



DENNY SUBSTATION PROGRAM

DENNY NETWORK DISTRIBUTION PROJECT
DENNY SUBSTATION FACILITY PROJECT
DENNY SUB TO MASS SUB TRANSMISSION

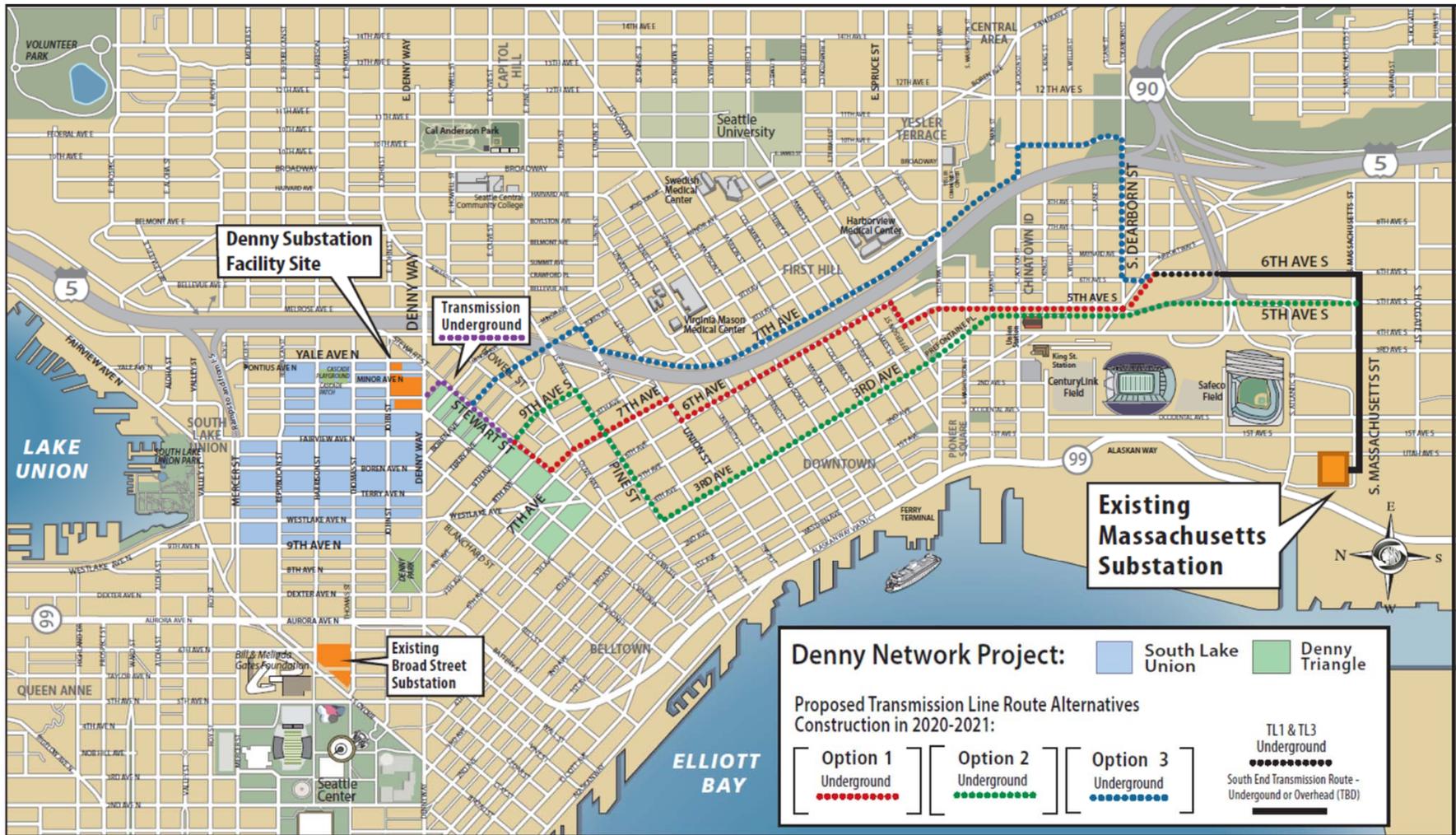
Program Update for Seattle City Light Review Panel

December 15, 2016 / Michael Clark – Program Manager



DENNY SUBSTATION PROGRAM

DENNY SUBSTATION FACILITY, DENNY NETWORK, DN-MA TRANSMISSION



DENNY NETWORK BACKBONE FEEDERS

This project constructs the Denny Network Backbone Feeders out of the new Denny Substation Facility. The civil construction is being performed by Shimmick Construction. The electrical construction is being performed by City Light Network Crews.

- **February 2016: Construction Begins**
- **Phase 1 (South Lake Union):**
 - Civil Construction: Q2-2016 to Q1-2018
 - Electrical Construction: Q2-2017 to Q2-2018
 - 22 vaults & 11,000 liner feet of ductbank
- **Phase 2 (Denny Triangle):**
 - Civil Construction: Q1-2016 to Q2-2017
 - Electrical Construction: Q3-2016 to Q3-2017
 - 8 vaults, 2 hot vaults, & 6,000 linear feet of ductbank
- **Mid-2018: Project Construction Completed**



CONSTRUCTION Q4-2016

October 2016:

- Duct bank construction on:
 - 6th Ave at Westlake Ave
 - Virginia St btwn 9th Ave & 8th Ave

November 2016:

- Duct bank construction on:
 - Virginia St btwn 6th Ave & 8th Ave
 - 6th Ave btwn Westlake Ave & Lenora Ave
 - Minor Ave btwn Harrison St & Thomas St
- Hot vault construction on: 7th Ave N btwn Virginia St & Lenora St
- Vault construction on:
 - 6th Ave at Westlake Ave
 - Thomas St btwn Boren Ave and Fairview Ave

December 2016:

- Duct bank construction on:
 - Minor Ave btwn Denny Way & Harrison St
 - Harrison St btwn Boren Ave N & Westlake Ave N
 - Thomas St btwn Fairview Ave N to Pontius Ave N
 - Thomas St btwn Boren Ave N to Westlake Ave N
- Hot vault construction on: 7th btwn Virginia St & Lenora St
- Vault construction on:
 - 7th Ave btwn Virginia St & Lenora St
 - Minor Ave btwn Denny Way & Harrison St
 - Thomas St btwn Fairview Ave N to Pontius Ave N



CONSTRUCTION Q1-2017 THRU Q2-2017

Denny Triangle:

- Complete duct bank on Virginia St
- Street Restoration on Virginia St, Stewart St, 6th & 7th Ave

South Lake Union:

- Potholing
- Install streetcar crossings at Thomas St & Harrison St
- Install vaults on Thomas St & Harrison St
- Install duct bank on Thomas St & Harrison St

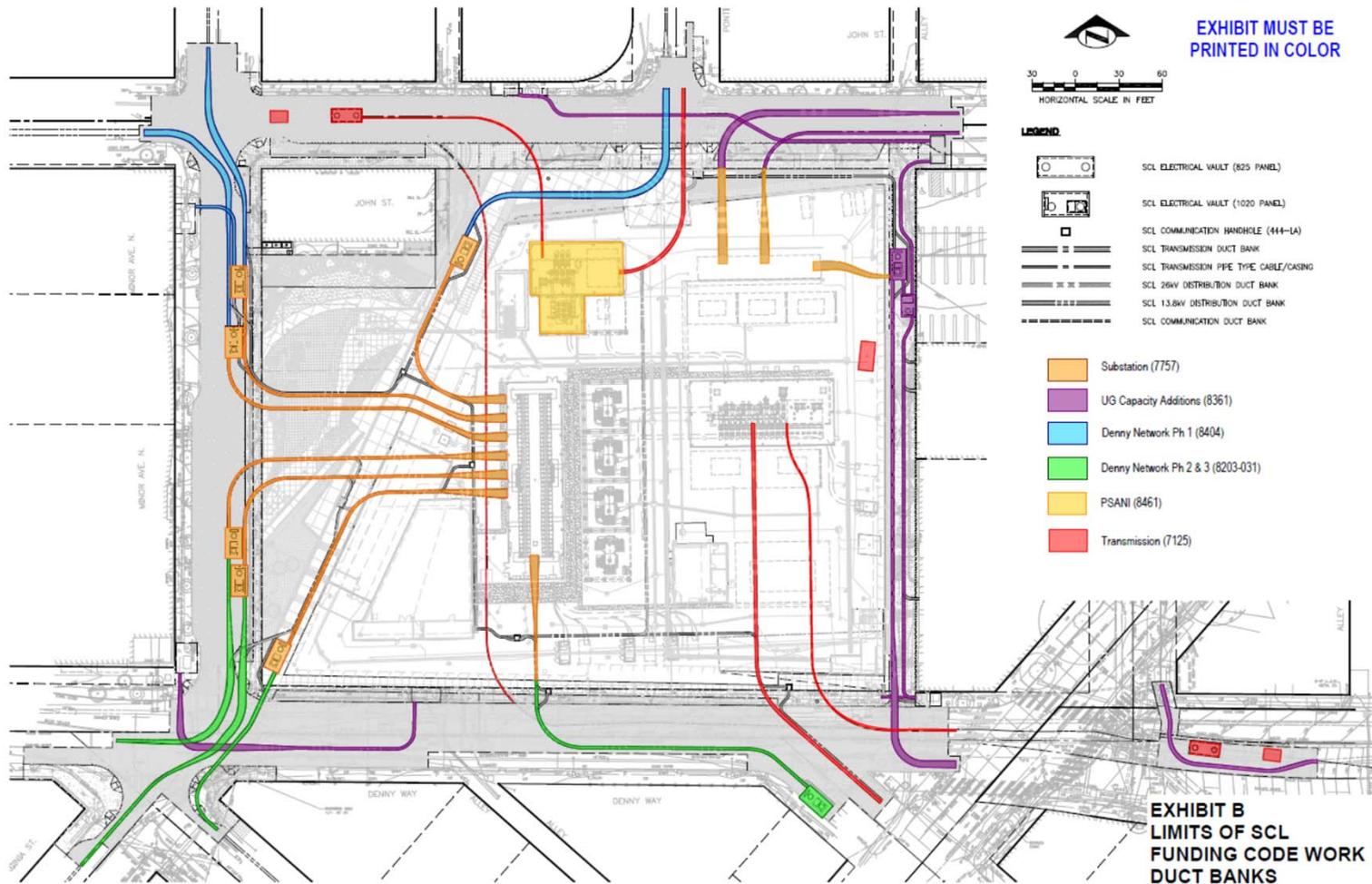




DENNY SUBSTATION

SEATTLE CITY LIGHT | SEATTLE, WA

DENNY SUBSTATION FACILITY CONSTRUCTION



DENNY SUBSTATION FACILITY CONSTRUCTION

May 2016: Start of Construction

On-Site Facility Construction:

Civil & Structural

- Major Utility Relocation
Sewer, Water, Power, Communications
- Mass Excavation
- Soldier piles and auger cast piles
- Grade Beams
- Structural Cranes
- Metal Cladding & Glazing
- Control Bldg. & Maintenance Bldg.

Electrical

- Major Electrical Equipment
Power Transformers
High Voltage Switchgear
Transmission Line Inductors
Communications & Controls



DENNY SUBSTATION FACILITY CONSTRUCTION

Right of Way Construction:

- 10 vaults and approximately 4,600 linear feet of duct bank
- Approximately 800 linear feet of water main and 450 linear feet of sewer lines
Sewer, Water, Power, Communications
- Power Distribution Feeder Getaways
- Telecommunication Circuits
- City of Seattle Communication Circuits

Q3-2018: Construction Completed



WHAT'S BEEN COMPLETED TO DATE: 12/7/16

On-Site Facility Construction:

- Soil Characterization
- Monitoring Equipment Installed
- Drilled Shafts
- Shoring
- Started Structural Steel Erection & Framing

Right of Way Construction:

John St, Pontius Ave N, Minor Ave N, Denny Way

- Water Line Replacement
- Sewer Line Replacement
- Electrical Power Vault Installations
- Duct Bank Construction



CONSTRUCTION Q4-2016 THRU Q2-2017

On-Site Facility Construction:

- Foundation Construction
- Structural Work
- On-Site Utility Work
Duct banks & Vaults



CONSTRUCTION – CURRENT SITE – DEC 2016

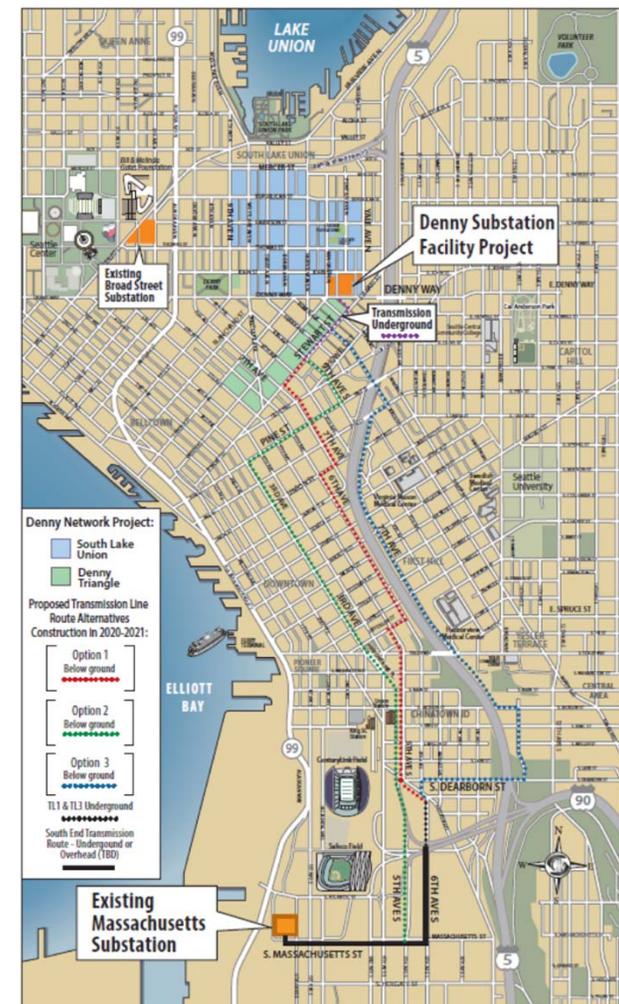


CONSTRUCTION – CURRENT SITE – DEC 2016



DENNY SUB – MASS SUB TRANSMISSION LINE

- Construction deferred until 2021
- Route Selection by Q4-2016
 - Preliminary Design (15-20%) Q4-2016
 - Comprehensive City of Seattle approach / RSJI
 - Community Involvement in Route Selection Analysis



DENNY SUBSTATION PROGRAM – QUESTIONS?

QUESTIONS?





OUR VISION

To set the standard—to deliver the best customer service experience of any utility in the nation.

OUR MISSION

Seattle City Light is dedicated to exceeding our customers' expectations in producing and delivering environmentally responsible, safe, low-cost and reliable power.

OUR VALUES

Excellence, Accountability, Trust and Stewardship.

