EOT

MASSACHUSETTS
EXECUTIVE OFFICE
OF TRANSPORTATION

CONCEPTUAL ENGINEERING & DRAFT ENVIRONMENTAL IMPACT REPORT

Red Line Blue Line CONNECTOR

FIRST PUBLIC MEETING

INTRODUCTION OF PROJECT AND ALTERNATIVES

OCTOBER 26, 2009

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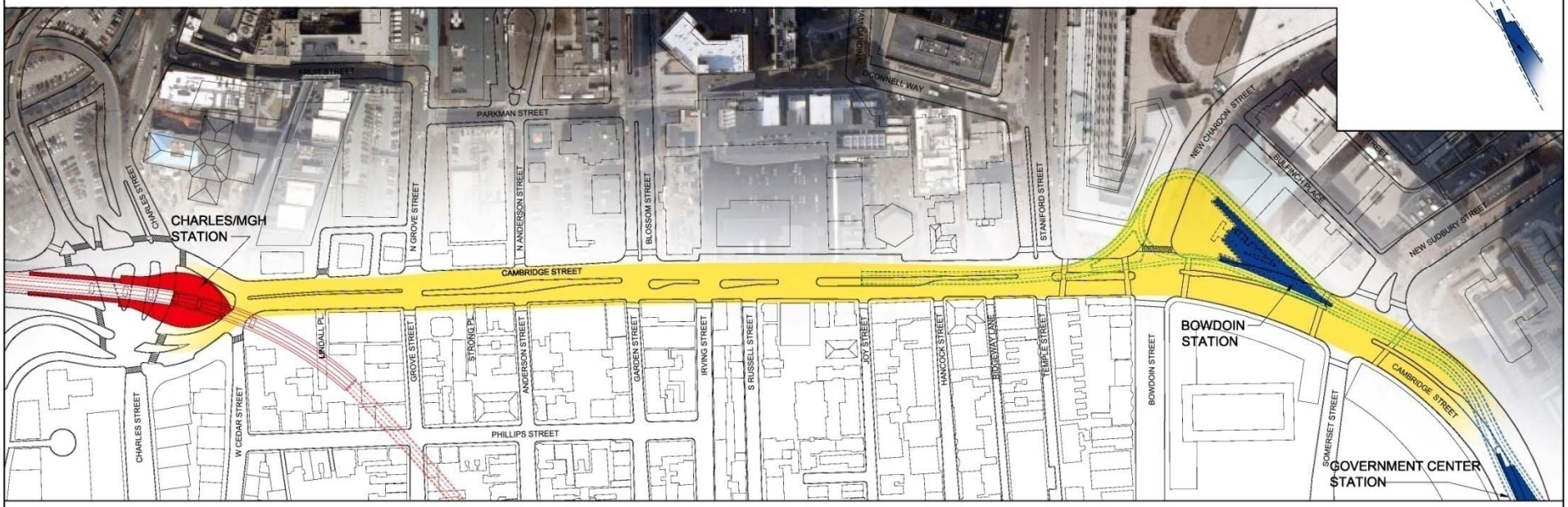
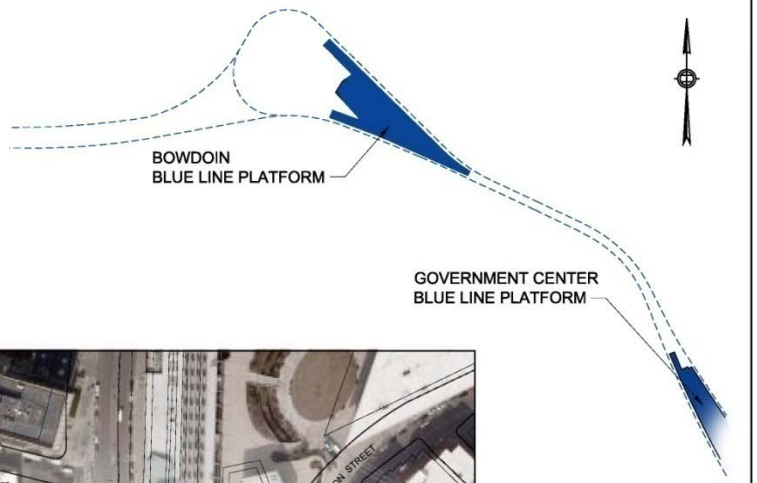
Project Overview

- 1500’ extension of Blue Line to Charles/MGH
- Possible *Elimination* or *Relocation* of Bowdoin Station
- Legal Commitment to Complete Design by 12/2011





LEGEND:

- PROPOSED RED-BLUE CONNECTOR PROJECT
- CENTERLINE OF EXISTING RED LINE TRACK
- EXISTING RED LINE TUNNEL WALL
- CENTERLINE OF EXISTING BLUE LINE TRACK
- EXISTING BLUE LINE TUNNEL WALL

0 200' 400'

SCALE: 1" = 200'-0"

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Project Goals

- Connect the only two of Boston's rapid transit lines that do not intersect.
- Improve mobility & regional access for East Boston, North Shore, Cambridge & western suburbs.
- Increase transit ridership.
- Reduce automobile travel through downtown, improve air quality and reduce congestion.
- Reduce volume at downtown transfer stations.
- Enhance access to MGH and surrounding medical facilities.

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Corridor Background

- Prior to 1924, streetcars serving Bowdoin would surface on Cambridge St. and continue across the Longfellow Bridge.
- This connection was broken in 1924 when streetcars were replaced with rapid transit vehicles.
- The loop track at Bowdoin became the end of the line.
- The Cambridge St. portal was sealed, leaving a dead-end tail track for train storage.

Scollay Square, Boston, in the 1880s.

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Planning Context and Next Steps

- 1986 Feasibility Study & Final Report
- 1987 Preliminary Design & Environmental Study
- Central Artery Project Mitigation Measures
- 2008 SIP Commitment
- 2007 EENF

Next Steps

- 2009 Alternatives Analysis / 10% Conceptual Engineering Report
- 2010 DEIR
- 2011 EIR & Final Design

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Project Impacts on Blue Line Service

Operations

- Extension would add approximately 5 minutes to the total round trip time on the Blue Line.*
- Extension is expected to require two additional peak period trains to maintain headways. This would increase Blue Line operating costs.*

*1986 Feasibility Study

Ridership

- Ridership on the connector is expected to be between 3,800 and 9,000 weekday riders.*
- Studies expect the project to generate approximately 3,100 new daily transit trips; 1,700 walk trips diverted to transit and 1,400 trips diverted from automobiles.*

*2005 MBTA estimate

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STV Project Timeline

- NTP – December 15, 2008
- Project Start-up – December 2008 to February 2009
  - *Initiate Public Involvement including abutter, state agencies, City of Boston, etc.*
  - *Data collection, existing conditions review, etc*
  - *Develop design criteria, etc.*
- Alternatives Refinement/Conceptual Engineering - March 2009 to September 2009
  - *Identify Issues (goals, operational issues, community issues, traffic, constructability, institutional, environmental, etc)*
  - *Develop$_{short}$ -list of alternatives and station concepts*
  - *Develop conceptual plans (architectural, civil, structural, traffic, utilities, track, power, etc)*
- Submit 10 % Design Report - December 2009
- Alternative Analysis – October 2009 to December 2009
- Submit Draft – Draft Environmental Impact Report – February 2010
- Submit Draft Environmental Impact Report – April 2010
- Public Hearing - May 2010
- Certificate Issued – June 2010

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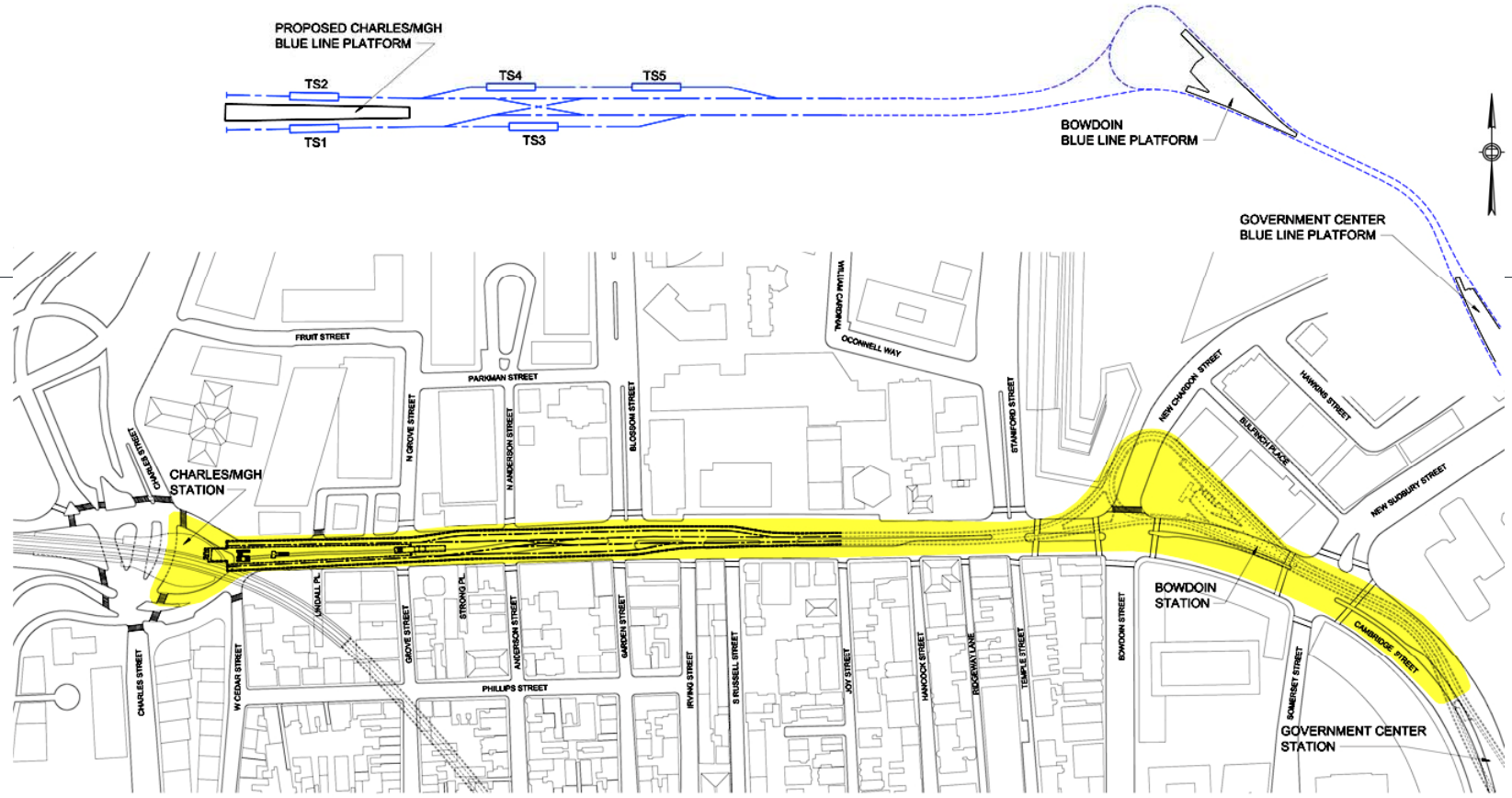
Track Diagram

Charles/MGH Station Alternatives 2 & 3 – EENF Configuration

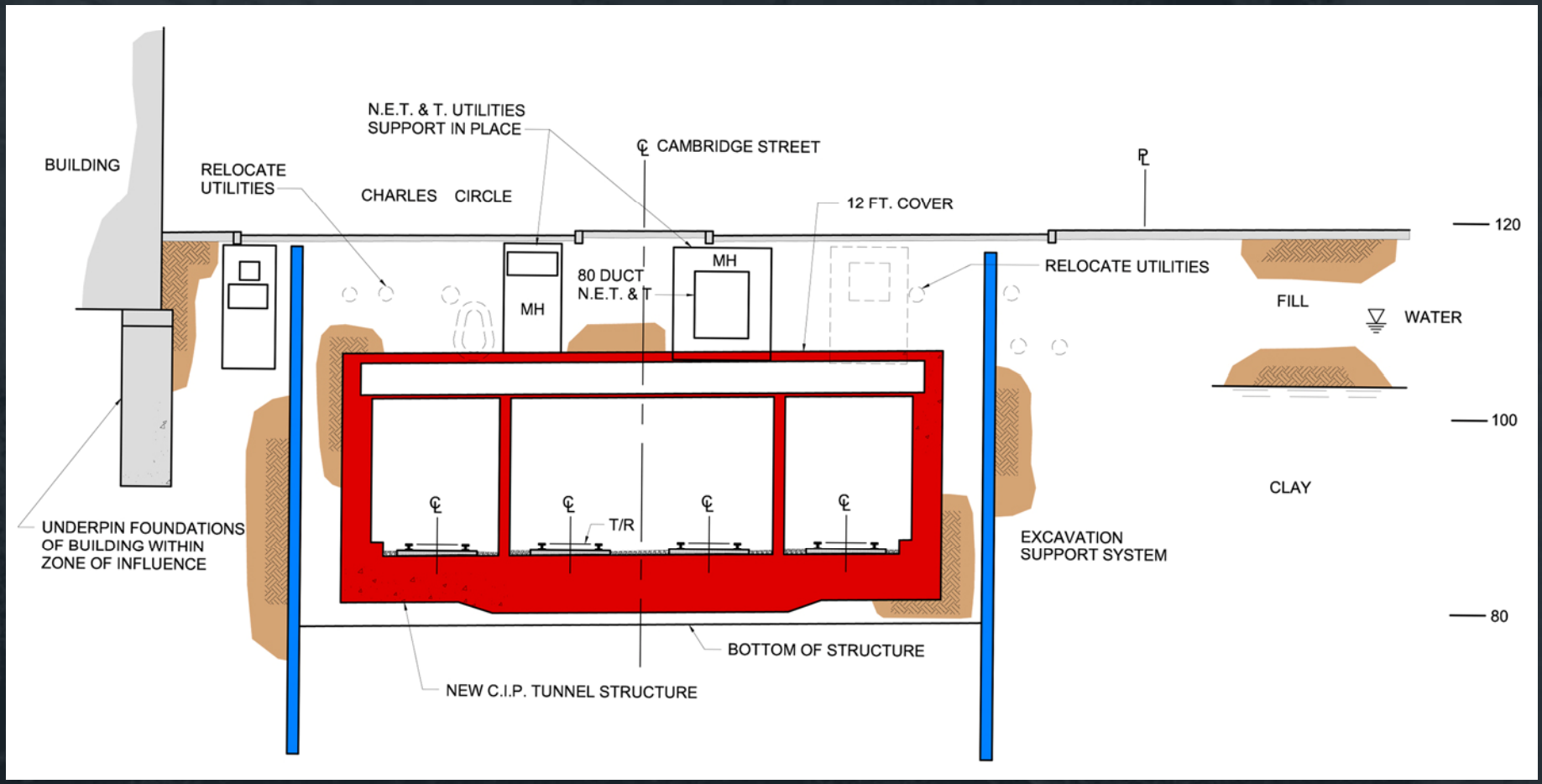


Alternative Analysis:

- ***No Build***
- ***Alternative 1: Red / Blue Line Connector with Elimination of Bowdoin Station***
- ***Alternative 2: Red / Blue Line Connector with Relocated Bowdoin Station***

EENF Cut & Cover Alternative

Tunnel Construction near Blossom Street - EENF Tunnel Configuration Section



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Impact Assessment

- Noise & vibration
- Historic/Archeological
- Groundwater
- Parklands
- Construction period
- Ridership
- Traffic
- Operations
- Land takings
- Air quality

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Tier 1 Alternatives Evaluation Criteria

32 Alternative Schemes

- *MGH Schemes*
- *Bowdoin Eliminated*
- *Bowdoin Relocated*
- *Mined Tunnel*
- *Cut & Cover*

- Platform Type
- Depth to Top of Rail at MGH
- Constr. Type
- Horizontal Alignment
- Vertical Alignment
- Storage Capacity
- Pros & Cons
- Compatible with Schemes

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Tier 2 Alternatives Evaluation Criteria

4 Alternative Schemes

- **Transit Service/ *Operations**
  - **Ridership*
  - *Station Access*
  - *Quality of Transit*
  - *Operations*
  - *Storage and Layover*
- **Construction Impacts**
  - *Construction Duration*
  - *Traffic Impacts*
  - *Pedestrian / Bicycle Impacts*
  - *Environmental Impacts (related to construction)*
  - *Impacts to Blue Line Operations*
  - *Impacts to Red Line Operations*
  - *Impacts to Business and Residents*
- **Community Impacts**
  - *Impact on Business Community*
  - *Impact on Residents*
  - *Impact on Cambridge Street*
  - *Opportunity to Upgrade Utilities*
- **Environment**
  - *Historic/Archeological*
  - *Noise and Vibration*
  - *Groundwater/ Stormwater*
  - *Parklands*
  - *Traffic*
- **Cost Impacts**
  - ***Capital Costs*
  - *Operation and Maintenance Costs*
- **Coordination**
  - *Available Right of Way*
  - *Impact on Other Area Transportation Projects*
  - *Compatibility with SIP*

**CTPS Data In Progress*

***Capital Cost Estimate In Progress*

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Construction Methodologies

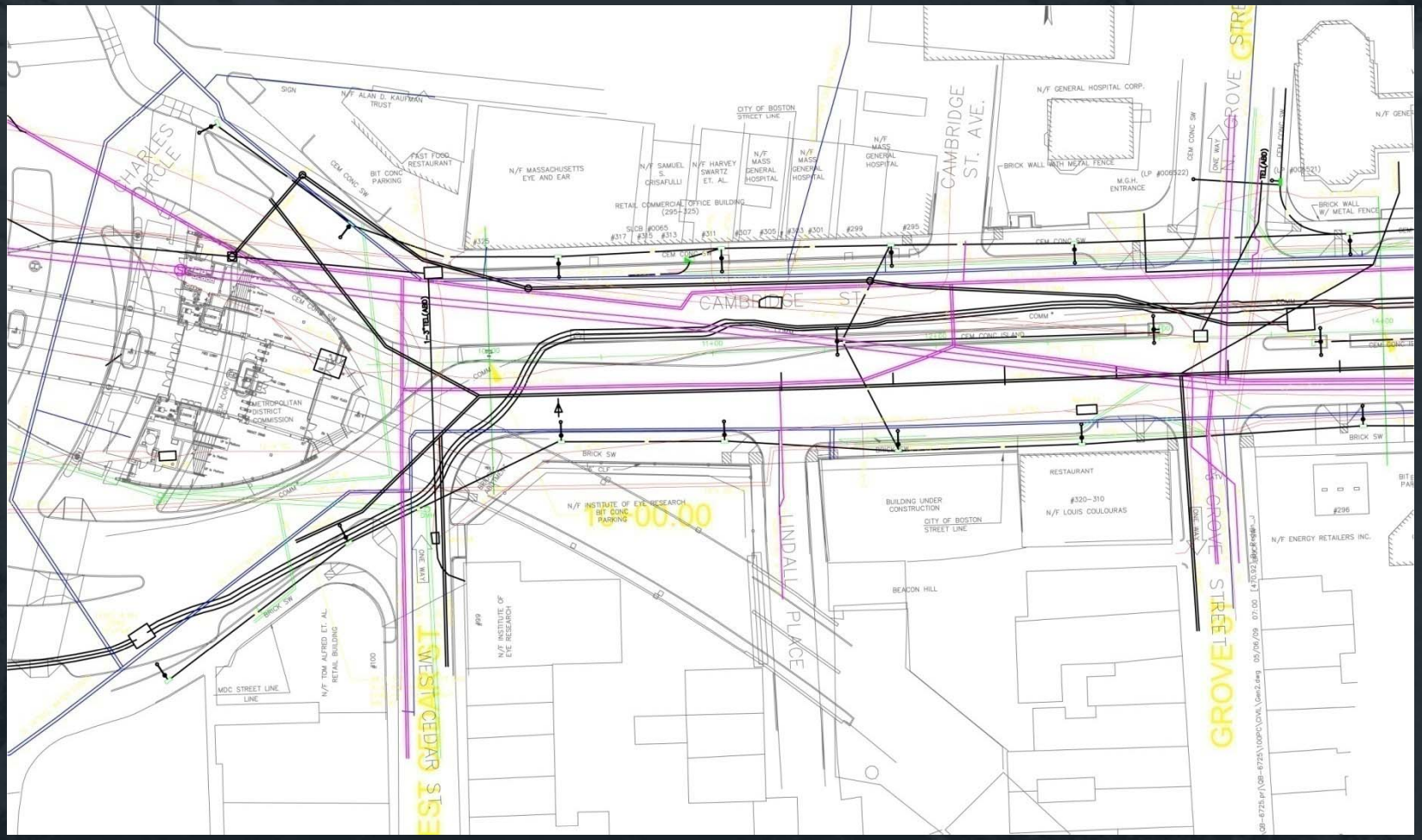
Cut & Cover

Photo: Slurry Wall constructed for Silver Line Tunnel

Mining

Existing Utilities

Along and Intersecting with Cambridge Street



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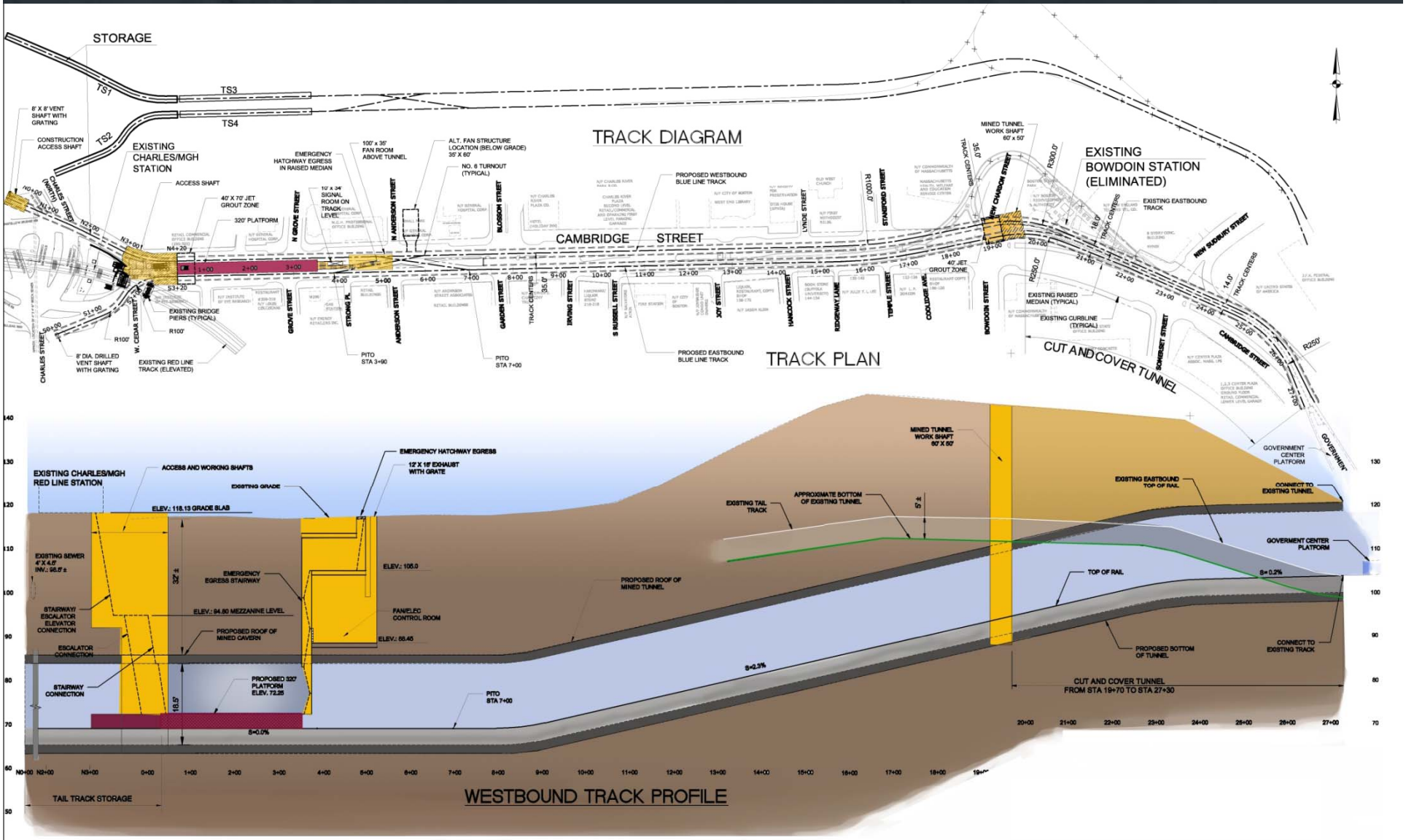
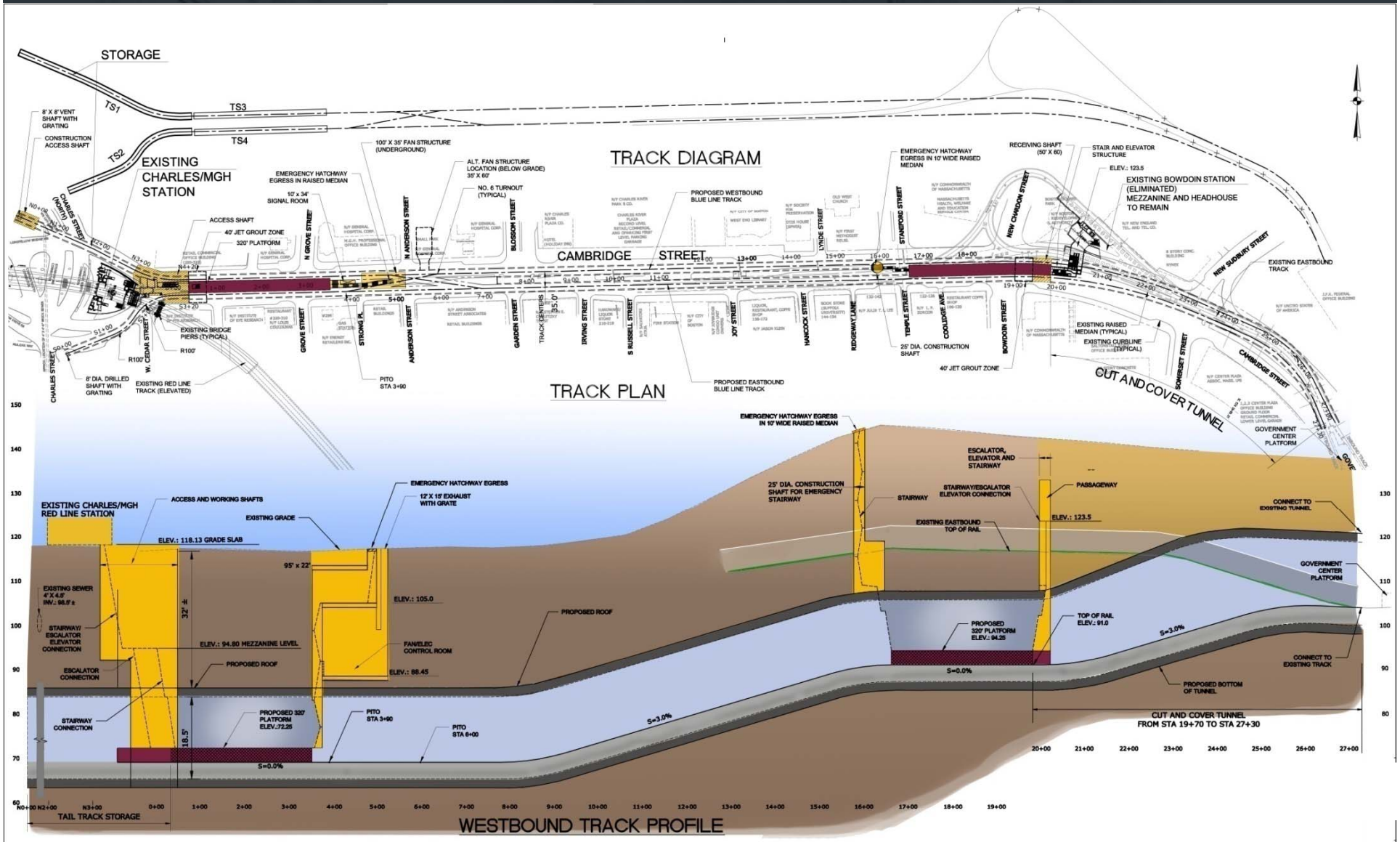
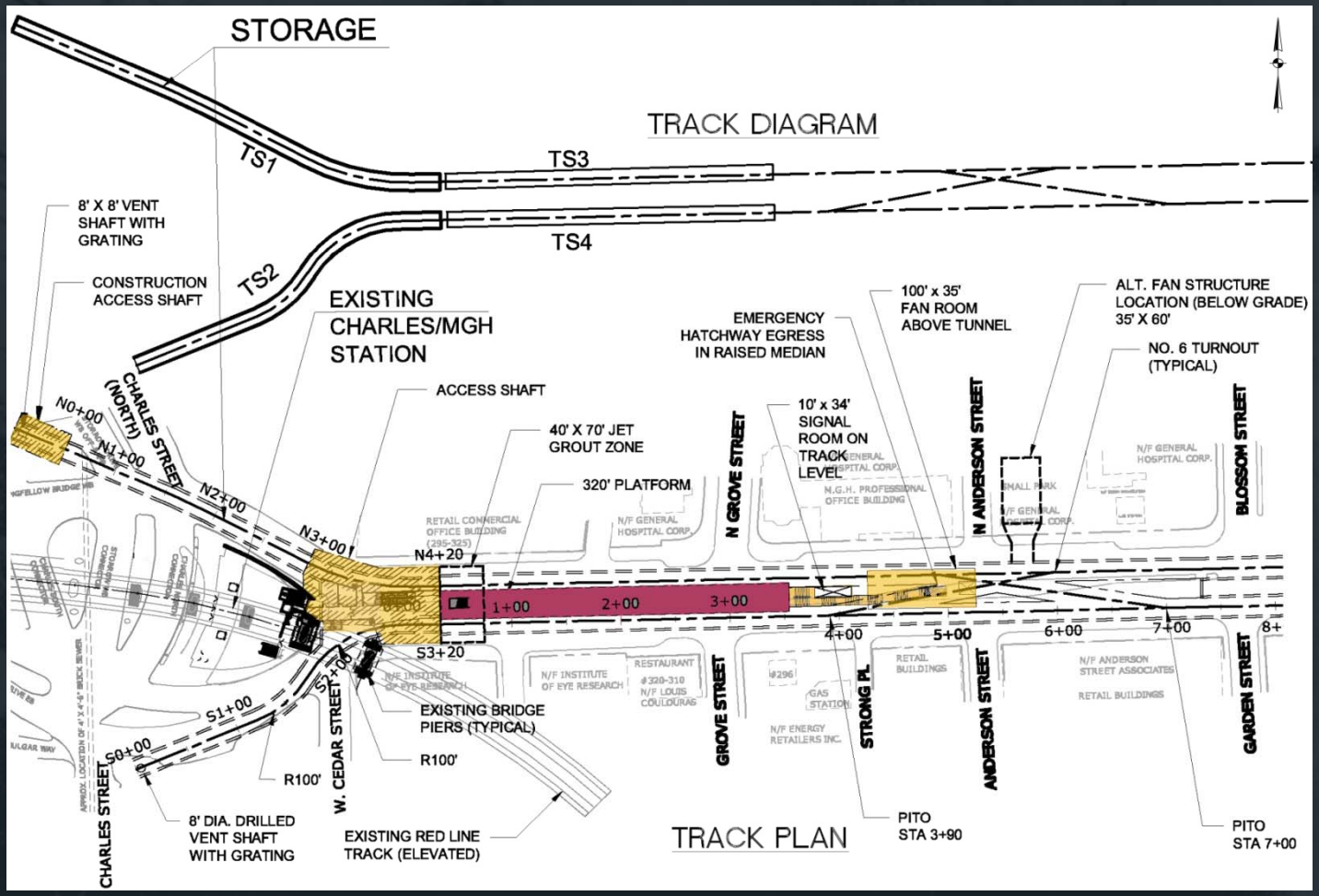
Alternative 1: Red / Blue Line Connector with Elimination of Bowdoin Station



Alternative 2: Red / Blue Line Connector with Relocated Bowdoin Station



Alt. 1 & 2 Construction Phasing at Proposed Charles/ MGH Blueline Track & Platform



Red Line
Blue Line
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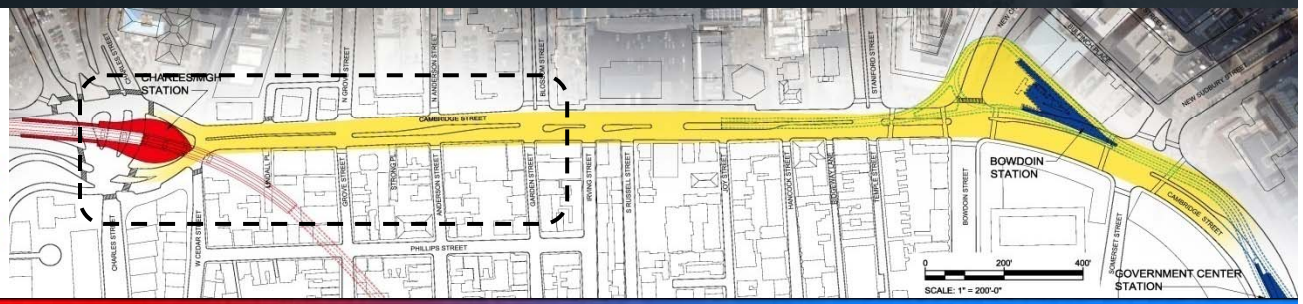
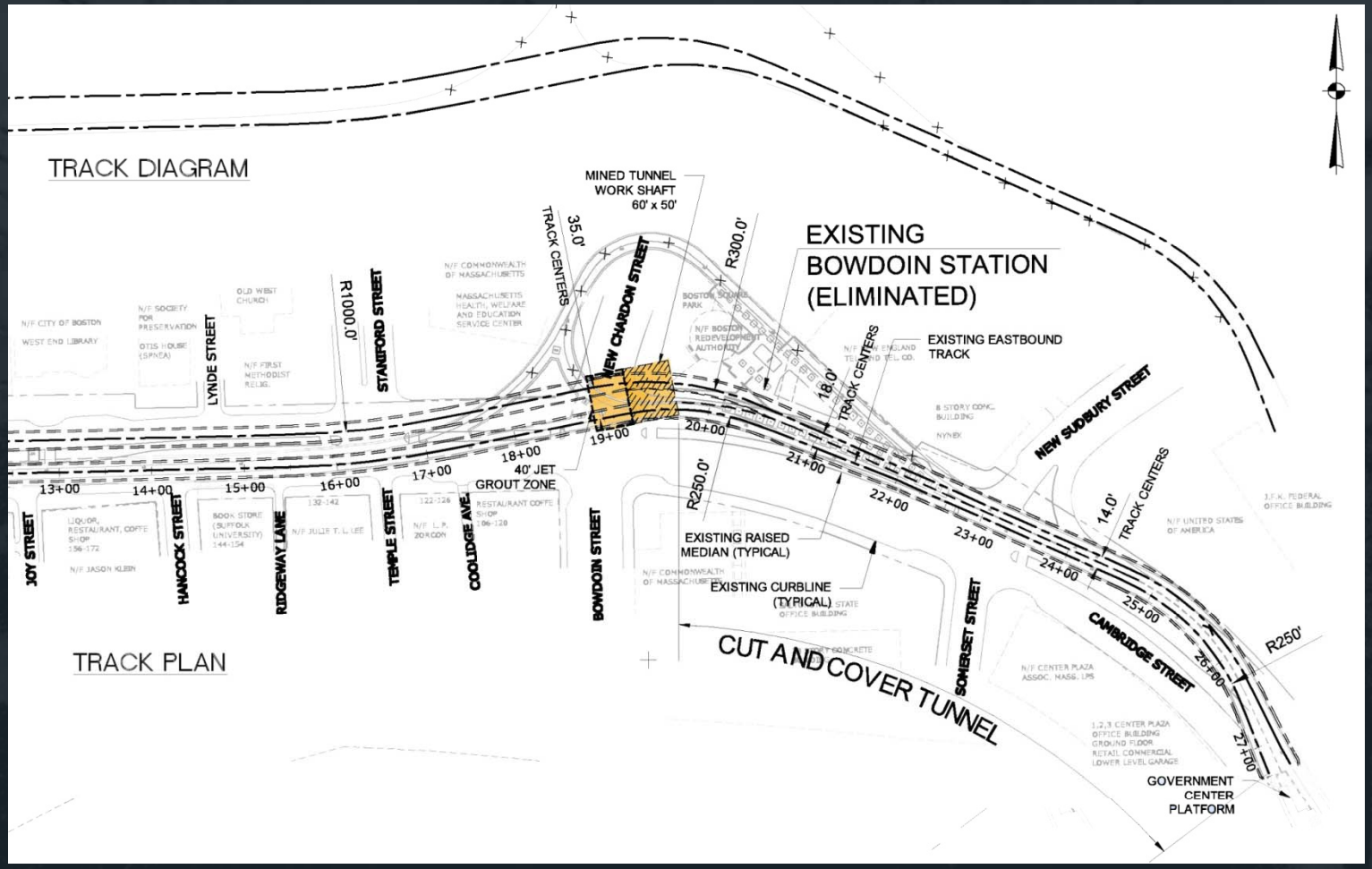


Alternative 1: Construction Phasing at Eliminated Bowdoin



Red Line
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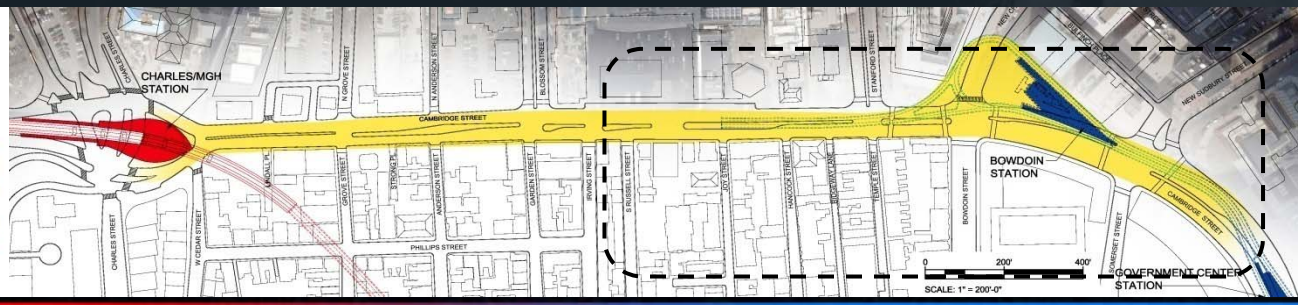
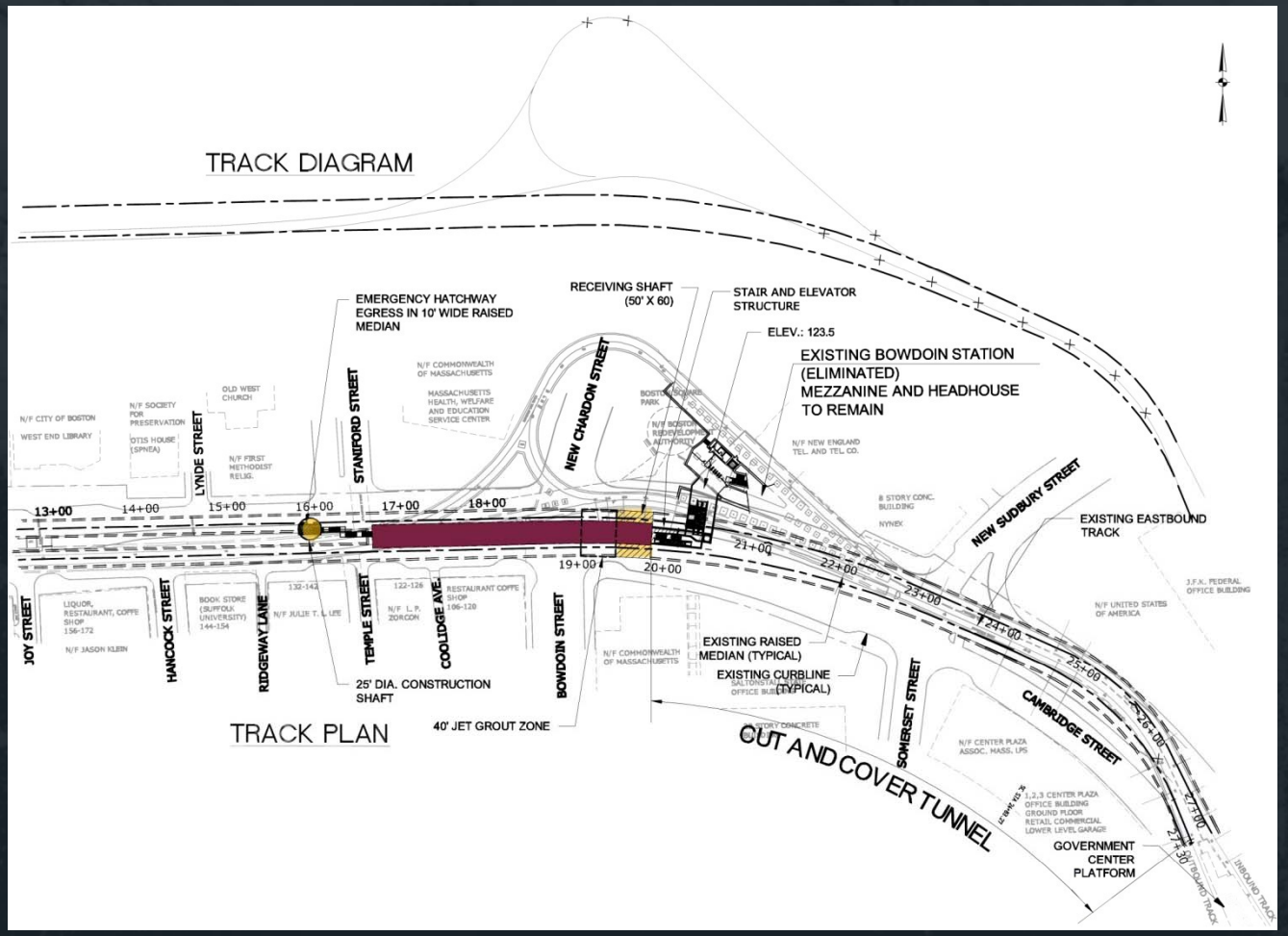
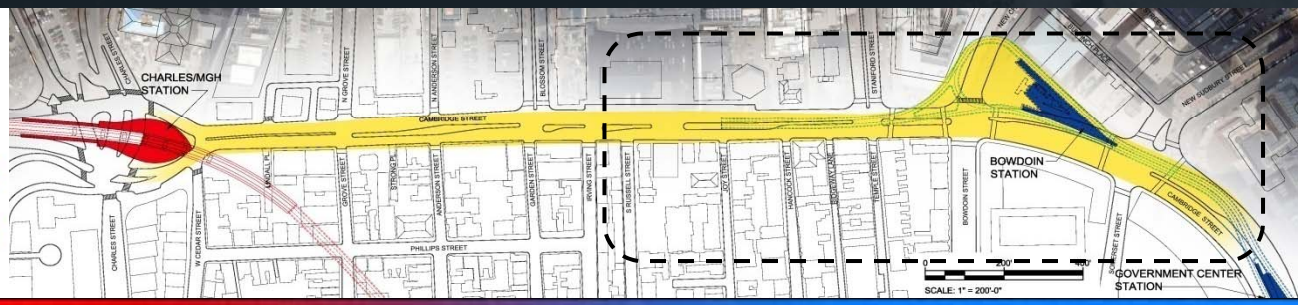


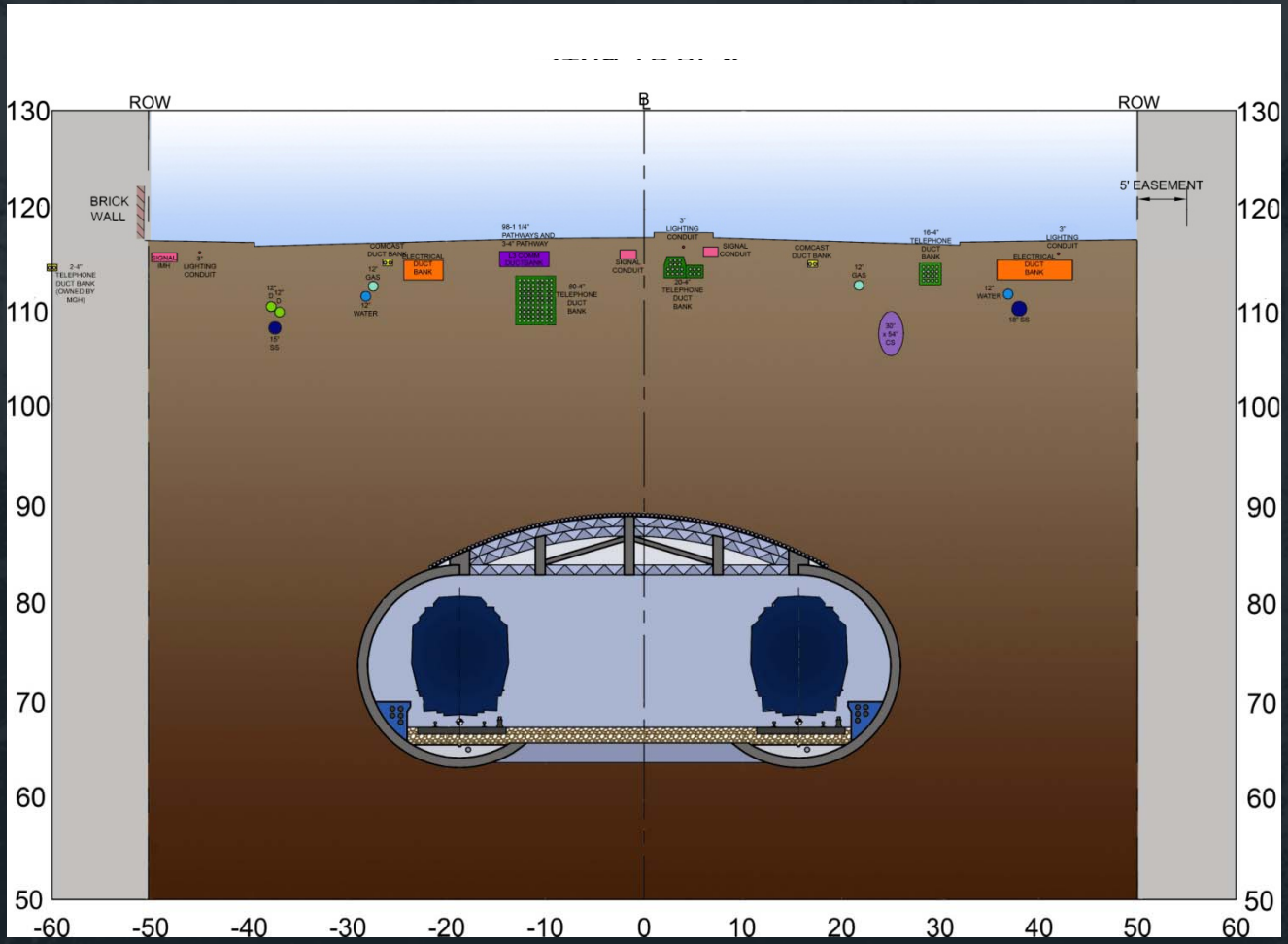
Alternative 2: Construction Phasing at Relocated Bowdoin



Red Line Blue Line CONNECTOR



Alternative 1 & 2: Mined Tunnel Section



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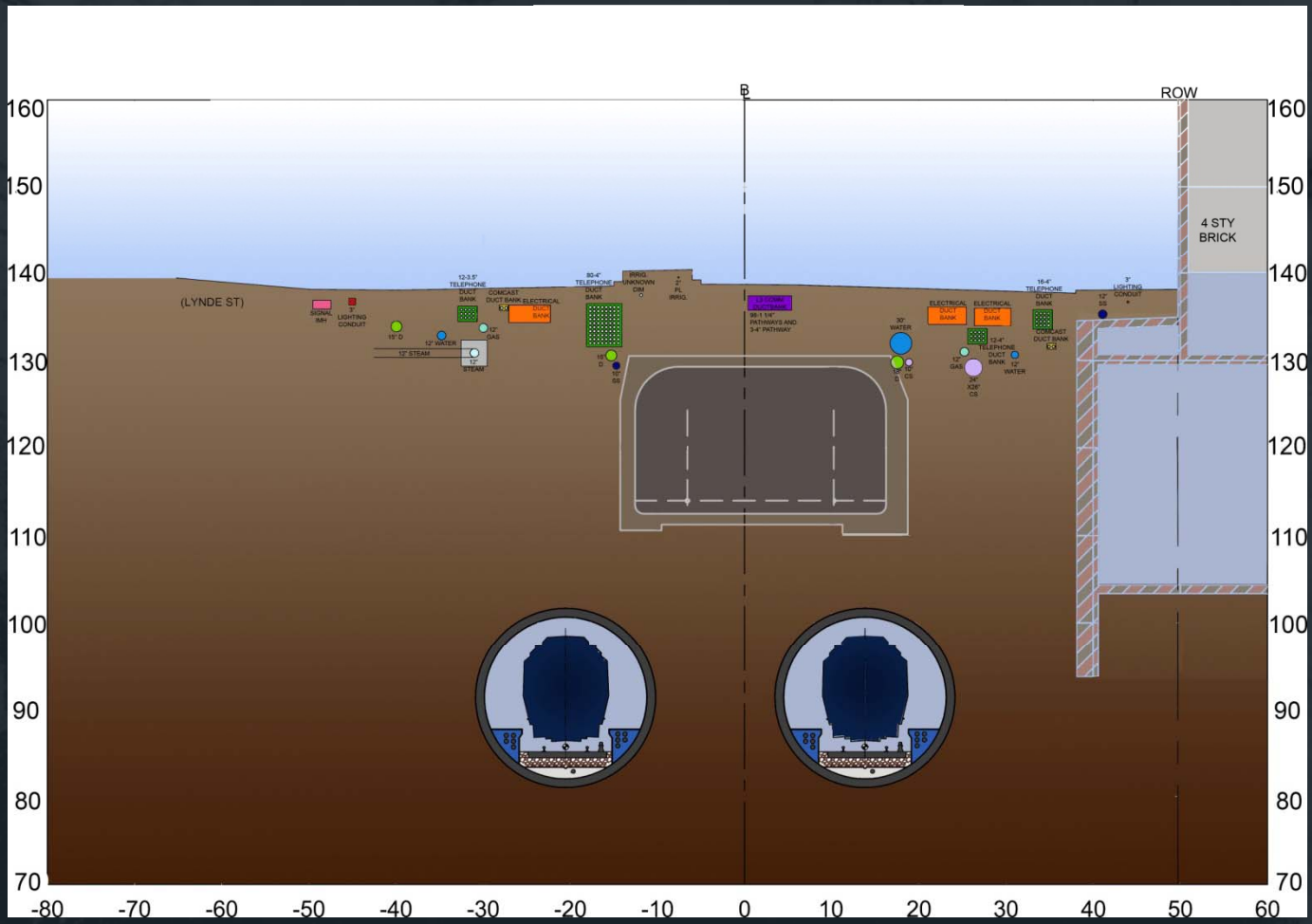
Alternative 1 & 2: Mined Tunnels Section



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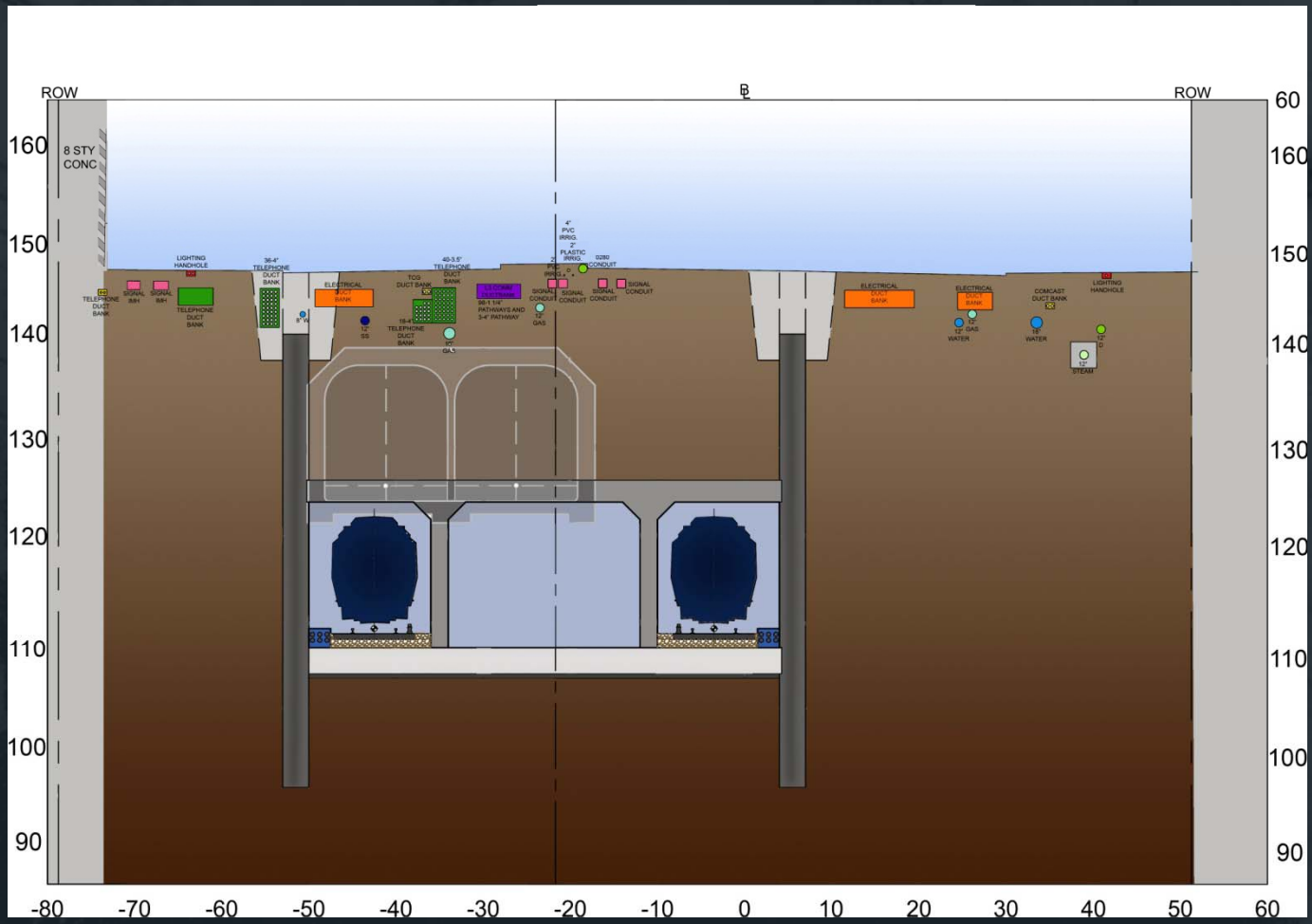
Alternatives 1 & 2: Cut and Cover Section



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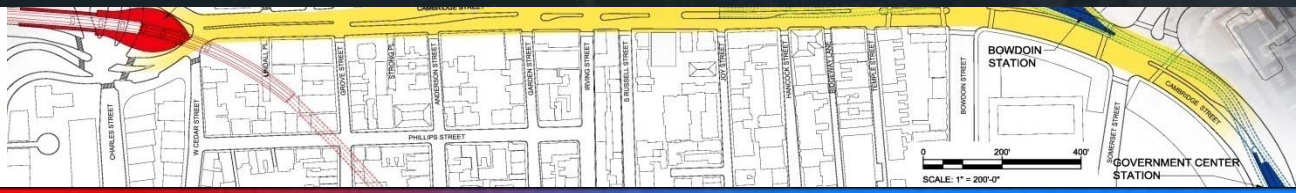
Public Comment

- Questions & Answers

Blue Line CONNECTOR



Project Contact Information

Please contact public involvement representatives Nancy Farrell or Regan Checchio, 617-357-5772 (nfarrell@reginavilla.com; rchecchio@reginavilla.com). If you would like to arrange a briefing for your organization or neighborhood this fall.

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PROJECT WEBSITE –http://www.mass.gov/eot/redblue

Project background materials, minutes and presentations are posted on this site.

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