

Land Use Code Amendments

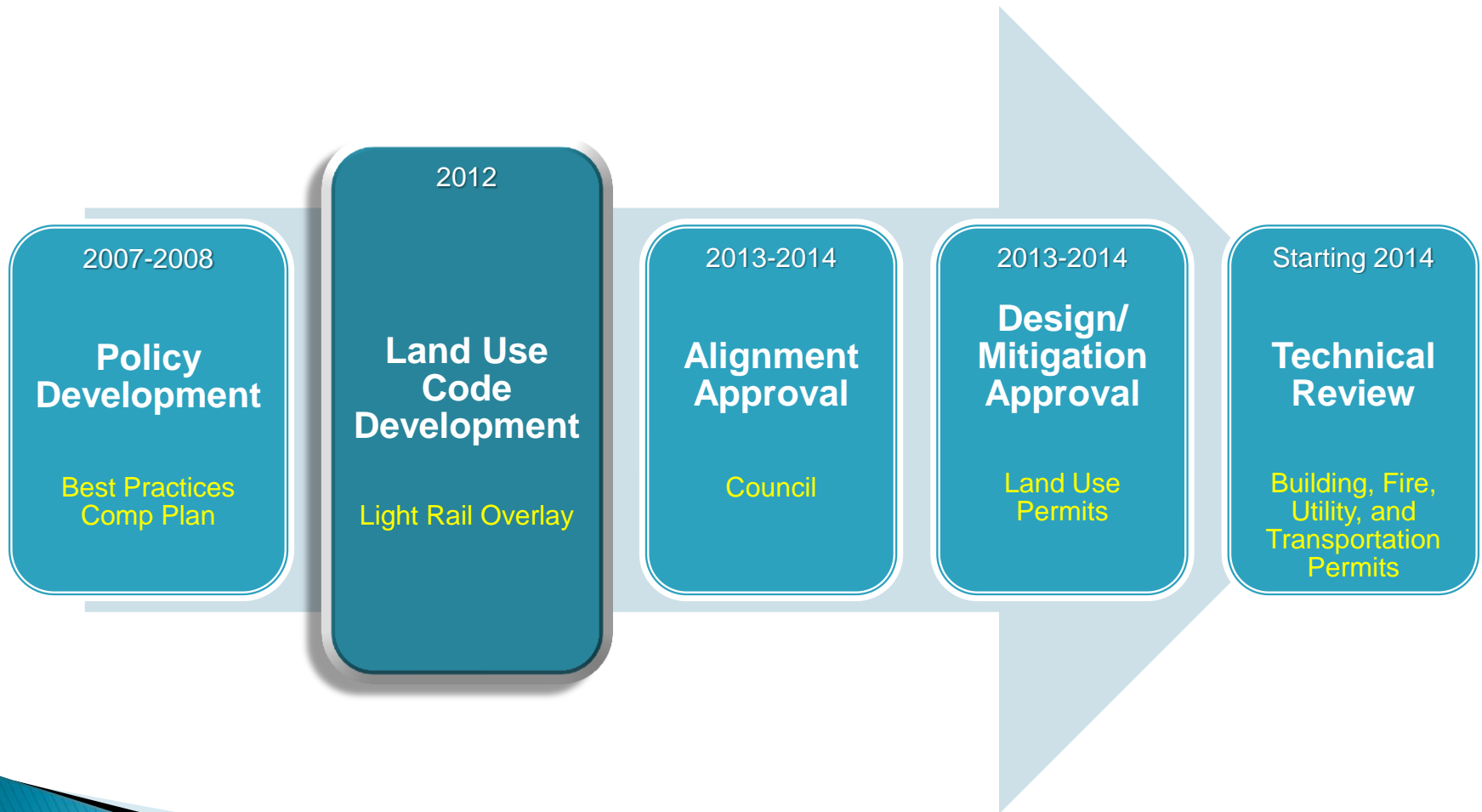
Design and Mitigation
for East Link Light Rail

City Council Study Session
December 3, 2012

Tonight

- ▶ Where we are in the process
- ▶ Focus tonight on Council input regarding certain design and mitigation topics:
 - Linear alignment segments south of Downtown
 - Traction Power Substations (TPSS)
- ▶ Schedule and Next Steps

Process Context



Tools to Evaluate Proposed Overlay Provisions for Design and Mitigation

- ▶ Visualizations of alignment segments south of Downtown
 - Cross section of Bellevue Way at Winter's House
 - Two cross sections of 112th Ave SE
 - Trench
 - Main Street station
- ▶ Illustrative photographs
 - Traction power substations
 - Landscaping
- ▶ Aerial photographs to provide context

Code Adoption Schedule

- ▶ **Time scheduled on upcoming Council agendas:**
 - December 10
 - All January Study Sessions
- ▶ **December 10th Design and Mitigation Topics**
 - South Bellevue Park and Ride
 - Elevated Alignment in South Bellevue
- ▶ **January Design and Mitigation Topic Blocks**
 - Concrete and Masonry Structures – tunnel portal, noise walls
 - Other Alignment Elements – Fences, Lights, OCS, Signals, Vents
 - Stations and Station Design Process
 - Bel–Red (including the Operations and Maintenance Base)
 - Overall Process (CUP/DA/Admin Modifications) and Wrap–up

Council Input Needed

Design and Mitigation Feedback:

- Alignment softening/transitions south of Downtown
 - Portions adjacent to private property
 - Portions adjacent to City right-of-way
- Setbacks and Landscaping for TPSS
 - Code required setback, or
 - Setback as necessary to accommodate required landscape screening

Visualization Feedback

Code Sections for Discussion

- ▶ **Landscape Development Code References**
 - Linear Alignment – to be added to Land Use Code based on Council direction
 - Traction Power Substations (TPSS) – LUC 20.25M.040.B
- ▶ **Dimensional Requirements**
 - TPSS Setbacks – LUC 20.25M.040.A.2
- ▶ **Design Guidelines**
 - TPSS Structures require context sensitivity – LUC 20.25M.050.B.2

Relevant Policy Language

▶ **Comprehensive Plan Policies:**

- TR 75.12 [in part] indicates that the City should partner with Sound Transit to include “substantial landscaping at stations and along the alignment, including retained significant trees and transplanted trees that are, at a minimum, saplings.”
- TR 75.14 Promote the use of context sensitive design and high quality materials to prevent and mitigate negative impacts and incorporate the light rail system appropriately into the streetscape.

▶ **Best Management Practices (excerpts)**

- “Transit facilities and infrastructure, including stations, track bed, supports, power poles, noise walls, ancillary buildings, etc., should apply the principles of context-sensitive design to be better integrated with Bellevue neighborhoods.”
- “[B]est practices emphasize reducing opportunities for conflict; improving visibility for everyone in the roadway environment; improving the predictability of pedestrians, bicyclists, and automobiles in the transit environment; and employing intelligent transportation tools to improve traffic operations.”

Context Sensitive Design

- ▶ Best Practices, Comprehensive Plan and proposed Overlay emphasize need for “context sensitive design”
- ▶ Comprehensive Plan describes:
“Context sensitive design seeks to balance the needs of the project with other desirable outcomes, including environmental sustainability, community character, and the creation of vital public places. Typical considerations of context sensitive design include building materials and texture, building scale relative to nearby structures and relationship to streets and adjacent uses.”

Proposed Overlay Standards & Guidelines -- TPSS

- ▶ **20.25M.040.B:** Traction Power Substations (TPSS) shall be screened with 10 feet of Type III landscaping pursuant to the requirements of LUC 20.20.520.G.3.

- ▶ **20.25M.050.B:** Additional Design Guidelines for Other RLRT Facilities. In all land use districts, the following design guidelines shall apply to traction power substations, signal bungalows, ventilation structures, signs, tunnel portals, retaining walls, and acoustical barriers.
 1. The facilities identified in this section, when located above grade, shall use context sensitive design to integrate the facility into the community. This includes, but is not limited to, the following:
 - a. Incorporating superior urban design, complementary materials, and public art;
 - b. Providing substantial landscaping along the alignment, where appropriate, including retained significant trees and transplanted trees; and
 - c. Incorporating durable materials in design and construction to ensure that the facility retains its appearance, functionality, and community value.
 2. Traction power substations shall be sited, screened, and/or incorporate architectural materials and treatments to minimize visual and operational impacts to surrounding uses. Based on CP Policy TR-75.22

Comparison of Landscape Types

Landscape Type	Width	Purpose/Characteristics	Typical Application
Type I	15 feet	<p><u>Very dense sight barrier</u> to significantly separate uses and land use districts.</p> <ul style="list-style-type: none"> • Two rows of evergreen trees (6 ft high / 20 ft on center) • Shrubs (3.5 ft high) to cover ground within 3 years • Backed with sight obscuring fence • Can house in building as an alternative 	<ul style="list-style-type: none"> • Electrical Substations • Sewage pumping stations • Water distribution Facility • Equipment and vehicle storage yards in transition areas or visible from ROW
Type II	10 feet	<p><u>Visual separation</u> between uses and land use districts.</p> <ul style="list-style-type: none"> • Evergreen and deciduous trees <ul style="list-style-type: none"> • deciduous limited to 30% • 6 ft high / 20 feet on center • Shrubs (3.5 ft high) to cover ground within 3 years 	<ul style="list-style-type: none"> • Churches • Public Parking Lots • Solid Waste Disposal Facility • Government Service Building
Type III/IV	10 feet	<p><u>Soften appearance</u> of streets, parking areas, and building elevations.</p> <ul style="list-style-type: none"> • Evergreen and deciduous trees <ul style="list-style-type: none"> • deciduous limited to 50% • 6 ft high / 30 feet on center • Shrubs (3.5 ft high) to cover ground within 3 years 	<p>Parking areas and buildings</p> <ul style="list-style-type: none"> • R-10 through R-30 • NB, PO, O OLB • LI, GC, CB
Type V	n/a	<p><u>Visual relief and shade</u> in parking areas.</p>	<ul style="list-style-type: none"> • Parking lots
Transition Area	20 feet	<p><u>Very dense buffer</u> to significantly separate uses of lesser intensity.</p> <ul style="list-style-type: none"> • Evergreen and deciduous buffer (10 ft high) <ul style="list-style-type: none"> • Deciduous limited to 40% • 5 trees/1,000 sf • Shrubs (3.5 ft high / 3 ft on center) • Retention of Significant Trees required w/i 15 ft of prop line 	<p>Areas receiving transition from higher intensity uses</p> <ul style="list-style-type: none"> • Single Family • Multifamily

Landscape Screen / Buffer Example



North

Street Frontage Landscaping Example



Street Frontage Landscaping Example



Bellevue Way

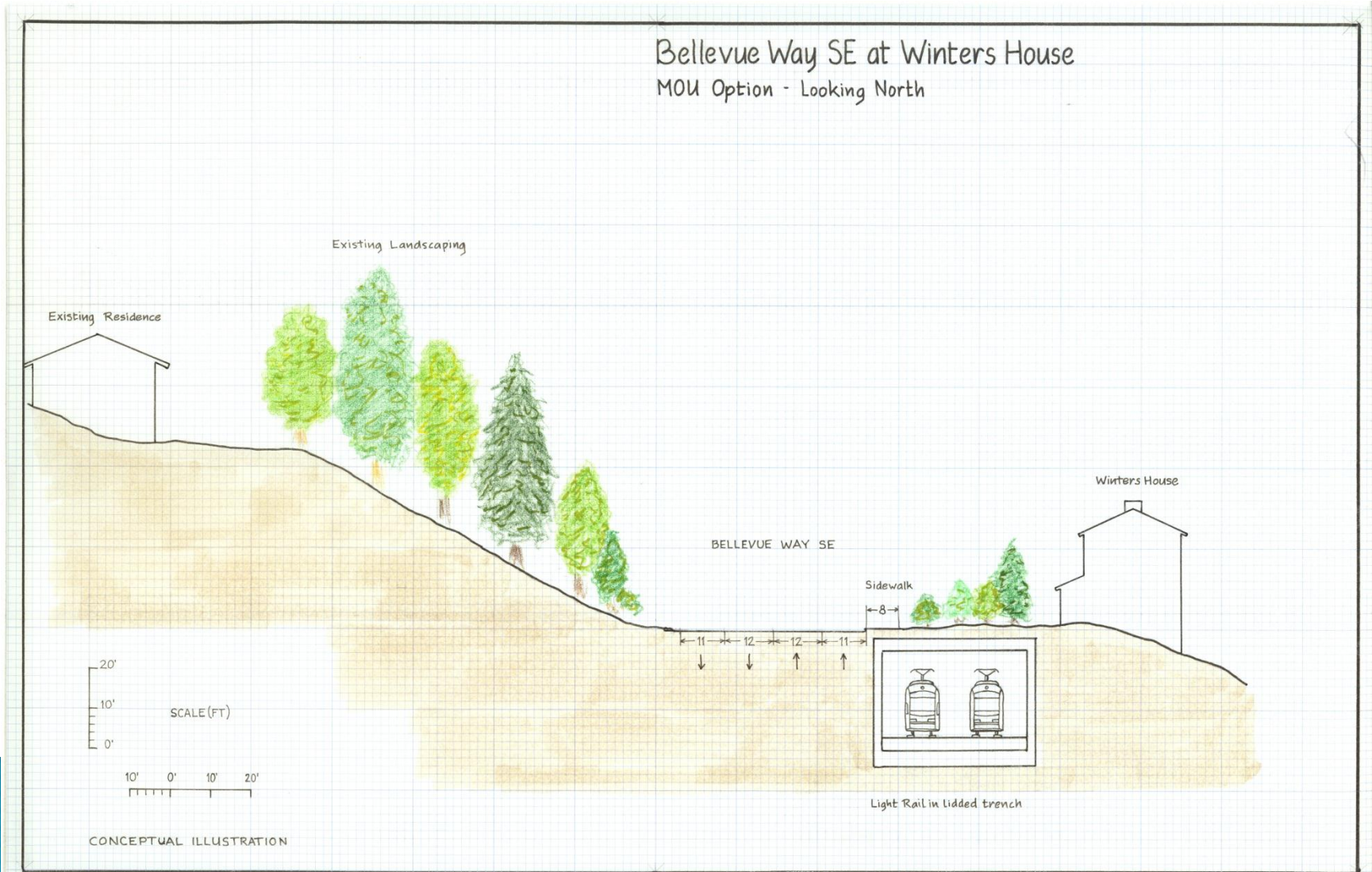


North



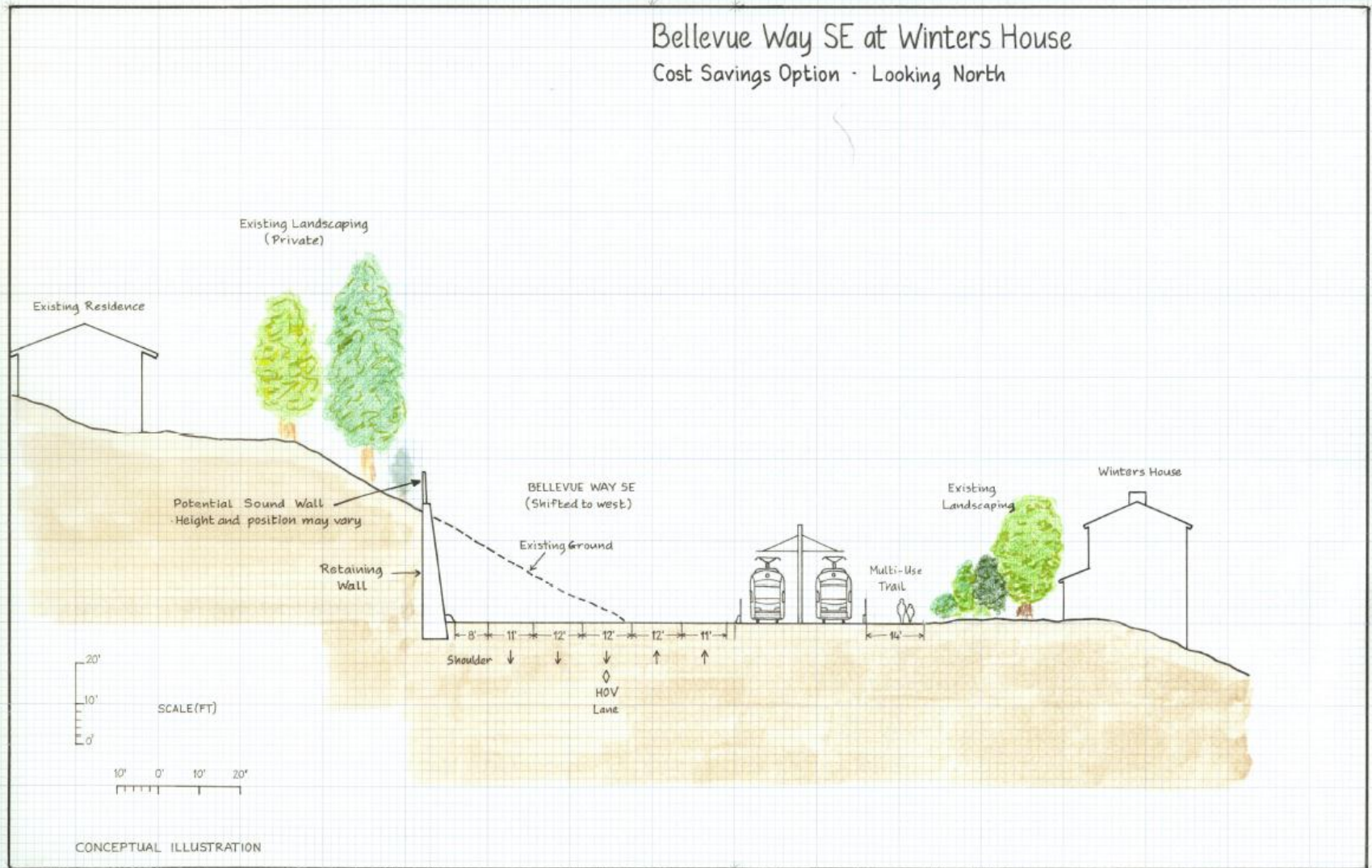
Track - Trench at Winters House

Bellevue Way SE at Winters House
MOU Option - Looking North



Track - At-grade at Winters House

Bellevue Way SE at Winters House
Cost Savings Option - Looking North

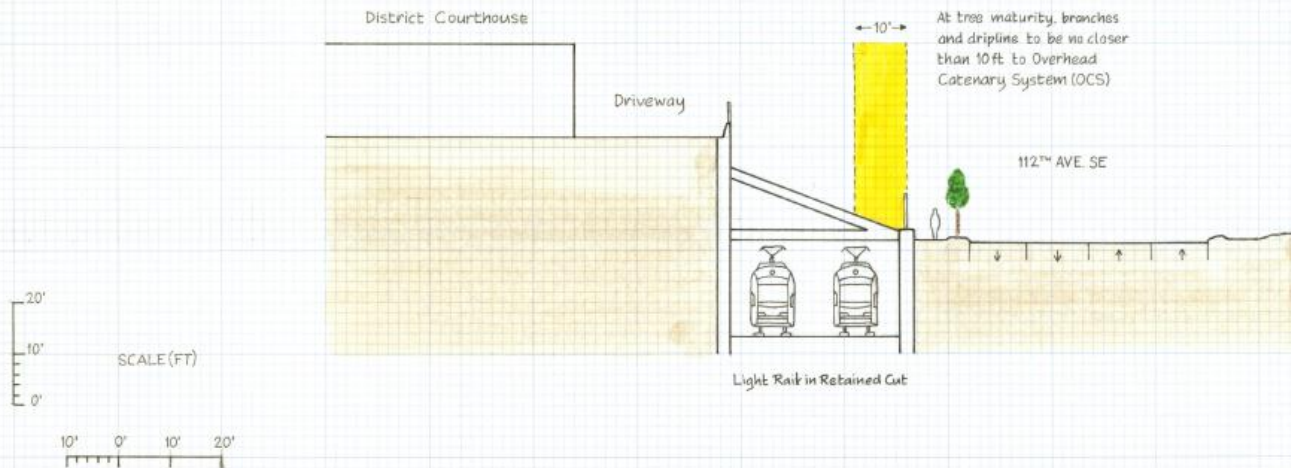


112th Avenue SE – South Section



Track - Trench on 112th Ave SE

112th Ave. SE at SE 6th St.
MOU Option - Looking North

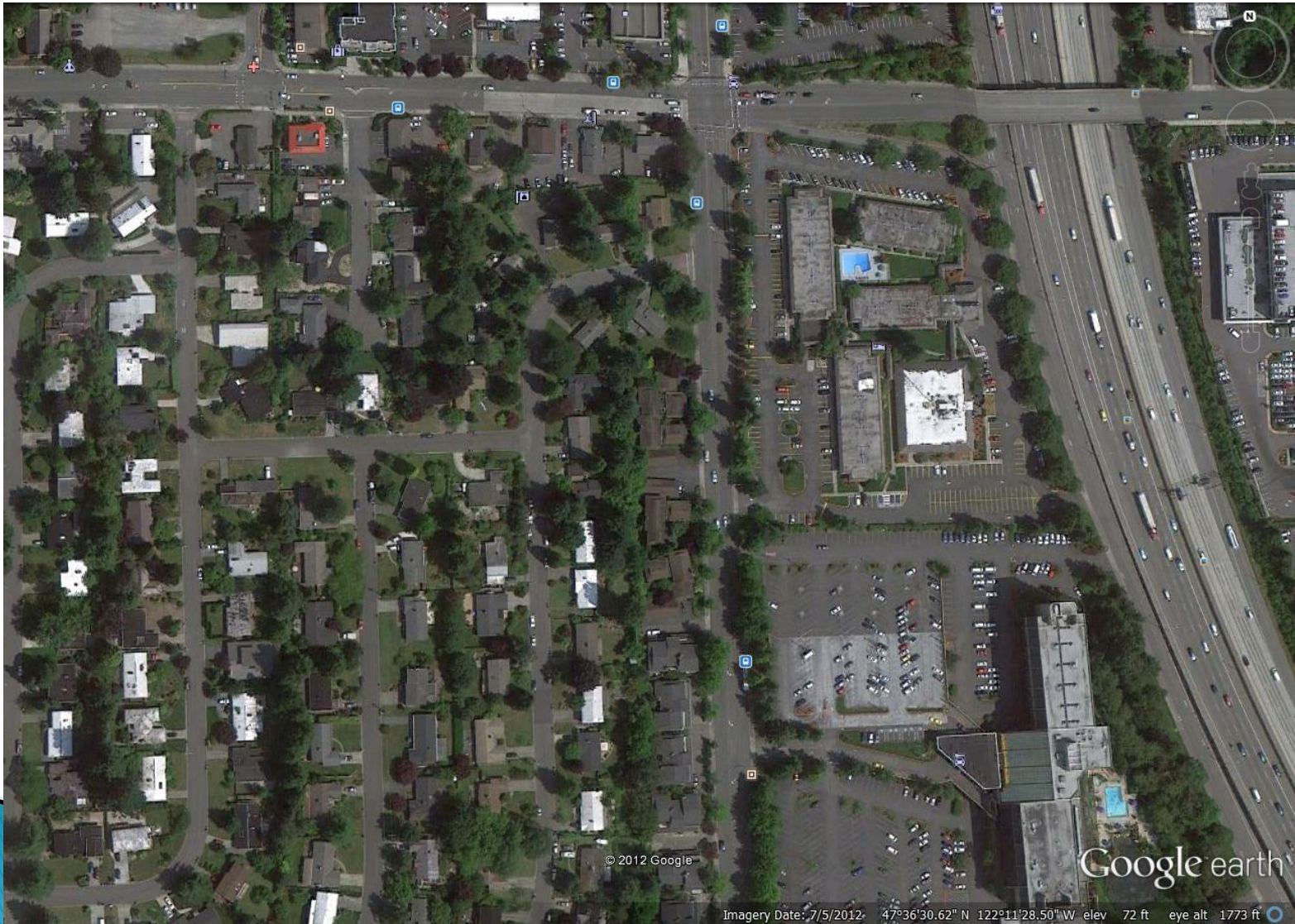


CONCEPTUAL ILLUSTRATION

112th Avenue SE – North Section

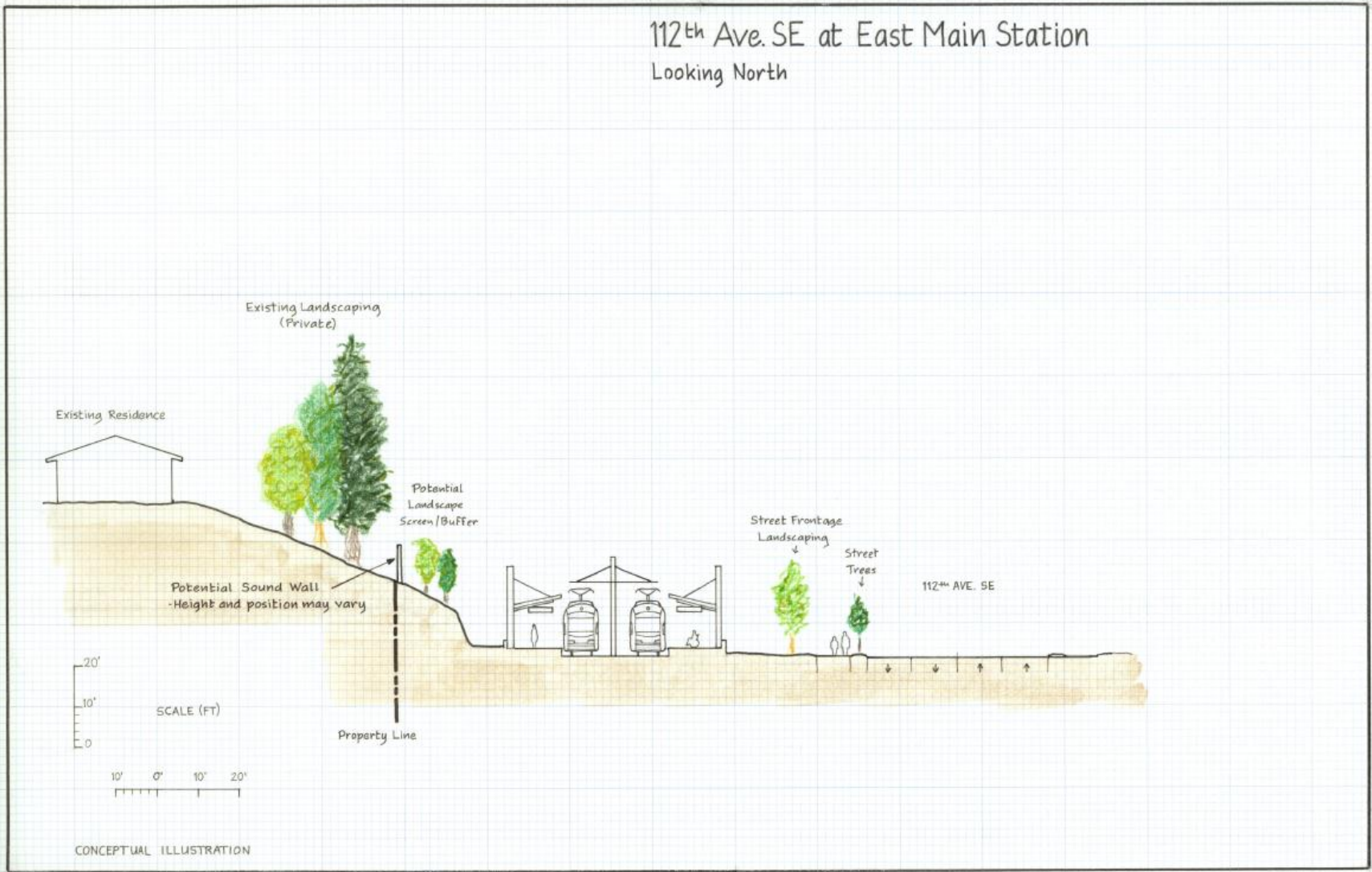


North



East Main Station, at-grade

112th Ave. SE at East Main Station
Looking North



TPSS

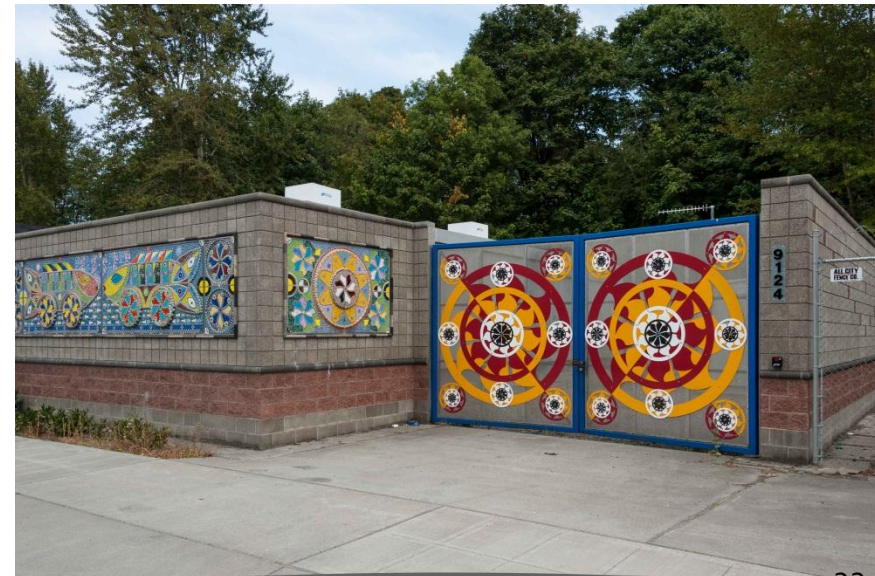
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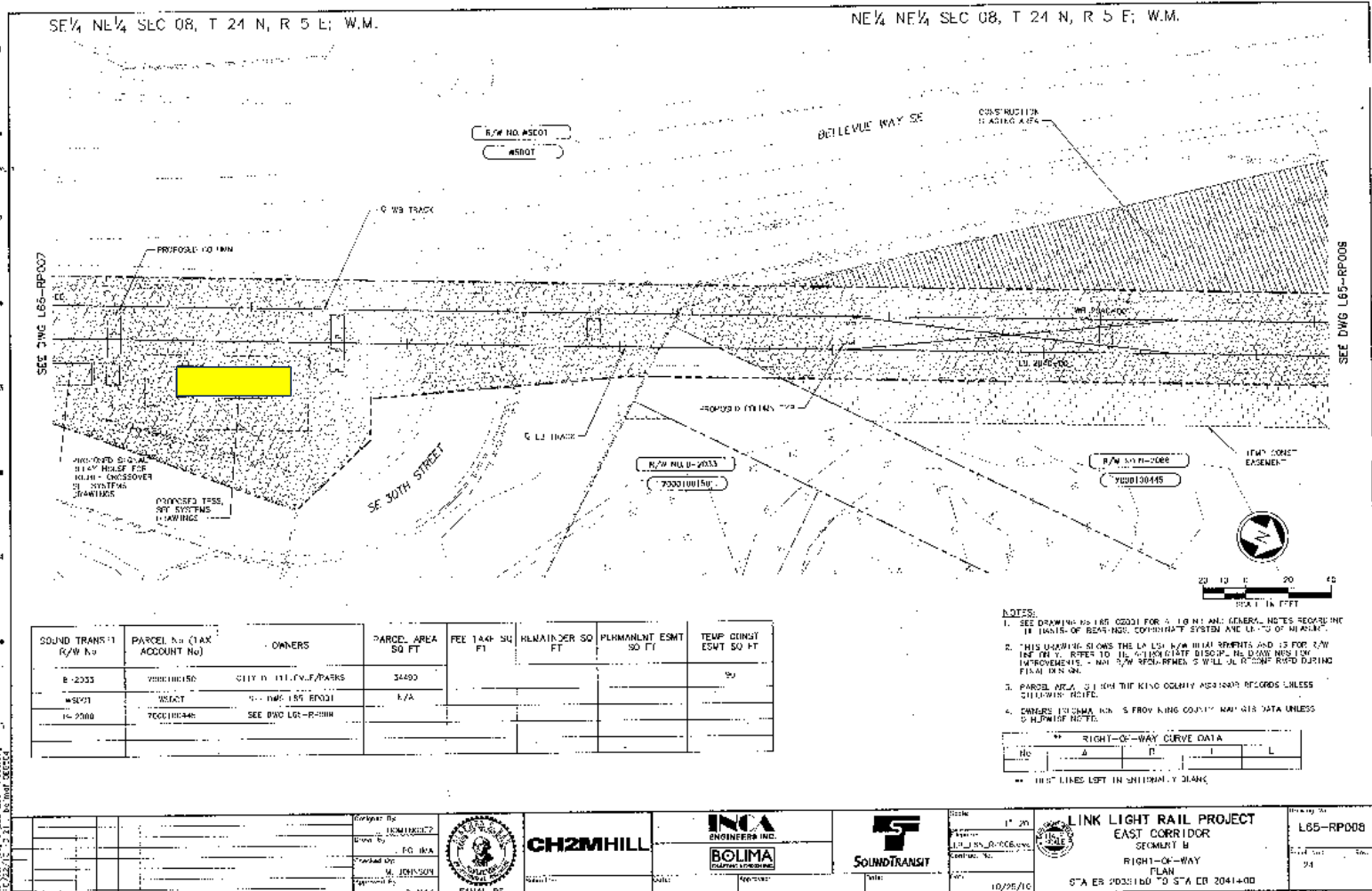
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TPSS – Contextual Art



TPSS - Swayolocken



SOUND TRANSIT R/W No	PARCEL No (TAX ACCOUNT No)	OWNERS	PARCEL AREA SQ FT	FEE TAX-ADJ SQ FT	HLMAINDR SQ FT	PLMMAINLT ESMT SQ FT	TEMP CONST ESMT SQ FT
B-2333	7000100150	CITY OF SEASIDE/PARKS	34490				50
W-5021	7000100151	SEE DWG L65-RP001	N/A				
14-2900	7000100146	SEE DWG L65-RP001					

- NOTES:**
- SEE DRAWING NO L65-RP001 FOR A LARGER AND GENERAL NOTES REGARDING THE BASIS OF DESIGN, CONSTRUCTION SYSTEM AND LIMITS OF MARKET.
 - THIS DRAWING SHOWS THE L&L R/W BOUNDARIES AND IS FOR R/W INFORMATION. REFER TO THE CIVIL DATE DISCIPLINE DRAWINGS FOR IMPROVEMENTS. NOT ALL IMPROVEMENTS WILL BE CONSTRUCTED DURING FINAL DESIGN.
 - PARCEL AREA IS FROM THE KING COUNTY ASSESSOR RECORDS UNLESS OTHERWISE NOTED.
 - OWNER TO OMA AND S FROM KING COUNTY MAY GET DATA UNLESS OTHERWISE NOTED.
- | RIGHT-OF-WAY CURVE DATA | | | |
|-------------------------|---|---|---|
| No | A | P | L |
| | | | |
- ** FIRST LINES LEFT IN UNIFORMITY BLANK

Designer: CH2MHILL Drawn By: PO. BIA Checked By: M. JOHNSON Date: 10/25/16					Scale: 1" = 20' Date: 10/25/16	LINK LIGHT RAIL PROJECT EAST CORRIDOR SEGMENT II RIGHT-OF-WAY PLAN STA ER 20321160 TO STA ER 2041400	L65-RP008 Sheet No: 74
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TPSS – Sveyolocken (Existing)



North



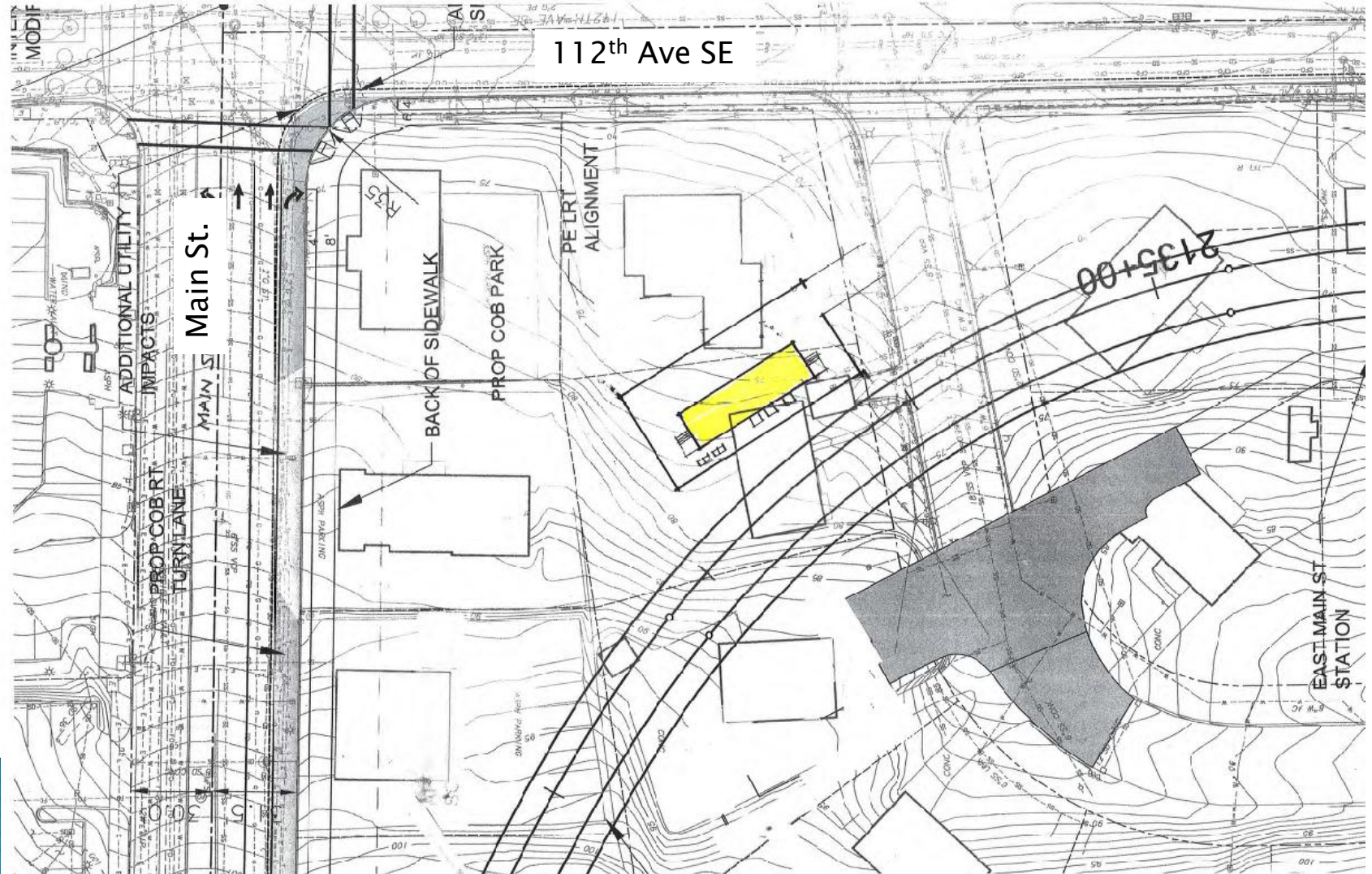
TPSS – Sveyolocken (Existing)



Current Sweyolocken Pump Station



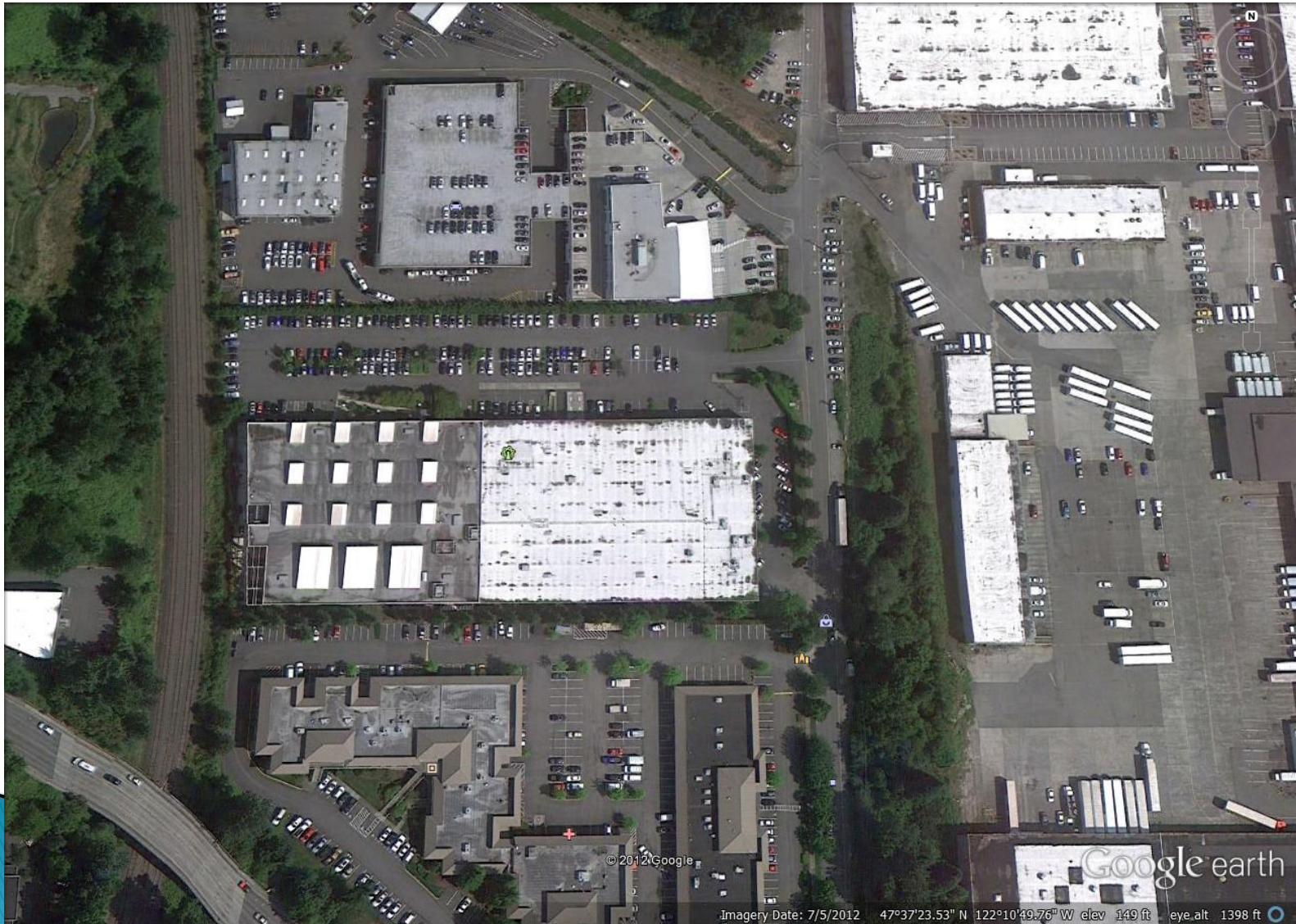
TPSS - East Main Station



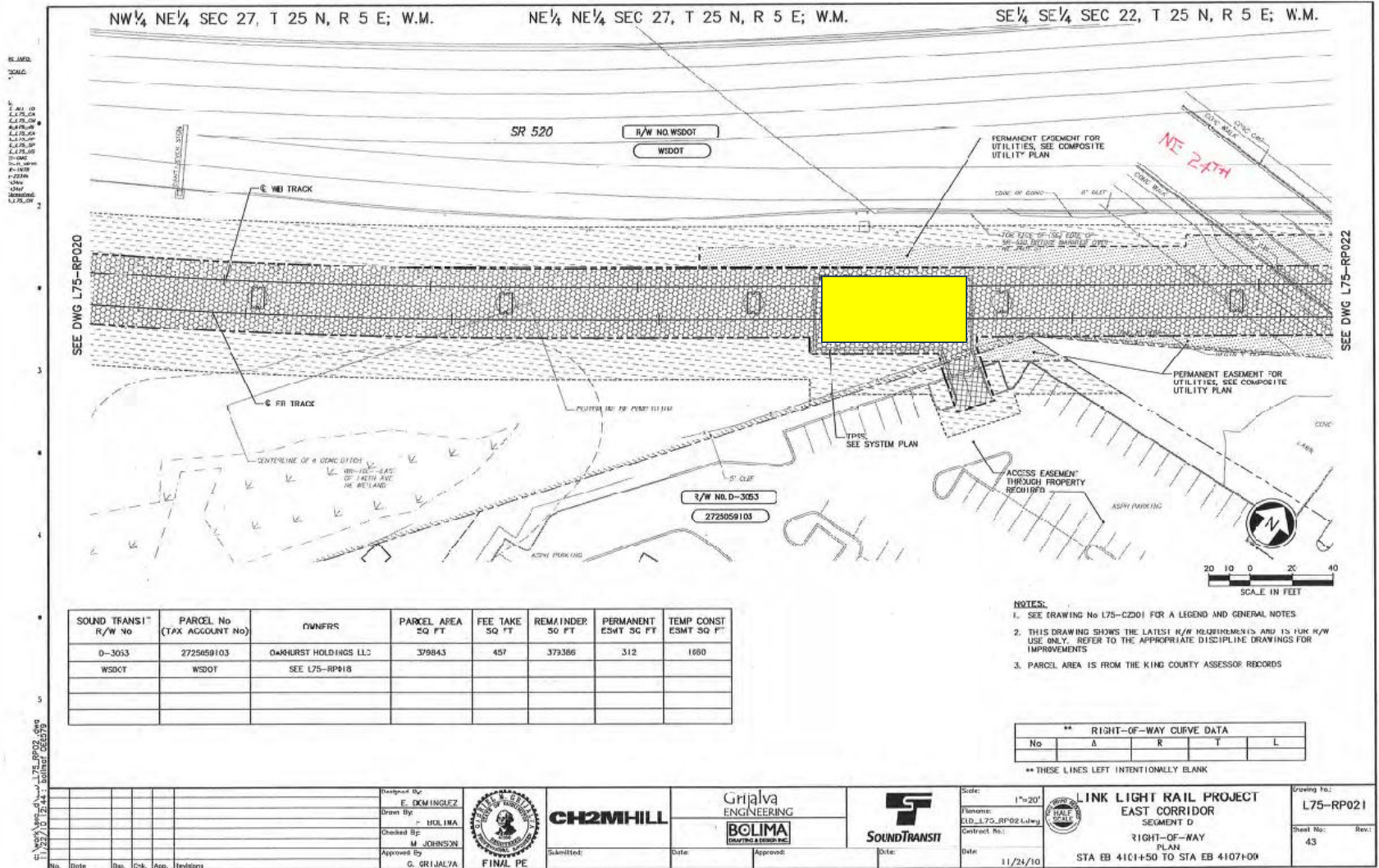
TPSS – East Main Station (Existing)



TPSS – 120th Ave NE (Existing)



TPSS - NE 24th St



TPSS – NE 24th St (Existing)



Next Steps

- ▶ December 3 –Alignment and Traction Power Substation (TPSS) design & mitigation focus
 - ▶ December 10 – Park and Ride and Elevated Alignment design & mitigation focus
 - ▶ January study sessions – complete design & mitigation discussion; confirm procedural approach
 - ▶ End of January – SEPA Threshold Determination
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For more information, see East Link Project website at:
<http://www.bellevuewa.gov/light-rail-overlay.htm>