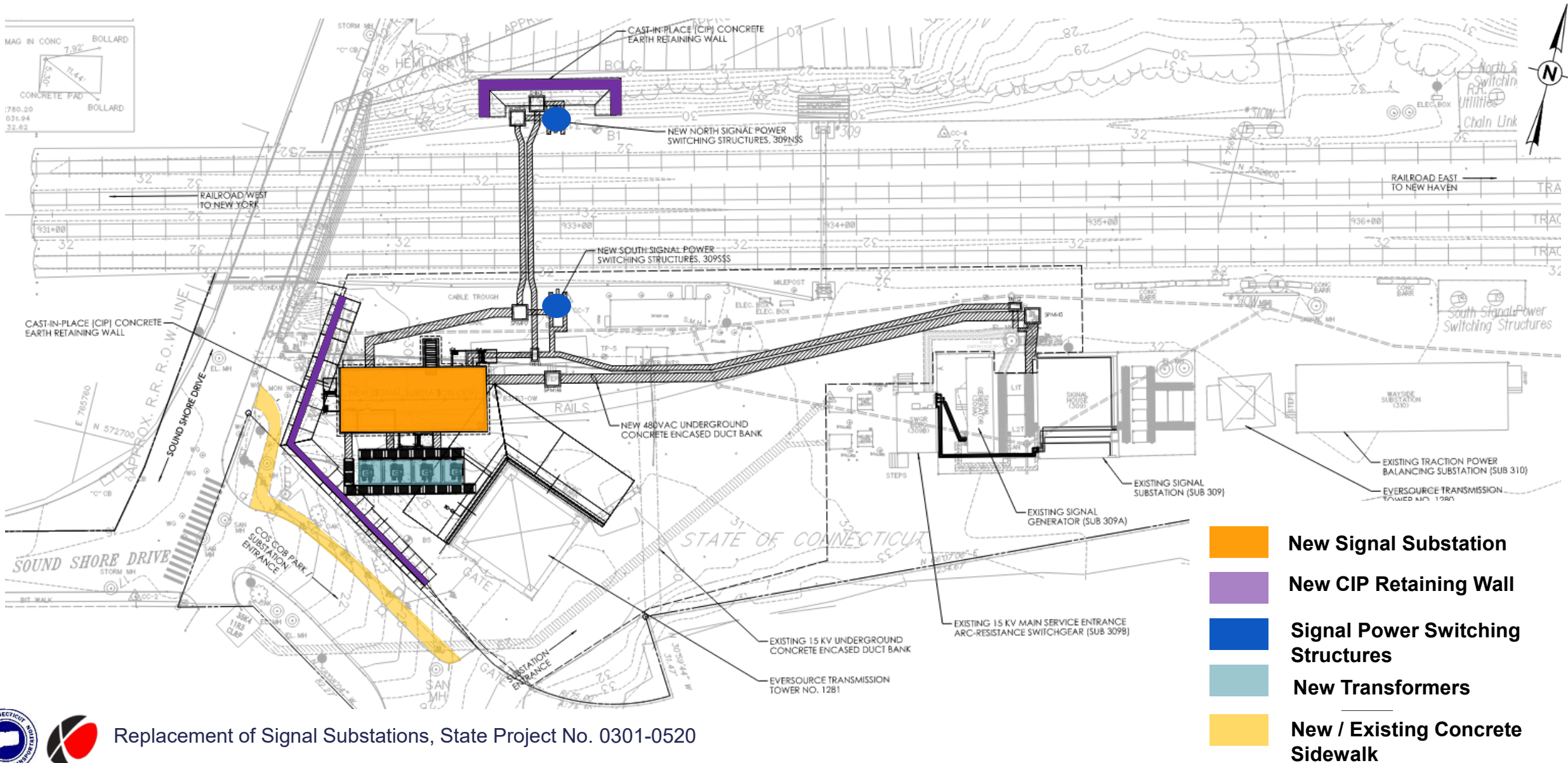
Replacement of Signal Substations, State Project No. 0301-0520



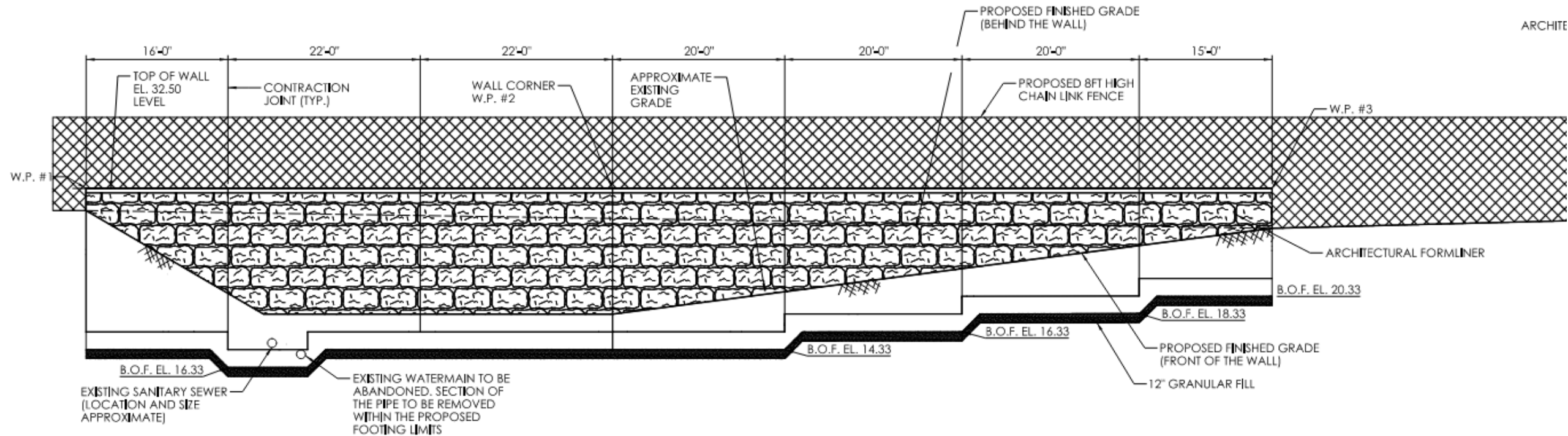
Proposed Construction

- Installation of cast-in-place (CIP) concrete retaining wall with decorative form liner along Sound Shore Dr and Cos Cob Park driveway
- Replacement of two (2) motor-alternator (MA) sets and house in new metal-clad signal substation enclosure
- Four (4) arc-resistant medium voltage switchgears for personnel safety
- Installation of four (4) step-up transformers
- Connection to existing main incoming power supply substation and signal power standby generator
- Final connection to existing railroad signal power system

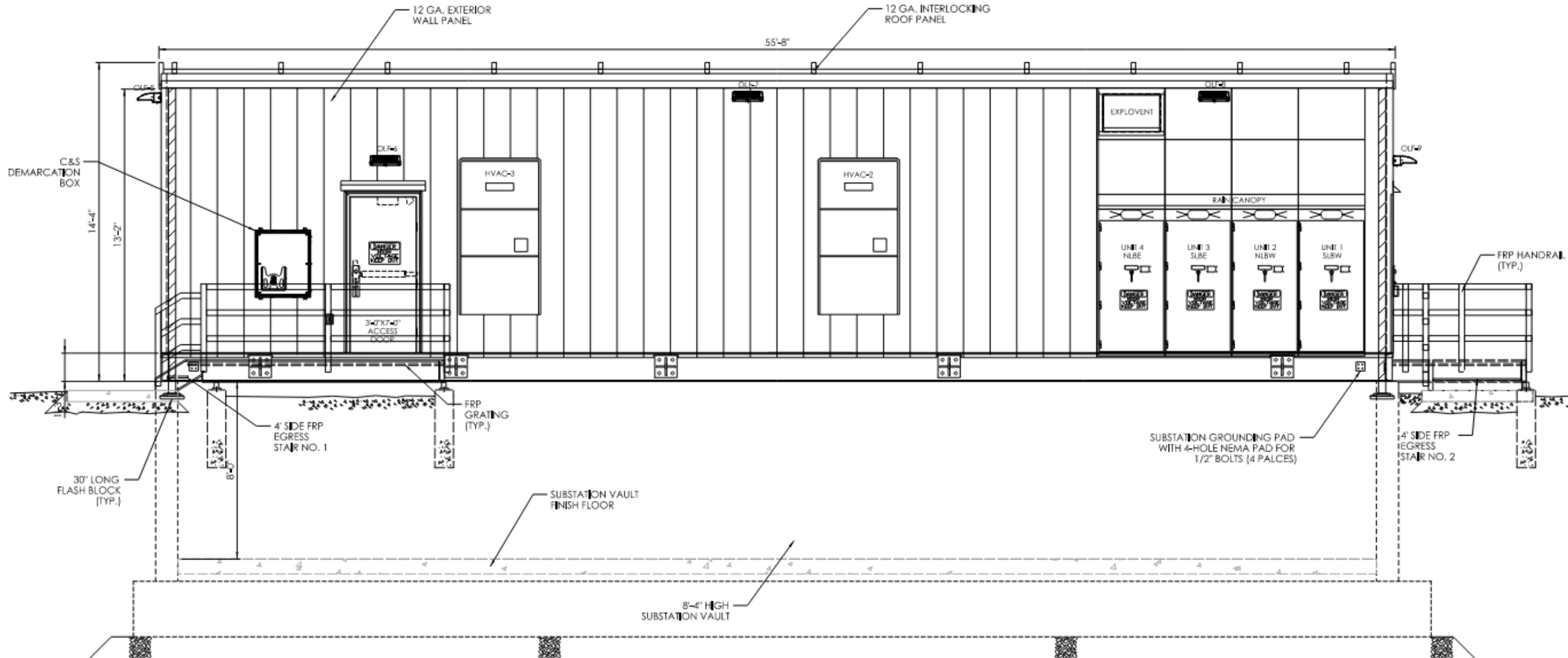
Proposed Cos Cob Construction Plan



Proposed CIP Retaining Wall Cross Section View



Proposed Signal Substation North Elevation View



Pre-fabricated Walk In Signal Substation Enclosure



Replacement of Signal Substations, State Project No. 0301-0520



Garg Consulting
Services, Inc.

Potential Impacts at Cos Cob



Potential Construction Impacts



- Cast-in-place earth retaining wall construction
- Existing sidewalk leading to Cos Cob Park may be temporarily closed
 - Temporary protected path will be set up to provide access
- Existing sewer, water, and electricity to Cos Cob Park remains

Potential Construction Impacts



- North cast-in-place earth retaining wall construction (60 days)
- Potential parking impacts adjacent to retaining wall (about 12 spaces)
- Work may occur at night to mitigate impacts
- Existing sewer, water, and electricity on road remains

Image credit: Google Earth, 6/1/2019



Replacement of Signal Substations, State Project No. 0301-0520

Potential Construction Impacts



- Delivery of Cos Cob signal substation enclosure
- Partial Sound Shore Dr closure (120 days)
- Traffic police escort
- Crane set up on state property

New Haven Substation Overview

- Existing Signal Substation Name: Fair St (Sub 1091)
- Proposed Signal Substation Name: Heath Dr (Sub 1087)

Existing New Haven Site

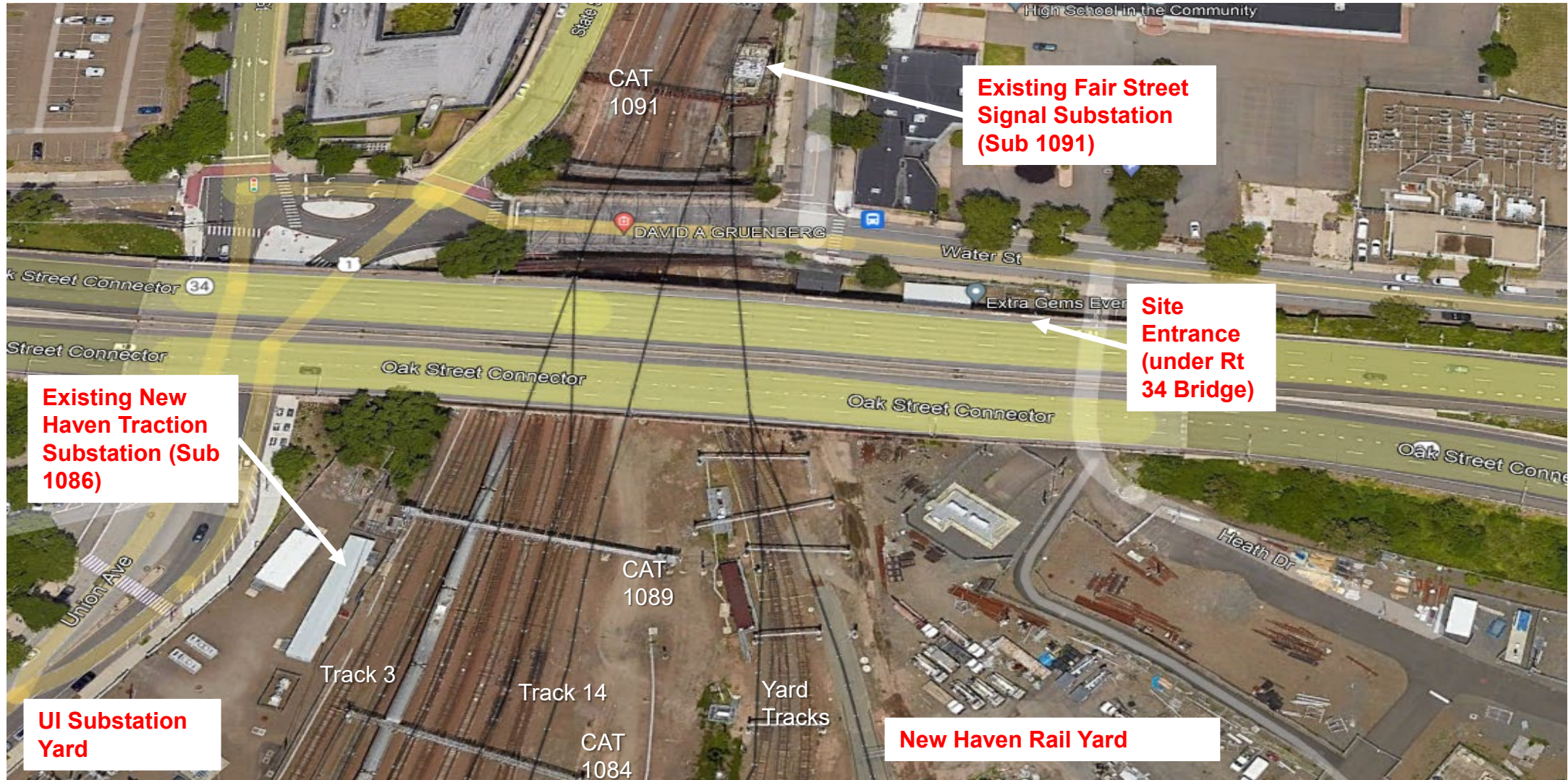


Image credit: Google Earth, 6/28/2022



New Haven Substation 1091 Existing Conditions

- One (1) motor-alternator set
 - One (1) feeder feeds 100 Hz signal power from New Haven to Amtrak Division Post, CT
 - Second feeder feeds 100 Hz signal power from New Haven to Cos Cob, CT
 - Existing brick and mortar building shall be demolished



New Haven Electrical Apparatuses Upgrades



**Remove existing
Motor Control
Centers (MCCs)**

**Remove one (1)
existing MA-set**



New Haven Proposed Site Design



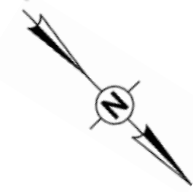
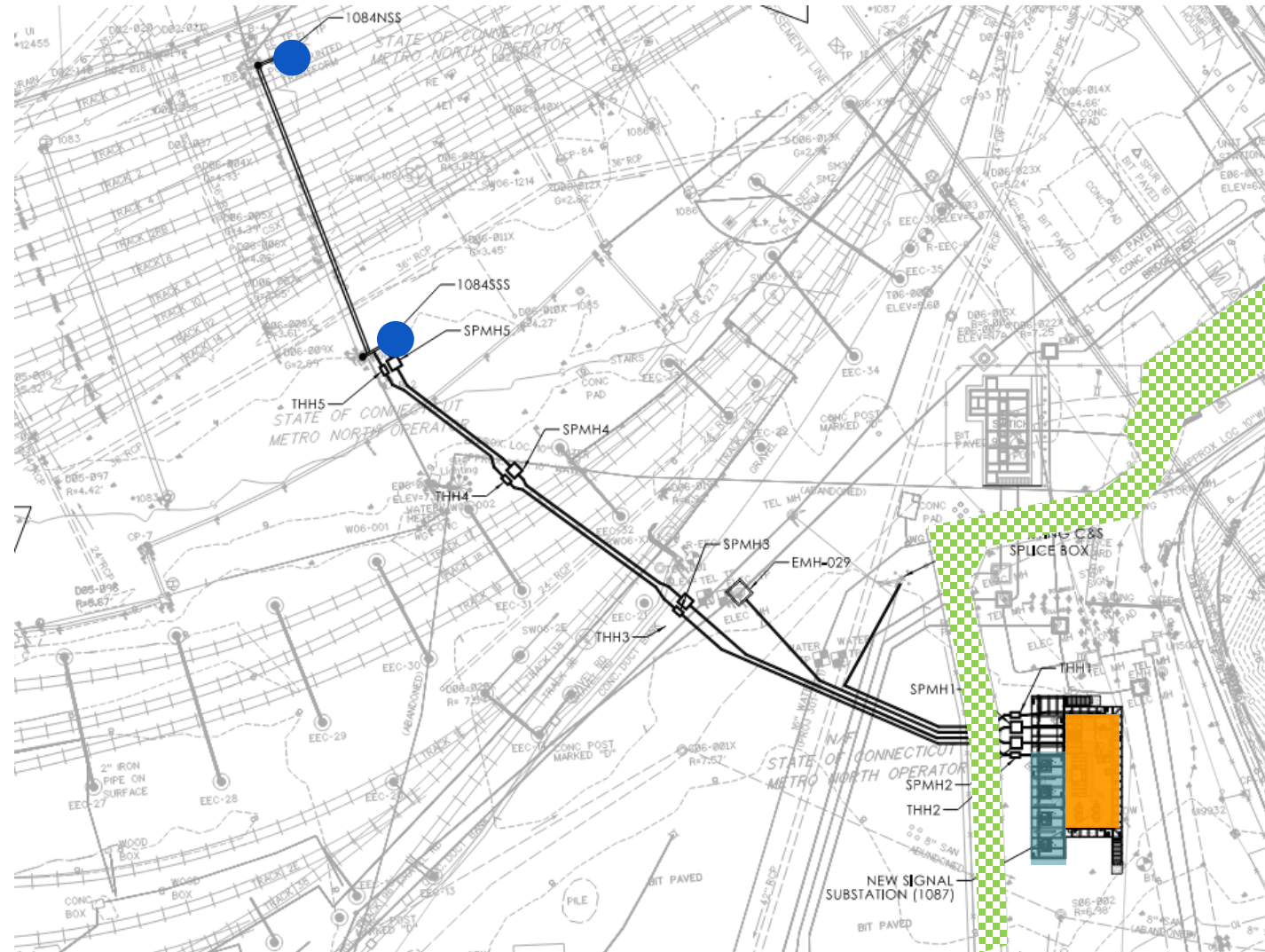
Replacement of Signal Substations, State Project No. 0301-0520







New Haven Proposed Construction

- Located adjacent to Heath Dr and Water St
- Within 100-year flood plain
- Installation of elevated platform to support new metal-clad signal substation enclosure and four (4) transformers
- Installation of two (2) motor-alternator sets
- Four (4) arc-resistant medium voltage switchgears for personnel safety
- Connection to existing Hallock substation 60Hz power feeders
- Final connection to existing railroad signal power system

Proposed New Haven Construction Plan

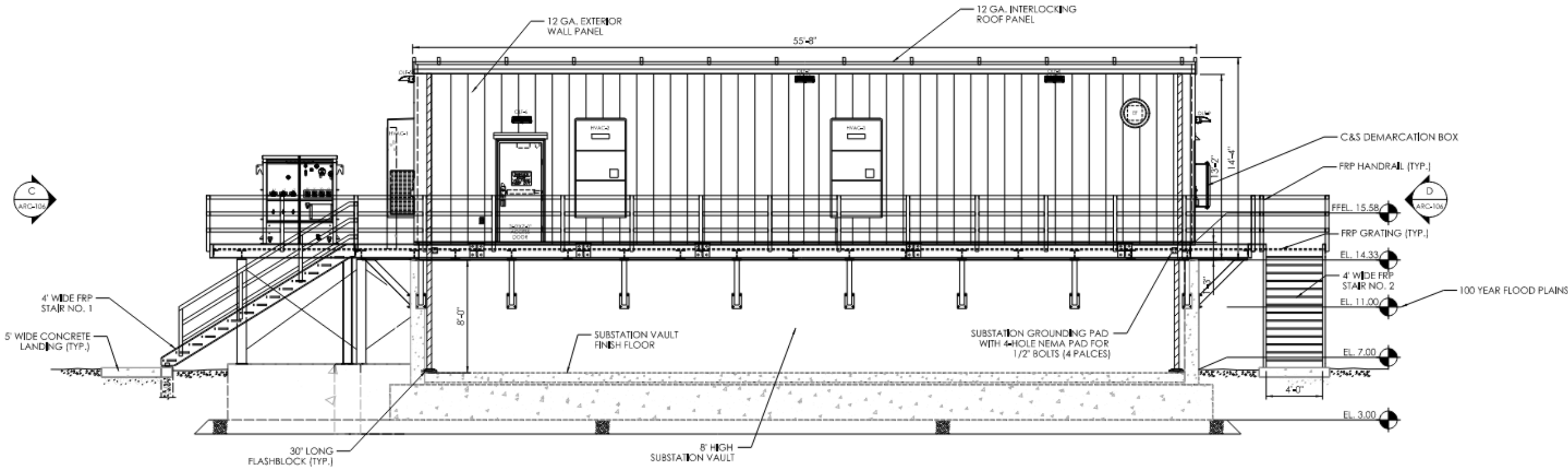


-  NEW SIGNAL SUBSTATION
-  SIGNAL POWER SWITCHING STRUCTURES
-  NEW TRANSFORMERS
-  OLD VISION TRAIL



Replacement of Signal Substations, State Project No. 0301-0520

Proposed Signal Substation North Elevation View



Potential Impacts at New Haven



Potential Construction Impacts



- Railroad traction power and signal power feeders are only run on one side of tracks
- Minor closures of Old Vision Trail through New Haven Rail Yard
- No redundancy

Potential Construction Impacts



- Delivery of Heath Dr signal substation enclosure
- Partial Brewery St closure
- Traffic police escort
- Crane set up on state property

Proposed Schedule



Proposed Project Schedule

**Complete
Design**

September 2024

**Issue Notice-to-
Proceed to
Contractor**

April 2025

**Start
Construction**

April 2025

**Complete
Construction**

November 2028



Stay Involved

- How to provide feedback and ask questions:
 - Participate in today's Zoom meeting
 - Email CTDOT Project Manager Seamus Flannery at Seamus.Flannery@ct.gov
 - Call Seamus Flannery at (860) 594-2885
 - Fill out [post-meeting survey](#)
- Public comment period ends March 29, 2024
- Meeting presentation and recording will be posted at <https://portal.ct.gov/DOTNHLPower301-520>

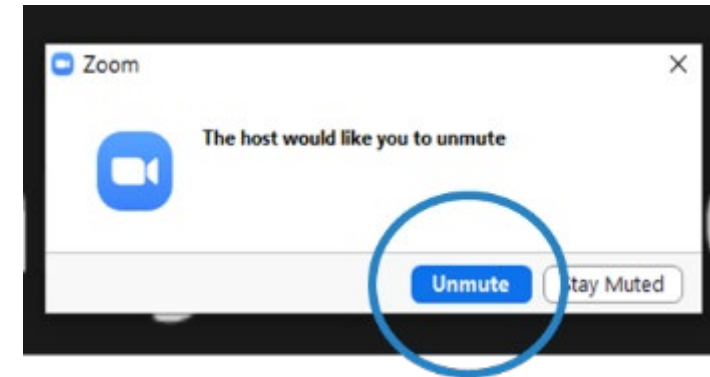
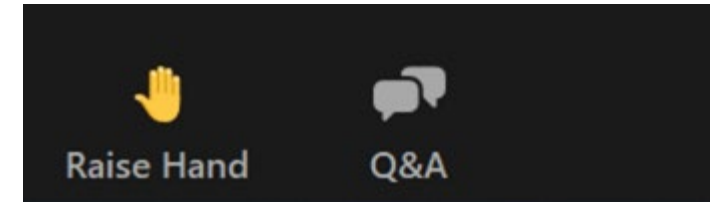


Q & A Session



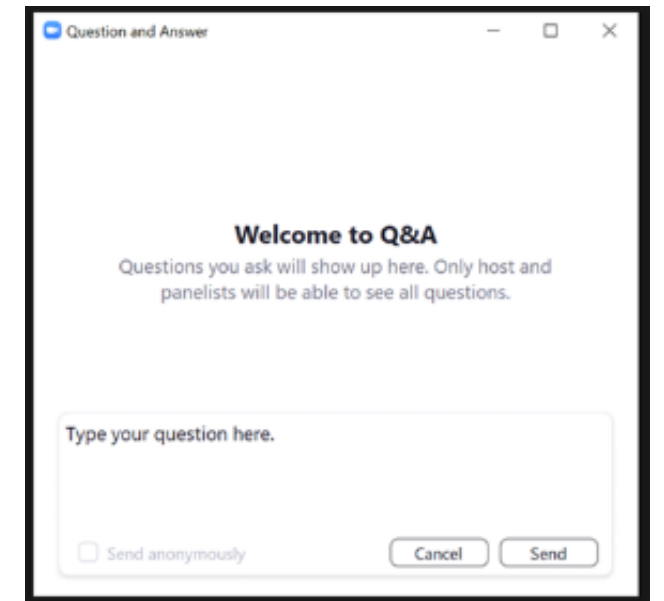
Verbal Comments

- To comment, use the 'raise hand' button in Zoom (or *9 for phone-only participants)
- We will call on speakers in the order than hands are raised
- When you are called upon, the facilitator will invite you to unmute your line
- Please state and spell your full name when you begin
- Please limit comments to 5 minutes



Written Q + A

- If you have a question, type it in Q&A box at bottom of your screen
- Questions can be typed in the Q&A feature throughout the presentation and listening session
- Study team will respond to any questions that came in through Q&A box



Q & A Session



Thank you!

