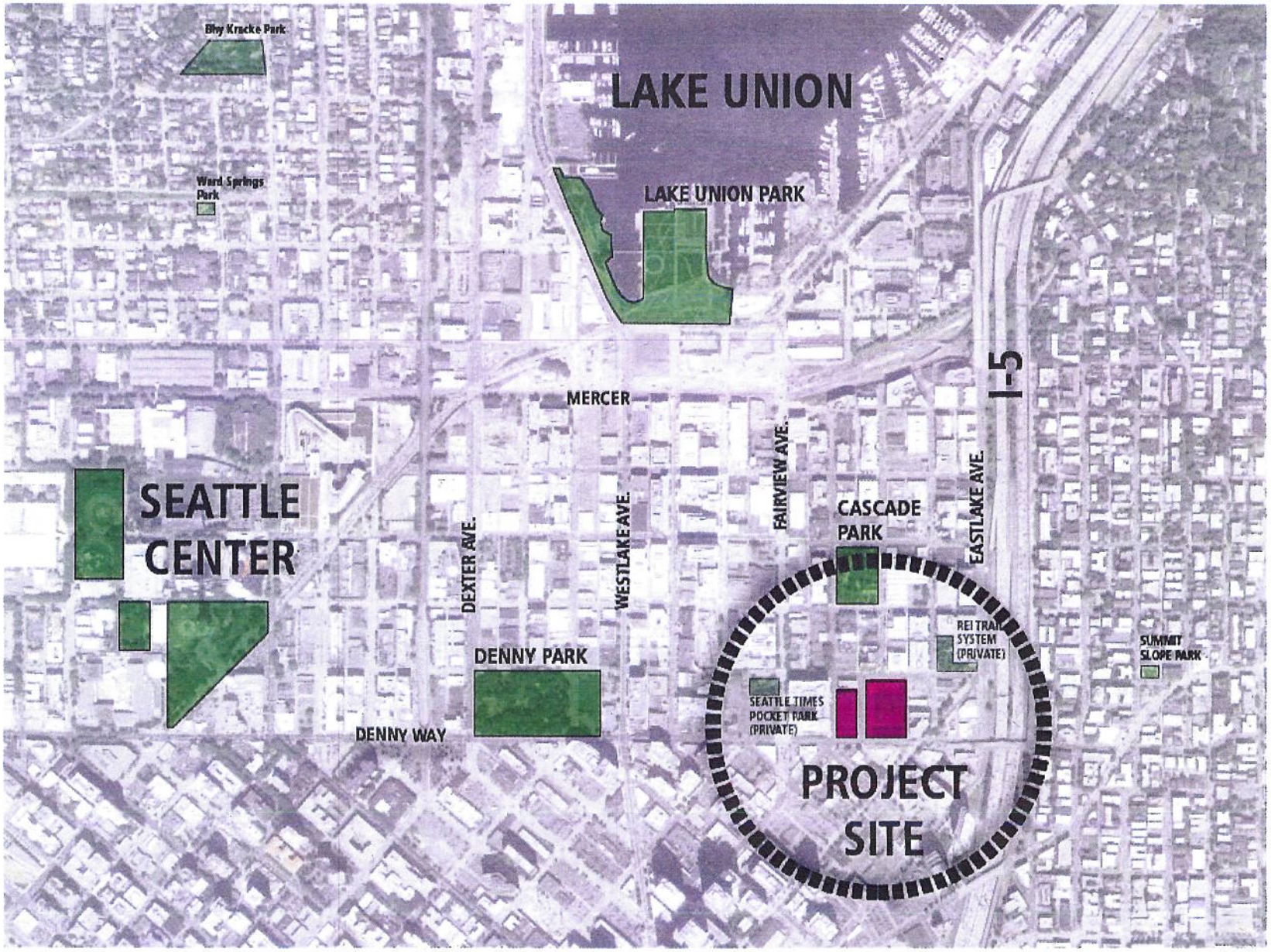
DENNY NETWORK PROJECT – SLU & DENNY TRIANGLE
DENNY SUBSTATION PROJECT

Update Briefing for

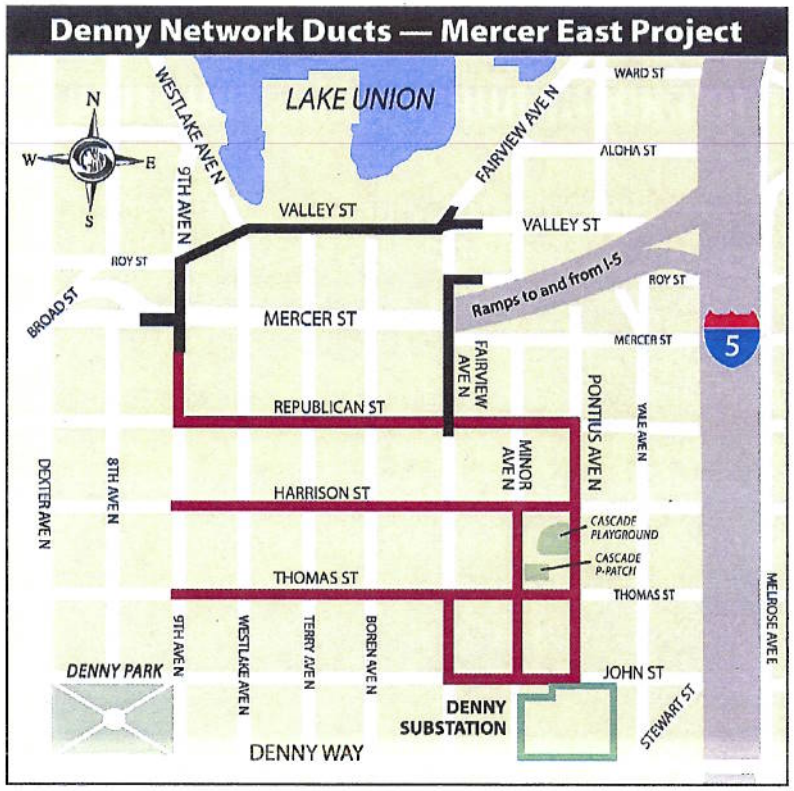
Seattle City Light Review Panel

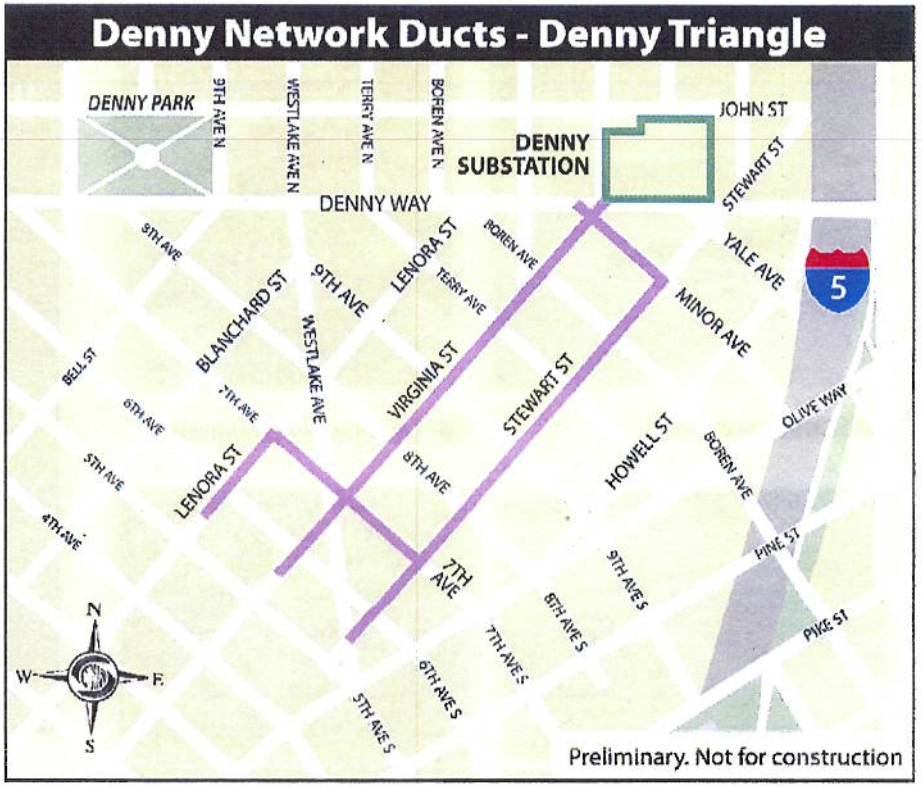
September 18, 2015 / Greg Stamatiou – Project Manager

THE NATION'S GREENEST UTILITY
SINCE 1905
SEATTLE CITY LIGHT


Bhy Kracke Park
LAKE UNION
Ward Springs Park
LAKE UNION PARK
MERCER
I-5
SEATTLE CENTER
DEXTER AVE.
WESTLAKE AVE.
FAIRVIEW AVE.
EASTLAKE AVE.
CASCADE PARK
REI TRAIL SYSTEM (PRIVATE)
SUMMIT SLOPE PARK
DENNY PARK
SEATTLE TIMES POCKET PARK (PRIVATE)
DENNY WAY
PROJECT SITE

DENNY NETWORK - SLU & DENNY TRIANGLE





DENNY NETWORK - SLU & DENNY TRIANGLE

NETWORK CONSTRUCTION

Street excavation

Duct bank installation

Installing vaults and conduit

Street restoration

WHAT TO EXPECT DURING CONSTRUCTION

Once network construction begins, crews will be working at multiple sites throughout the project area. However, construction will not occur on all streets at the same time. You can also expect:

- Lane restrictions
- Some traffic and pedestrian detours
- Weekday work hours 6 a.m. to 7 p.m.
- Some weekend, night and early morning work
- Parking and loading restrictions near works zones
- Other impacts such as dust, noise and truck activity

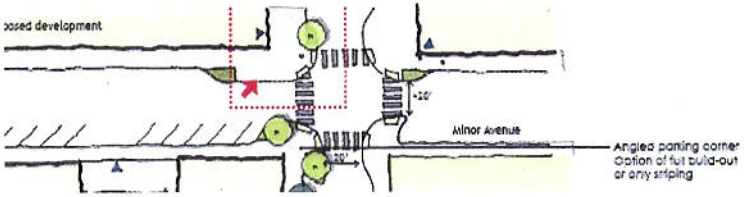
DENNY NETWORK – CASCADE NEIGHBORHOOD

ADDITIONAL SURFACE IMPROVEMENTS – CONSTRUCTION MITIGATION

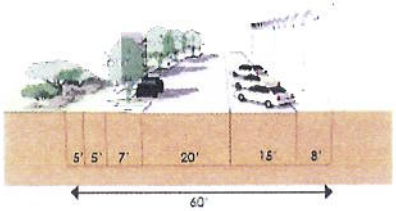
SDOT'S STREET CONCEPT PLANS WILL BE USED AS A DESIGN GUIDELINE

SDOT's Street Concept Plan - Examples

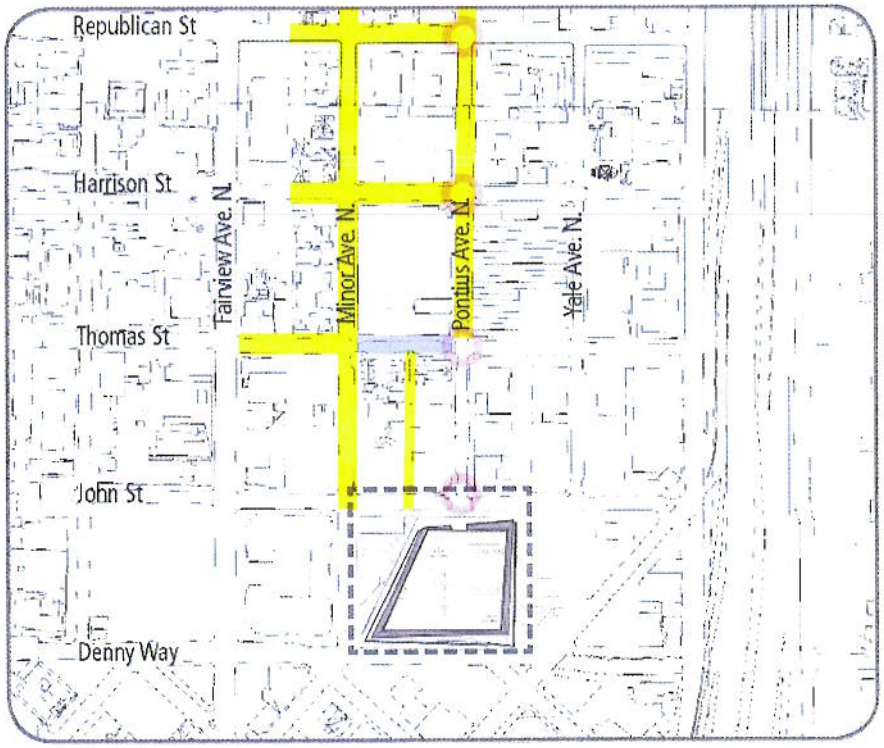
Pontius Ave. N.



Minor Ave. N. and Thomas St.



Pontius Ave. N.



Zones Identified as Opportunities for Improvements

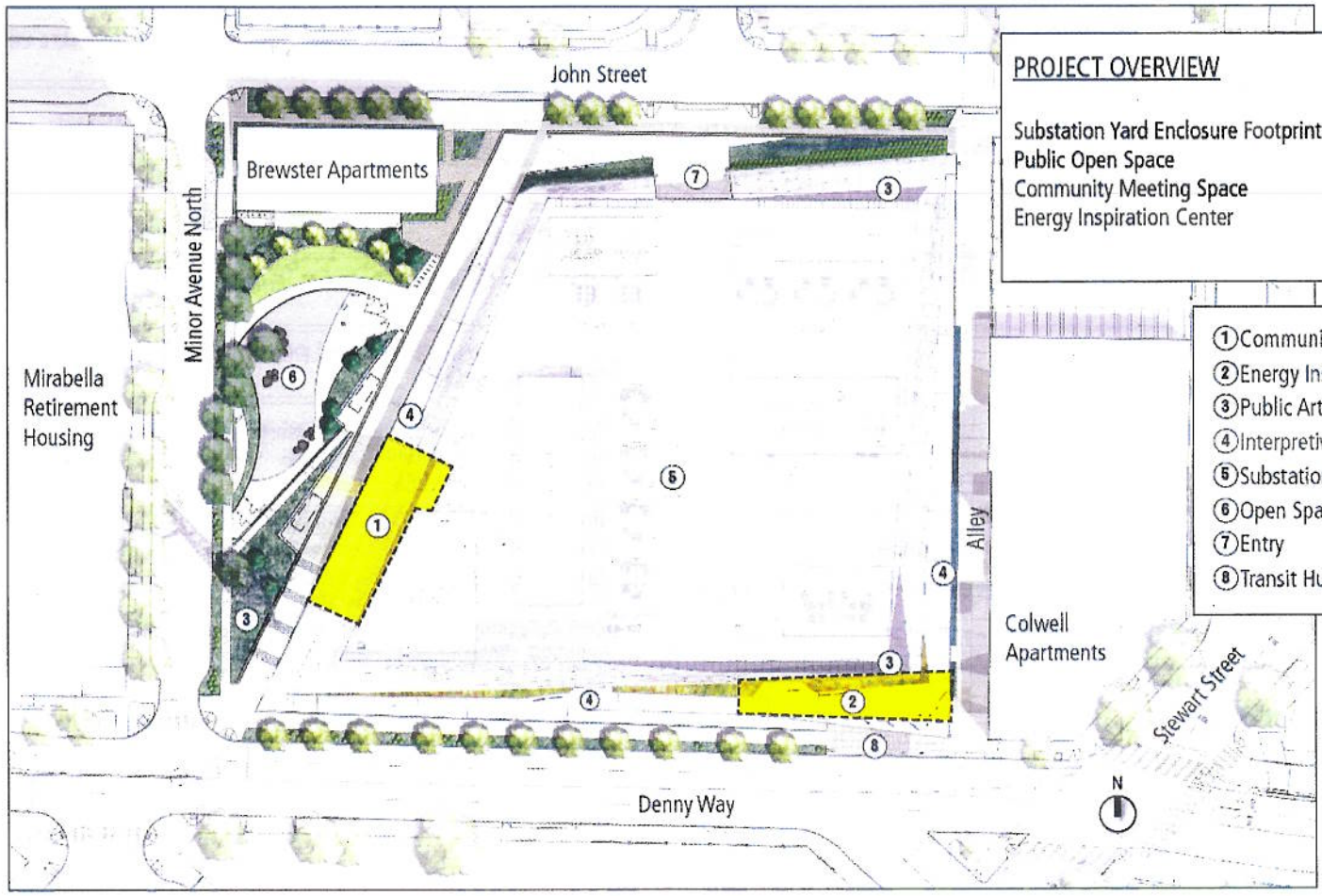
SCL Street Improvement Area (Public Benefit)

SDOT Street Improvement Area

DENNY NETWORK SCHEDULE

- **Engineered Design 100%** - Complete: 1/16/15
- Start of Construction (11/18/15)
- Phase 2 (Denny Triangle):
  - Civil Construction: 11/18/15 to Q1-2017
  - Electrical Construction: Q3-2016 to Q3-2017
- Phase 1 (South Lake Union):
  - Civil Construction: 11/18/15 to Q4-2017
  - Electrical Construction: Q2-2017 to Q2-2018

DENNY SUBSTATION – PLAN VIEW



PROJECT OVERVIEW

Substation Yard Enclosure Footprint	110,564 sf
Public Open Space	44,251 sf
Community Meeting Space	3,900 sf
Energy Inspiration Center	2,900 sf

1. Community Meeting Space
2. Energy Inspiration Center
3. Public Art
4. Interpretive Walking Loop
5. Substation Yard
6. Open Space
7. Entry
8. Transit Hub

DENNY SUBSTATION – PUBLIC BENEFITS

PUBLIC BENEFIT ITEM	QUANTITY	APPROXIMATE COST
1 - Public Open Space and Community Meeting Space	23,500 SF open space including, 6,000 SF Off leash area & 1,540 SF event zone / spillout space. 3,900 SF Community Meeting Space	$3,630,000
2 - Occupied Use to Activate Street Edge	2,900 sf	$2,900,000
3 - Denny Street Crossings	2 crossings	$200,000
4 - Off-site Street Improvements	Curb: 869 LF; Sidewalk: 778 SY; Trees (new): 13	$250,000
5 - Bus Shelter / Transit Hub	566 SF overhang, 3 lean rails, 1 bench, 3 bike racks, 2 receptacles	$130,000
6 - Alley Improvements	9,350 SF alley paving enhancements, 220 LF of bioretention planter, 3 speaker locations, 250 lf of safety lighting	$250,000
7 - Implementation of the Intent of the "Denny Streetscape Plan"	Sidewalk 5'0" wider & Planting 9" wider than minimum required. 47.5% increase over minimum development requirement	$33,000
8 - John Street Green Street Enhancements	Sidewalk 4'0" wider & Planting 2'4" wider than minimum required. 53.4% increase over minimum development requirement	$67,000
9 - Interpretive Walking Loop	15,250 SF interpretive walking loop; 7 sitting rails; 10 viewing portals; 1,400 SF of landscaping	$3,200,000

TOTAL = $10,660,00

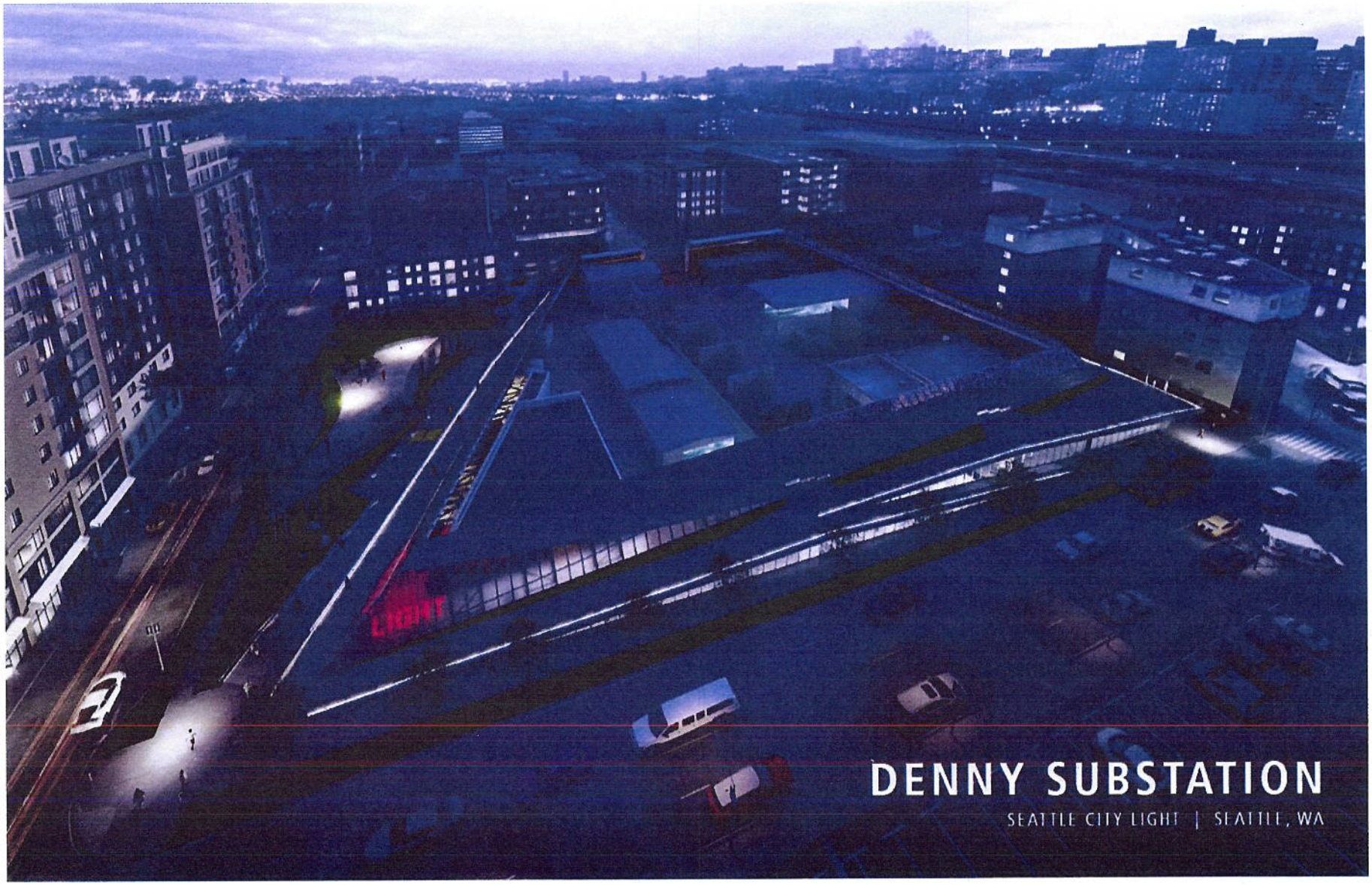
DENNY SUBSTATION – RENDERINGS

DENNY SUBSTATION CONSTRUCTION SCHEDULE

Below is the updated assumptions for the Substation Construction Schedule at completion of the 90% Design milestone.

Updated Assumptions - Substation Construction Schedule

Notice to Proceed – 4/18/16
Start of Construction – 5/31/16
Energize – Q1 2018
Facility Completion (Public Spaces, etc.) – Q2 2018



DENNY SUBSTATION

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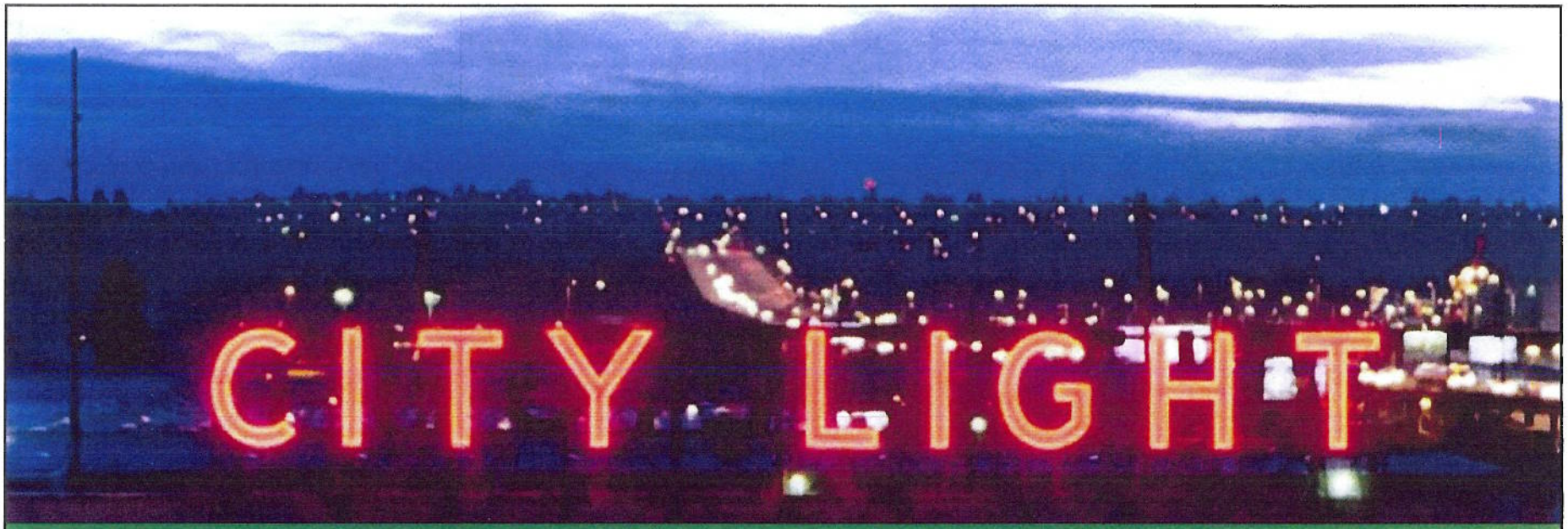

OUR VISION

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.

THE NATION'S GREENEST UTILITY
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Seattle City Light

Seattle City Light

MEMORANDUM

JUNE 29, 2015

TO
Mayor Murray and Seattle City Council

FROM
Jim Baggs, Interim General Manager & CEO

SUBJECT
Denny Substation Project - 90% Design Milestone / Budget Impacts

I am writing to provide an update on key milestones and project cost changes related to the Denny Substation Project.

Milestones:

- SCL has recently completed the 90% Design stage for the Denny Substation and have received approval from the Seattle Design Commission to prepare the 90% Design Concept and Public Benefits Package for presentation to the City Council for final approval of the project.
- SDOT is preparing their recommendation on the related Street Vacation Petition (Pontius Ave N, between John St & Denny Way) and DPD is preparing their recommendation on the related Master Use Permit (MUP) for your review and approval during this process.
- We are confirmed for a presentation on the Denny Substation Project (Street Vacation Permit & Public Benefits, and CIP & Master Use Permit) with the Transportation Committee on July 28, 2015.
- The Transportation Committee is holding a Public Hearing for the project at 5:30pm on Thursday, July 30th at the Belltown Community Center.
- The Transportation Committee vote is scheduled for a special Transportation Committee meeting on August 13th, at 9:30 in the City Council Chambers.

Project Costs:

After advancing the project through the Seattle Design Commission and updating the cost estimate submittals to reflect a 90% design effort, the impacts to the adopted project budget are known. We are now projecting budget increases totaling $35.9M that are not covered in the previously adopted budget, which was based on 2013 estimates from the 30% Design Phase. These increases will be

partially offset from revenue received from the sale of the surplus property at Parcel 3. This property is at the corner of John St and Yale Ave N, and it was identified as surplus post-construction during the 90% design effort. City Light is also reprioritizing other capital projects to stay within the rate path called for in the utility's six-year Strategic Plan.

The major budget impacts at the 90% Design Milestone are summarized below, followed by a description of the more significant components of the project that are experiencing cost changes.

Adopted Project Budget at 30% Design Milestone	**$173.6M**
Projected Budget at 90% Design Milestone	**$209.5M**
Sub-Total Budget Impact	**$ 35.9M**
Offsetting Income from Sale of Parcel 3	**$ (8.5M)**
Total Budget Impact	**$ 27.4M**

The table below shows the projected cost increases for specific project components (costs in millions). Following the table is a more detailed explanation of the changes.

	Adopted Project Budget	Revised Budget	Difference
1. Major Electrical Equipment Procurement & Installation	$19.0	$34.6	$15.6
2. Site Remediation & SEPA/EIS	$11.0	$19.3	$8.3
3. Civil/Structural/Architectural/Public Benefit	$45.4	$55.3	$9.9
4. Power Engineers/KPFF/NBBJ Design Contract	$14.3	$15.5	$1.2
5. Allowance for Funds Used During Construction (AFUDC)	$4.4	$7.8	$3.4
6. Contingency (Original)*	$20.3	$0.0	($20.3)
Contingency (New)	$0.0	$15.0	$15.0
7. Project Impact for Sale of Parcel 3	$0.0	($8.5)	($8.5)
All remaining portions of project budget	$59.2	$62.0	$2.8
TOTAL	**$173.6**	**$201.0**	**$27.4**

* The original project contingency budget of $20.3M has been expended to fund cost over runs listed in the table above. An additional $15M has been added back in to the contingency budget to cover potential changes in the estimates of the remaining uncommitted funds and major equipment costs.

1. Major Electrical Equipment Procurement & Installation

The bids received during the procurement process for the Major Electrical Equipment were higher than the original market survey estimates used in the originally adopted budget. Additionally in advancing the electrical design of the substation facility within the last year, the design team had to:

- Implement updates and revisions to the design of the major equipment to adjust to new industry standards and safety requirements within the substation, and
- Resolve operational issues for crew safety. This increased design scope for the major electrical equipment.

The design issues are resolved and contracts are now in place for delivery of these major components of the substation.

Cost Increase of $15.6M *- Increase in equipment costs and additional design scope.*

2. Site Remediation & SEPA/EIS

The environmental remediation at the substation site encountered a higher level of contaminated soil than anticipated during budget development. Additionally resources were required to provide additional analysis for an alternative substation site in the final EIS.

Cost Increase of $8.3M *- Higher level of contaminated soil than expected. Additional analysis for FEIS.*

3. Civil / Structural / Architectural / Public Benefits

In advancing the civil, structural, architectural design of the substation facility within the conditions set by the Seattle Design Commission, and providing for the public benefits to secure the street vacation, the scope of construction of the facility addressing these refinements and required public benefits has increased.

The most significant impact to the budget in the Public Benefits category was the additional scope of design and construction for tenant improvements in the previously identified "shell spaces" at the edges of the facility. As a condition of their approval of the 60% Design Concept, the Seattle Design Commission required City Light to further develop and refine the design of these "shell spaces" and develop a plan that showed commitment to access, programming, curation, operation and connectivity to the public open space at the site. These design improvements were included in the 90% Design Concept and Public Benefits Package to meet these conditions to secure approval by the Design Commission and are now a significant feature of the public benefits and open space attributes of the facility.

Additionally there were unanticipated major utility relocation costs in the streets adjacent to the substation site.

Cost Increase of $9.9M *- Additional Public Benefit Requirements (Design Commission conditions) and progression of design with Design Commission & Major Utility Relocation.*

4. POWER Engineers/KPFF/NBBJ Design Contract

In advancing the electrical design of the substation facility within the last year, the design team had to:

- Implement updates and revisions as required by new industry standards and safety requirements,
- Refine the main electrical bus design to resolve operational issues for crew safety,

- Provide additional alternative analysis to support the Final Environmental Impact Statement (FEIS), and
- Respond to the design requirements of the additional Public Benefits.

Cost Increase of $1.2M *- Additional design scope: Revisions of industry standards and safety requirements, Alternative Analysis support, design progression of Public Benefit Requirements (Design Commission conditions)*

5. Contingency

The previously budgeted contingency of $20.3M has been used to help cover the cost increases described herein. As we enter the Final Design and Construction stage of the project, the contingency budget, which was spent down to zero, is restored to the level of $15M. This amount of contingency is required to cover potential changes in the estimates of the remaining uncommitted funds and major equipment costs. This contingency can be set at a lower percentage (12.5%) of the remaining costs.

In summary, $20.3M in contingency funds have been used and spread to various project costs, and $15.0M in new contingency budget is being added for the remainder of the project.

Cost Increase of $15.0M *- Set contingency to 12.5% at Final Design and Construction Phase. This restoration of the contingency is a net reduction to the contingency budget line item of $5.3M, as it comes down from $20.3M to $15M.*

6. Allowance For Funds Used During Construction (AFUDC)

The projected AFUDC for the project has increased due to the increased scope and related seven month extension of the substation construction schedule.

Cost Increase of $3.4M *- Adjust AFUDC to correspond with Additional Scope and Schedule Duration.*

7. Surplus of Parcel 3 (Corner of John St & Yale Ave N)

We have completed a real estate evaluation of Parcel 3 and have estimated a current value of $9.1M for the property. Deducting sale costs we are projecting income from this sale to be at $8.5M.

Income of $8.5M *- Surplus of Parcel 3 can take place at end of construction for an estimated $9.1M with anticipated sale costs of $600K bringing the total income to a projected net of $8.5M.*