



Portland-Milwaukie Light Rail Project

Downtown Milwaukie Alignments Review

June 7, 2007





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TABLE OF CONTENTS

Introduction	1
Downtown Milwaukie Alternatives	
Locally Preferred Alternative	5
McLoughlin Boulevard	
<i>West McLoughlin Alignment</i>	13
<i>Center McLoughlin Alignment</i>	19
McLoughlin Boulevard/Main Street Couplet	25
North of Highway 224 Alternatives	
Locally Preferred Alternative	33
Milwaukie Working Group	35
Tillamook Branch Reverse Crossover	37
McLoughlin Boulevard/Main Street	39



INTRODUCTION

This Report

This report illustrates potential light rail alignments for downtown Milwaukie along SE McLoughlin Boulevard and/or SE Main Street. The report is in response to Milwaukie Mayor Jim Bernard's request to the Portland-Milwaukie Light Rail Project Steering Committee for an opportunity to fully examine a light rail alignment in downtown Milwaukie on SE McLoughlin Boulevard and/or SE Main Street. The report describes where and how light rail could operate on SE McLoughlin Boulevard and SE Main Street based on present conditions in downtown Milwaukie.

Illustrations of SE McLoughlin Boulevard light rail alignment options are provided in the following two configurations:

- A light rail alignment adjacent to or within the public right-of-way of SE McLoughlin Boulevard
- A light rail couplet on SE Main Street and SE McLoughlin Boulevard

Also included in this report are illustrations of the adopted Locally Preferred Alternative, which uses the Tillamook Branch rail right-of-way through downtown Milwaukie.

Mayor Bernard's request was made in response to concerns expressed over the Tillamook Branch rail alignment in downtown Milwaukie. These concerns were brought forward in April and May of 2007, by members of the Portland Waldorf School and St. John the Baptist Catholic School as well as the Historic Milwaukie and Lake Road neighborhood associations. Concerns cited include safety, quality of school environment, traffic, preservation of neighborhoods and property impacts.

This report represents an initial review of potential options. Additional study would be necessary to develop any options into detailed alternatives and may change the initial assessment.

Transit Studies in the South Corridor

Since the 1980s numerous studies have concluded that there is a need for high capacity transit service in the Portland to Milwaukie corridor. During this time several alignments for light rail have been considered in downtown Milwaukie.

Between 1999 and 2001, Metro completed an alternatives analysis on a wide range of transit options for the South Corridor. The options included busway, bus rapid transit and light rail. This culminated in a Supplemental Draft Environmental Impact Statement (SDEIS) and the adoption of the Locally Preferred Alternative (LPA) in 2003. A two-phased strategy was recommended. Phase I of the LPA included light rail on the transit mall in downtown Portland as well as along the I-205 corridor between Gateway and Clackamas Town Center. Phase II was a light rail alignment between Portland and Milwaukie. This LPA, adopted by Milwaukie City Council in April 2003, is located along the Tillamook Branch rail right-of-way through downtown Milwaukie.

History of Downtown Milwaukie Rail Alignments

The history of downtown Milwaukie light rail alignments that have been studied is illustrated on page 2. Between 1990 and 1996, Metro studied multiple variations of light rail alignments in downtown Milwaukie for the South/North Transit Corridor Project. The study included a portion of SE McLoughlin Boulevard. Metro conducted technical evaluations in conjunction with community meetings to determine the Locally Preferred Alternative (LPA).

In 1998, the Milwaukie City Council approved the LPA, which included a loop pattern alignment around the former Safeway site. This alignment utilized the Tillamook Branch rail right-of-way, SE Main Street and Highway 224.

During the South Corridor Project in 2001, chairs of Milwaukie's neighborhood associations requested an alignment that located a transit center at the former Southgate Theater site. The alignment crossed over to the Tillamook Branch right-of-way as it moved south into downtown. This alignment included a station at SE Harrison Street behind the former Milwaukie Junior High School (now the Portland Waldorf School).

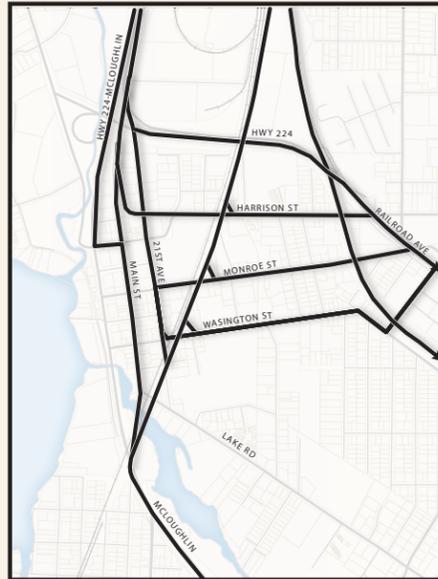
Milwaukie neighborhood associations and the Milwaukie City Council co-hosted a Town Hall meeting in the summer of 2001 to discuss this alignment as well as to hear other options from the community. In 2002, Metro completed a Supplemental Draft Environmental Impact Statement (SDEIS) that included the alignment. Milwaukie City Council approved this alignment as the new LPA in 2003.

In response to business concerns about potential impacts to truck access in the North Industrial area, Milwaukie City Council established a working group that included neighborhood representatives. The working group study recommended an alignment along the Tillamook Branch rail right-of-way north of downtown Milwaukie and relocating the park and ride from the Southgate site to a new southern terminus location south of Kellogg Lake. The Milwaukie City Council adopted the alignment but learned later that the property at Kellogg Lake was not available.

INTRODUCTION

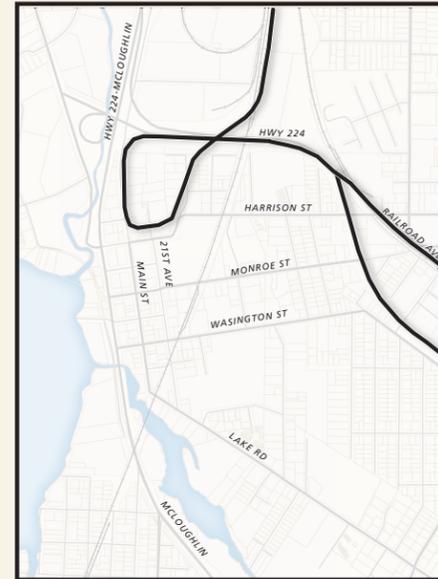
History of light rail alignment options in downtown Milwaukie

1990-1996 Narrowing of Options



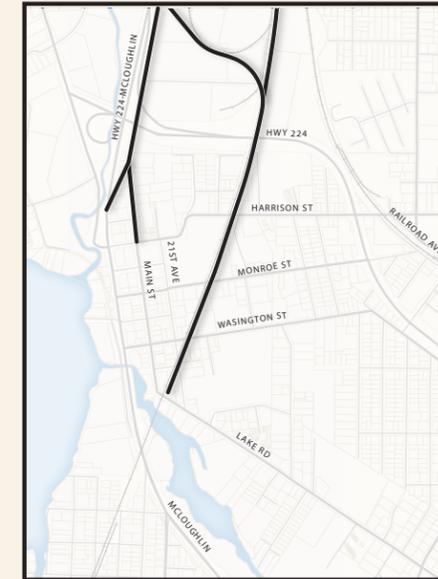
Numerous alignments connecting to Oregon City and Clackamas Town Center were studied.

1998 SDEIS* and LPA†
(LPA adopted by Milwaukie City Council)



Alignment option focused on minimizing impacts and served a potential transit center at the Safeway site, with a terminus at Clackamas Town Center.

2001 Pre-SDEIS*

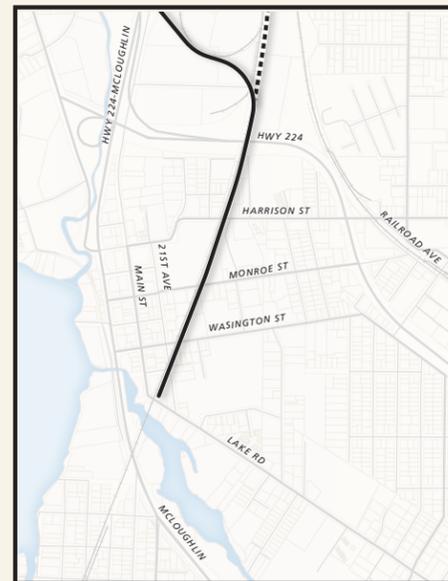


The Union Pacific (UP/SF)/ Highway 224/Railroad Avenue alignment became redundant following the light rail extension via I-205 to Clackamas Town Center (South Corridor Phase I).

Alignments on Main Street and adjacent to SE McLoughlin were studied.

Neighborhood 14-Point letter requested the Tillamook Branch alignment.

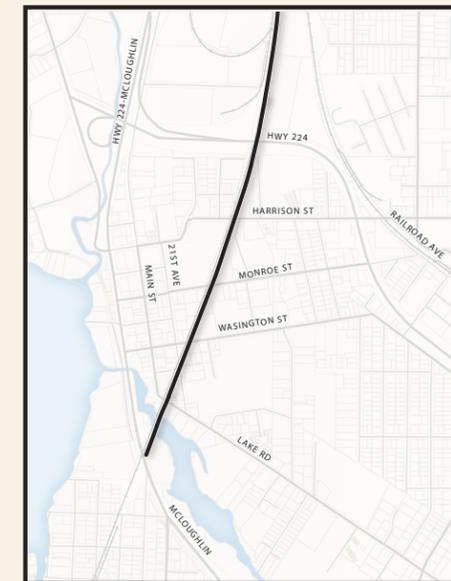
2002 SDEIS* and 2003 LPA†
(LPA adopted by Milwaukie City Council)



Both a Tillamook Branch alignment and Southgate Crossover were studied in great detail.

After extensive public comment, the Southgate Crossover with Tillamook Branch alignment was selected.

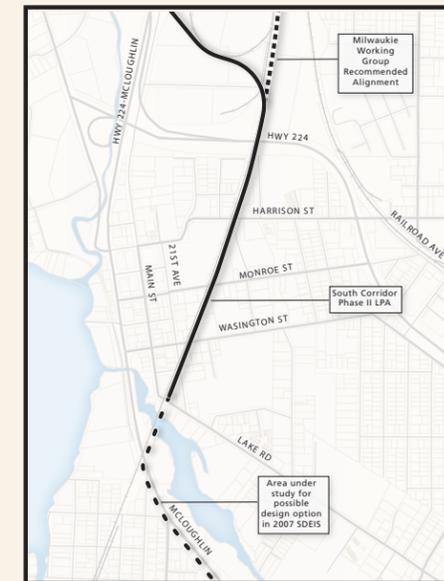
2004 Milwaukie Working Group Recommendation
(adopted by Milwaukie City Council)



Community members reviewed many alignments and selected a Tillamook Branch alignment with a Kellogg Lake terminus.

The City of Milwaukie then found the Kellogg Lake site was unavailable.

2007 Refinement Study/SDEIS*



Both alignments adopted by the City of Milwaukie (the 2003 LPA and Working Group recommendation), along with a possible extension to Park Avenue, are proposed for further study.

* SDEIS - Supplemental Draft Environmental Impact Statement
† LPA - Locally Preferred Alternative

INTRODUCTION

Recent Activities in Milwaukie

Beginning in the summer of 2007, Metro will conduct a new SDEIS to update the 2003 adopted LPA of the South Corridor Project.

During the winter and spring of 2007, Metro conducted a refinement study in preparation for the SDEIS. The primary purposes of the refinement study were to identify and review changes since earlier studies and determine whether design options, in addition to the LPA, should be included in the SDEIS. The refinement work focused on options for the Willamette River crossing, the southern terminus and station and park and ride locations. The refinement study incorporated community input as well as analysis.

In Portland, the Willamette River crossing area has not been examined since 1998, and has undergone significant growth since then. In Milwaukie, since the site south of Kellogg Lake is not available, a new southern terminus and park and ride location would need to be identified. Design options were developed that would extend the alignment from SE Lake Road to SE Park Avenue along SE McLoughlin Boulevard and construct a park and ride garage at SE Park Avenue. The refinement study confirmed a significant demand for park and ride and all alignment options include park and ride facilities to address parking demand by transit riders. An extension to SE Park Avenue could also potentially include a station and park and ride facility at SE Sparrow Street and a station at SE Bluebird Street.

In order to understand and address community preferences and/or concerns about the alignment, station and park and ride location options, an open house and three meetings focused on specific geographic segments in Milwaukie were held during the refinement study phase.

Cost effectiveness was also considered in the evaluation of the options. Cost effectiveness is a key factor in obtaining Federal Transit Administration (FTA) funding.

Development of SE McLoughlin Boulevard and SE Main Street Design Options for this Phase

As requested by the City of Milwaukie, TriMet has developed a series of design concepts along SE McLoughlin Boulevard and SE Main Street. Consultation among TriMet, Metro and City of Milwaukie staff resulted in the selection of three concepts for presentation.

There are important considerations in examining alignments along SE McLoughlin Boulevard. Safety and traffic impacts on SE McLoughlin Boulevard will need to be evaluated and accepted by the Oregon Department of Transportation (ODOT), which has jurisdiction over state highways. Cost is an important consideration for transportation projects, and will be a deciding factor in obtaining federal funding for this project. Costs have not yet been developed, but activities that are known to increase costs need to be noted, as high cost could make the project ineligible for federal funding. Also, any impact to parkland is subject to significant federal requirements that could affect project feasibility.

Review of McLoughlin Options

Three options for double track on SE McLoughlin Boulevard were considered for this report. All options begin north of Highway 224, where the alignment would run along SE Main Street. An alignment along SE McLoughlin Boulevard in this segment would increase traffic impacts on a high-volume state highway and not reduce property impacts. The options all present similar property displacements north of Harrison Street and increase the size of the bridge crossing over Johnson Creek. All options require additional right-of-way. Much of the right-of-way would be acquired west of SE McLoughlin Boulevard in order to avoid business displacements on the east side of SE McLoughlin Boulevard. Riverfront Park would be impacted, and the extent of impacts would require a significant FTA review process.

Light rail with double track on the east side of SE McLoughlin Boulevard was considered to avoid an at-grade crossing of SE McLoughlin Boulevard. However, this option would close access to several properties on SE McLoughlin Boulevard and it would pose safety issues. Vehicles in downtown Milwaukie can currently make right turns onto SE McLoughlin Boulevard northbound. Vehicles turning across the light rail tracks could increase the potential for accidents. For these reasons, the east side running option is not illustrated.

An option running in the center of SE McLoughlin Boulevard is illustrated. This alignment would run adjacent to a reconstructed SE Main Street and then cross northbound SE McLoughlin Boulevard lanes at a new road north of SE Scott Street. This option would require complete reconstruction of SE McLoughlin Boulevard. This reconstruction as developed would include the removal of planting strips and the narrowing of lane widths, in order to minimize the impact on Riverfront Park. This option affects signals and turn pockets, which could reduce the speed and capacity of SE McLoughlin Boulevard. Project staff are working with ODOT to address the feasibility of this option.

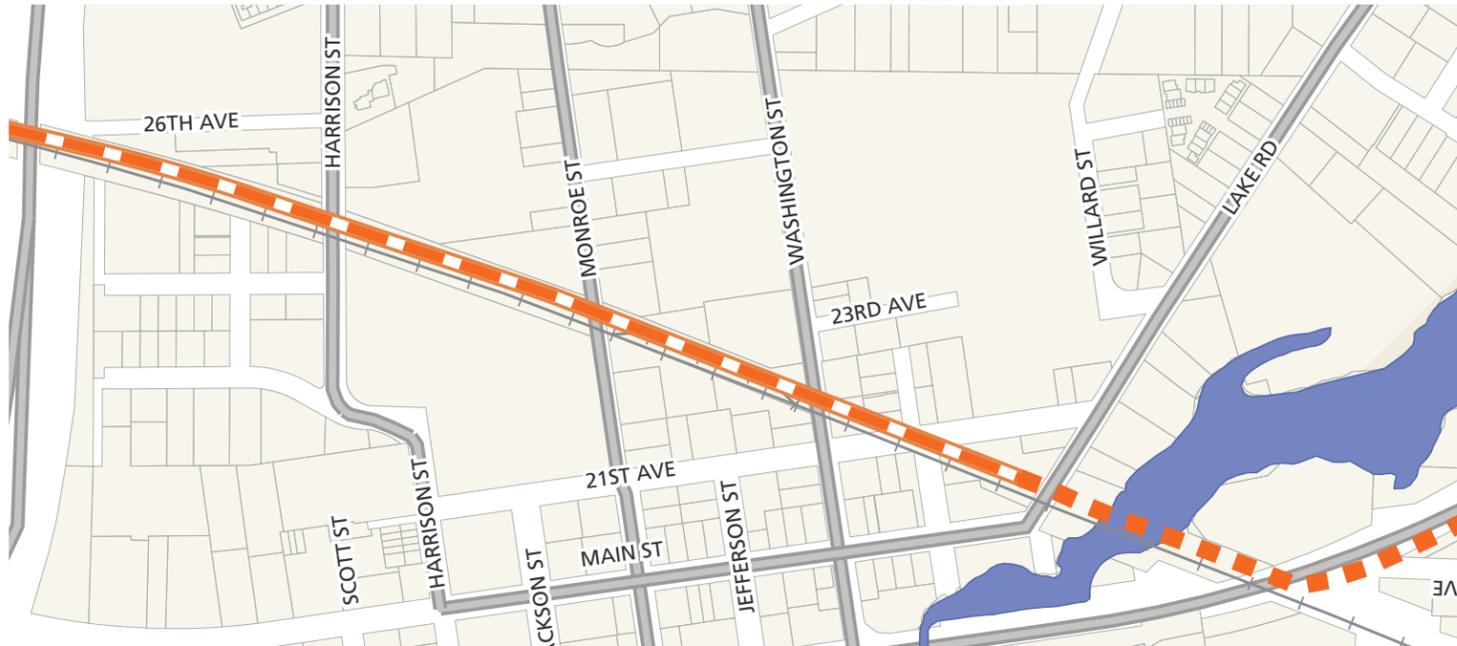
Trains on the west side of SE McLoughlin Boulevard are also illustrated. This alignment would cross over all lanes of SE McLoughlin Boulevard at a new intersection at SE Harrison Street. Although this scenario presents the largest impact to the Riverfront Park, it could potentially require less reconstruction of the roadway and have the fewest traffic and safety impacts. Furthermore, it would provide a better station environment than the center running option.

SE McLoughlin Boulevard / SE Main Street Couplet

Two couplet alignments were developed for this report. Both alignments would run southbound adjacent to a reconstructed SE Main Street and cross over SE McLoughlin Boulevard at SE Harrison Street. The alignments would run on the west side of SE McLoughlin Boulevard, cross over all lanes of traffic to turn east on SE Washington Street, then run northbound on SE Main Street. One option would run on the east side of SE Main Street; the other in the center of SE Main Street.

Both SE Main Street options would significantly reduce on-street parking and both would eliminate a SE Washington Street entrance to a proposed park and ride facility. The east side running option would require the removal of numerous property accesses on SE Main Street. Additionally, this option presents safety concerns with vehicles making right turns across the tracks. Due to reduced traffic, safety and property access impacts in comparison to the east side running option, the center running option was chosen for presentation.

LOCALLY PREFERRED ALTERNATIVE



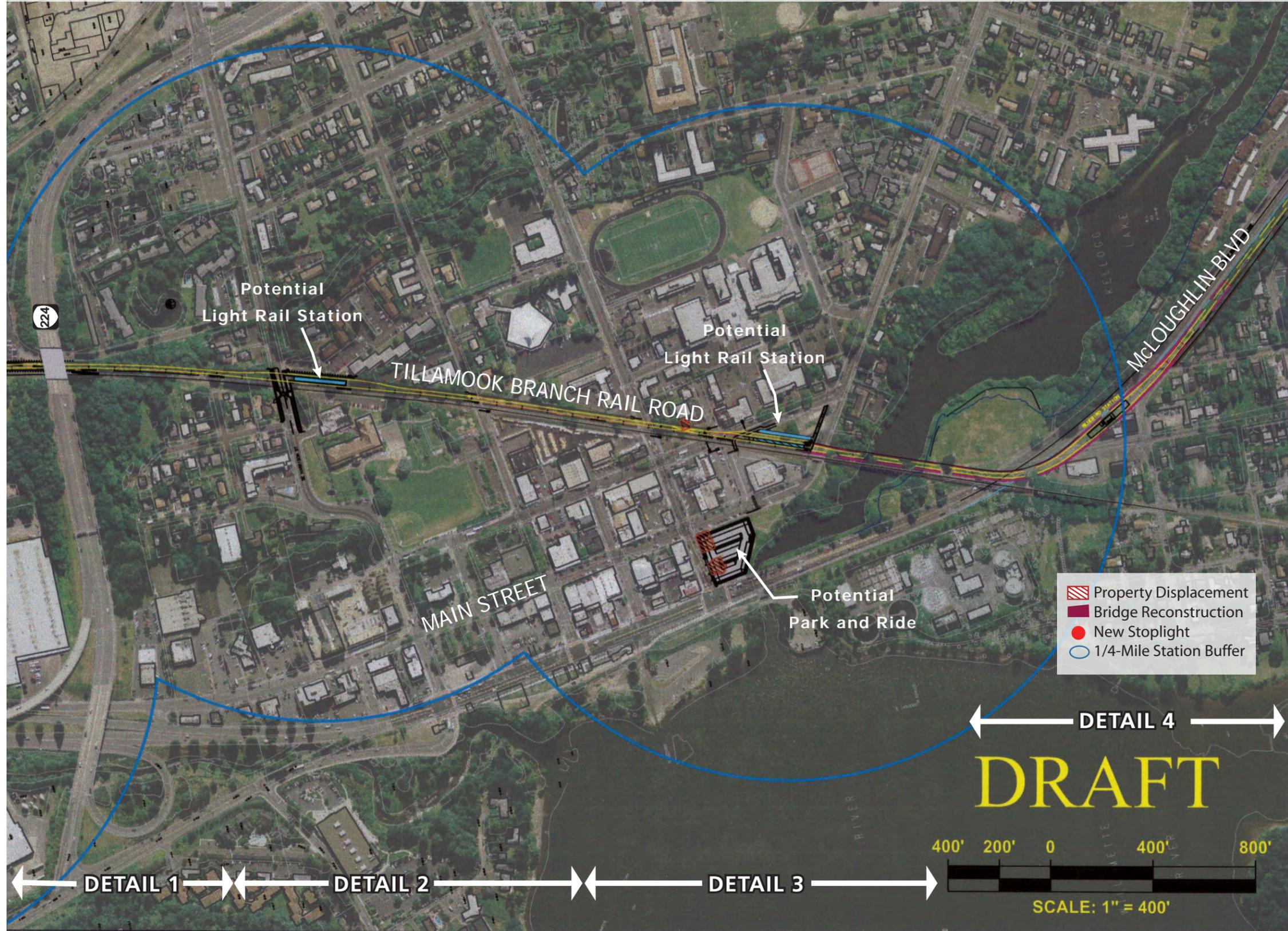
This is the 2003 adopted Locally Preferred Alternative.

South of Highway 224, this option is located east of the existing freight tracks within the Tillamook Branch rail right-of-way. The alignment could terminate at a 275-space park and ride facility at SE Lake Road located on the former Cash Spot site.

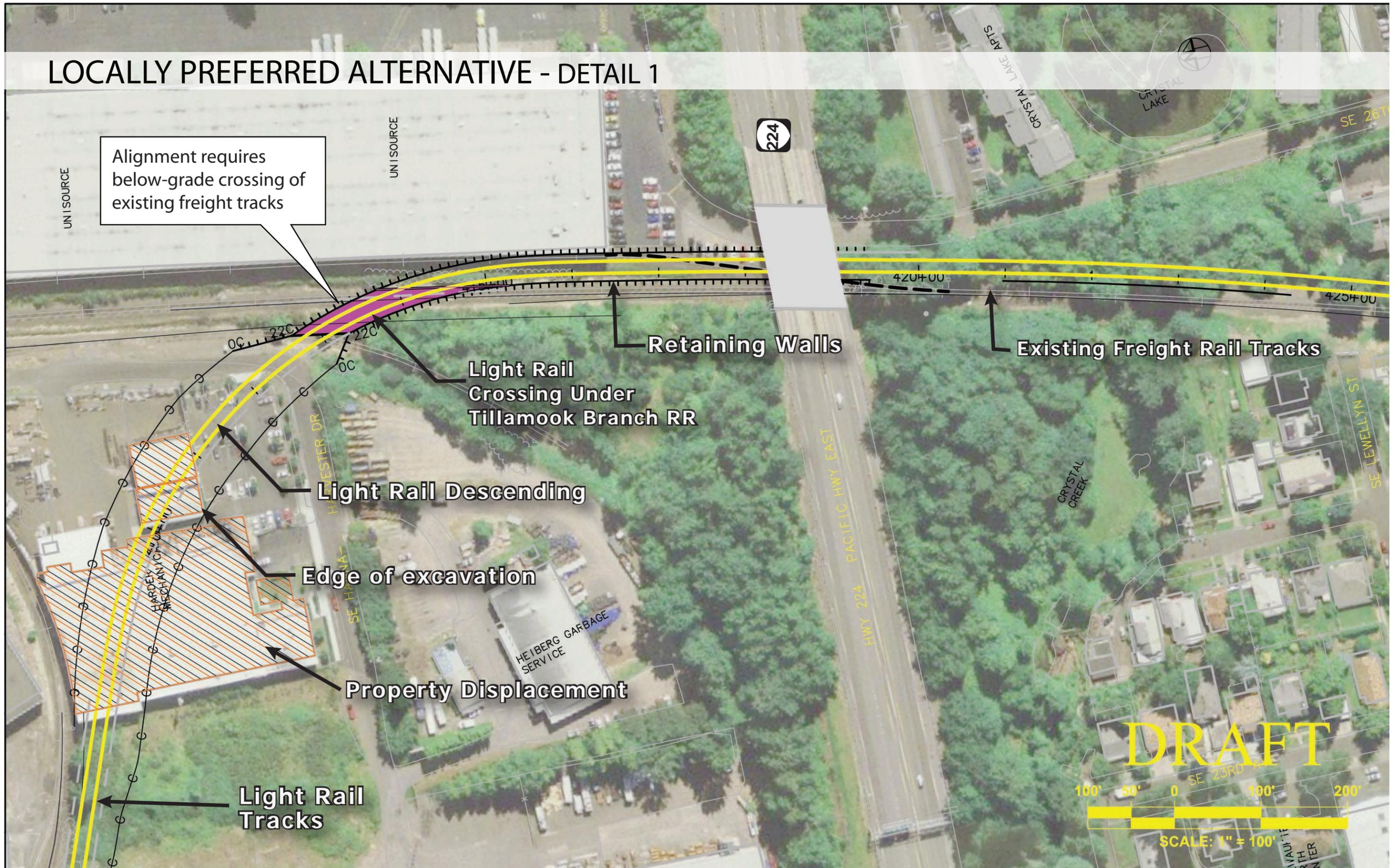
If the alternative were extended south of downtown, it would require a new bridge over Kellogg Creek, cross SE McLoughlin Boulevard, and impact the adjacent park and the Trolley Trail west of SE McLoughlin Boulevard. Access from SE McLoughlin Boulevard to SE Sparrow Street would be affected and potential park and ride facilities at SE Sparrow Avenue and Park Avenue would result in property impacts.

Considerations	Initial Assessment
Properties displaced	3
Business access impacts	None
McLoughlin traffic impacts	Least of options illustrated
Downtown parking impacts	<ul style="list-style-type: none"> 5 to 6 spaces removed south of SE Washington Street at SE Lake Road station Off-street parking removed between SE Monroe and SE Washington streets if a station is placed at SE Monroe Street
Additional cost factors	<ul style="list-style-type: none"> Retaining walls and excavation along the east side of light rail station
Affected parkland	None
Affected wetland	Possible minor wetland impact north of SE Harrison Street
Proximity to sensitive sites	Travels in freight rail right of way adjacent to residences and institutions including the Waldorf and St. John the Baptist schools
Station access	Easy walk access from neighborhoods and businesses
Park and ride access	Access to SE Lake Road park and ride is from SE McLoughlin Boulevard via SE Washington Street
Downtown traffic circulation	<ul style="list-style-type: none"> Gated crossings at SE Harrison, SE Monroe, SE Washington and SE Main streets SE Lake Road park and ride increases downtown traffic
Southern extension requirements	<ul style="list-style-type: none"> New bridge over Kellogg Creek Must address crossing SE McLoughlin Boulevard Adjustment of planned Trolley Trail to account for light rail alignment Crossing over Kronberg Park and next to the existing freight rail trestle if extended south Structure over Kellogg Lake, if extended south of downtown Milwaukie

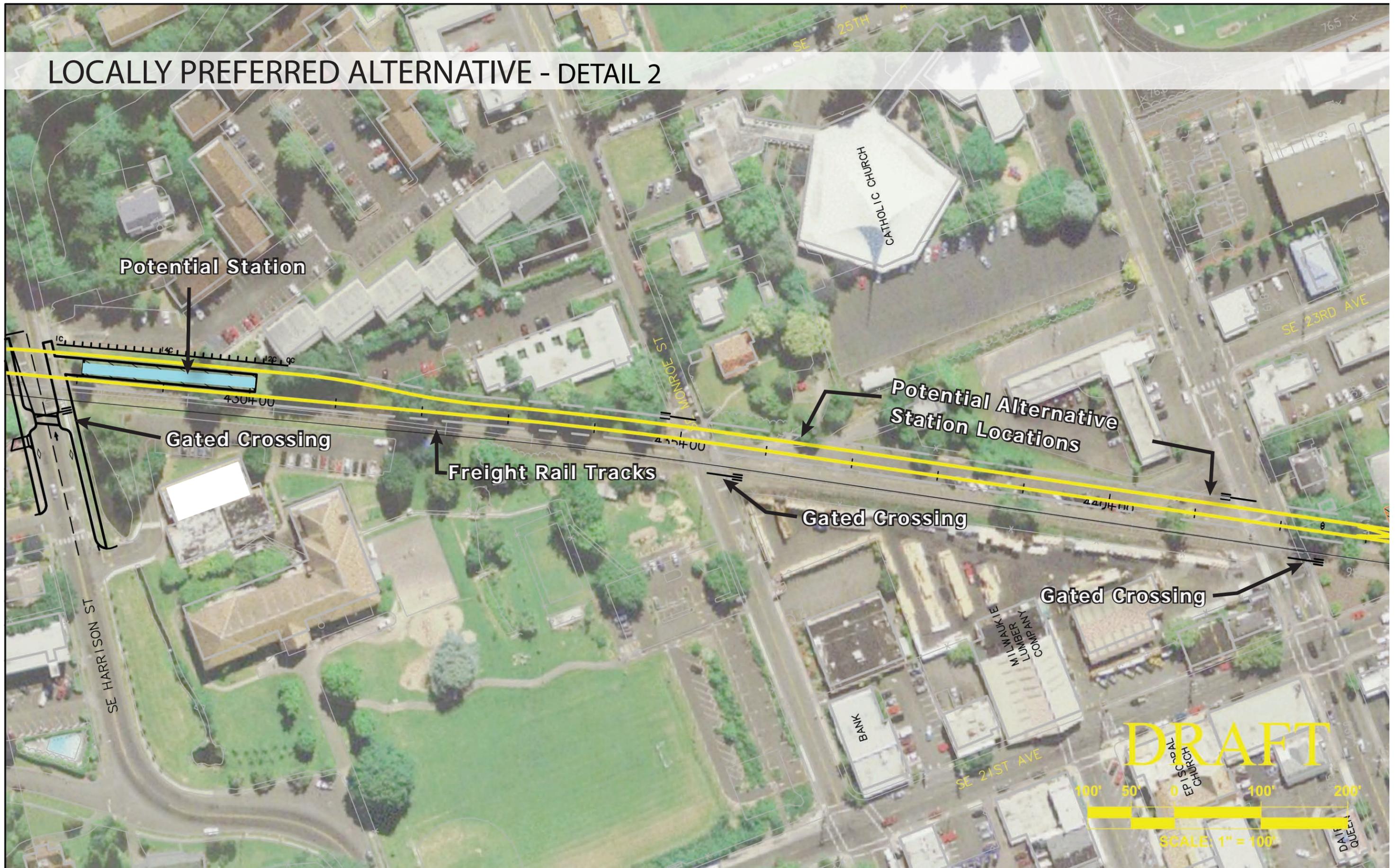
LOCALLY PREFERRED ALTERNATIVE - overview



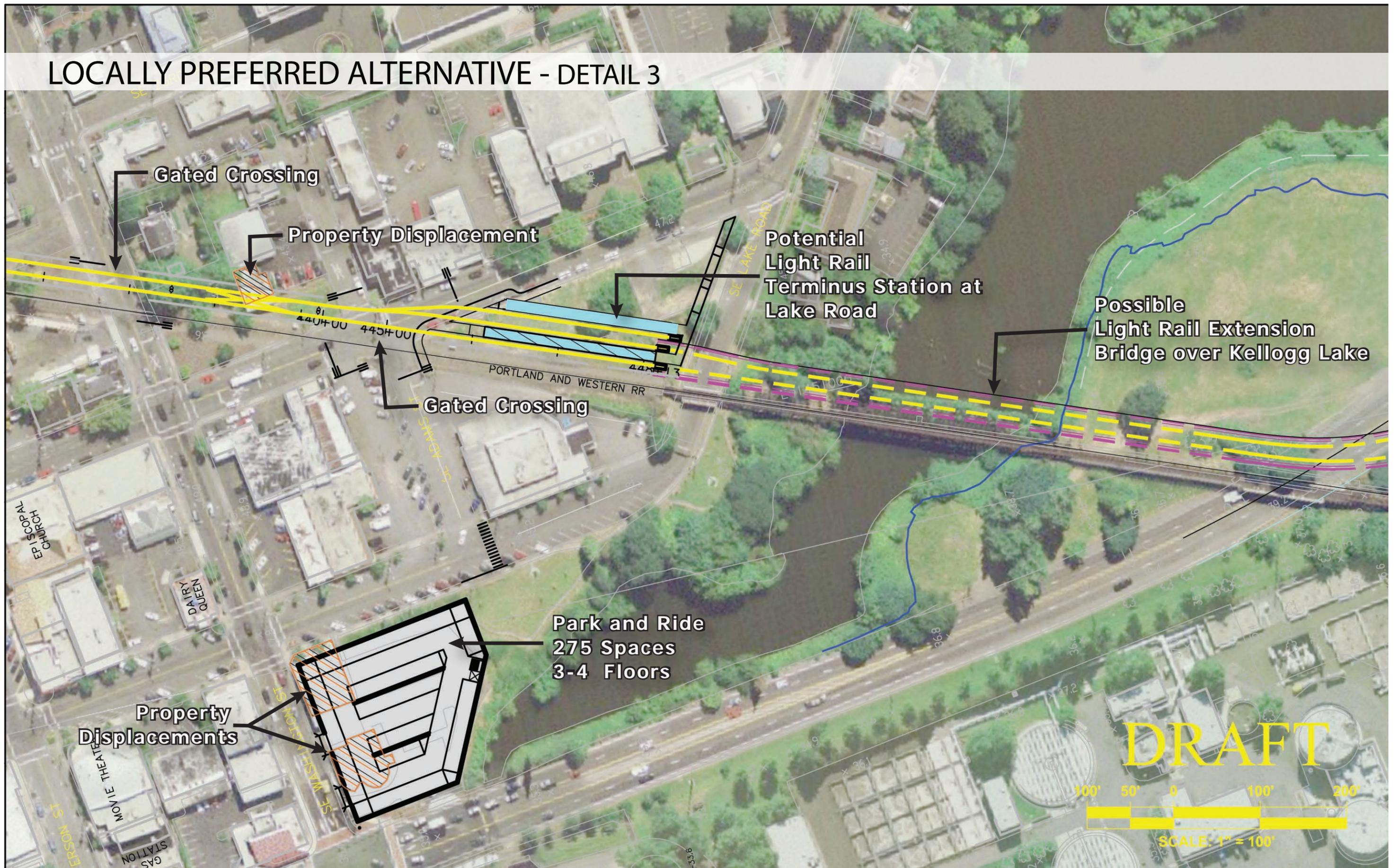
LOCALLY PREFERRED ALTERNATIVE - DETAIL 1



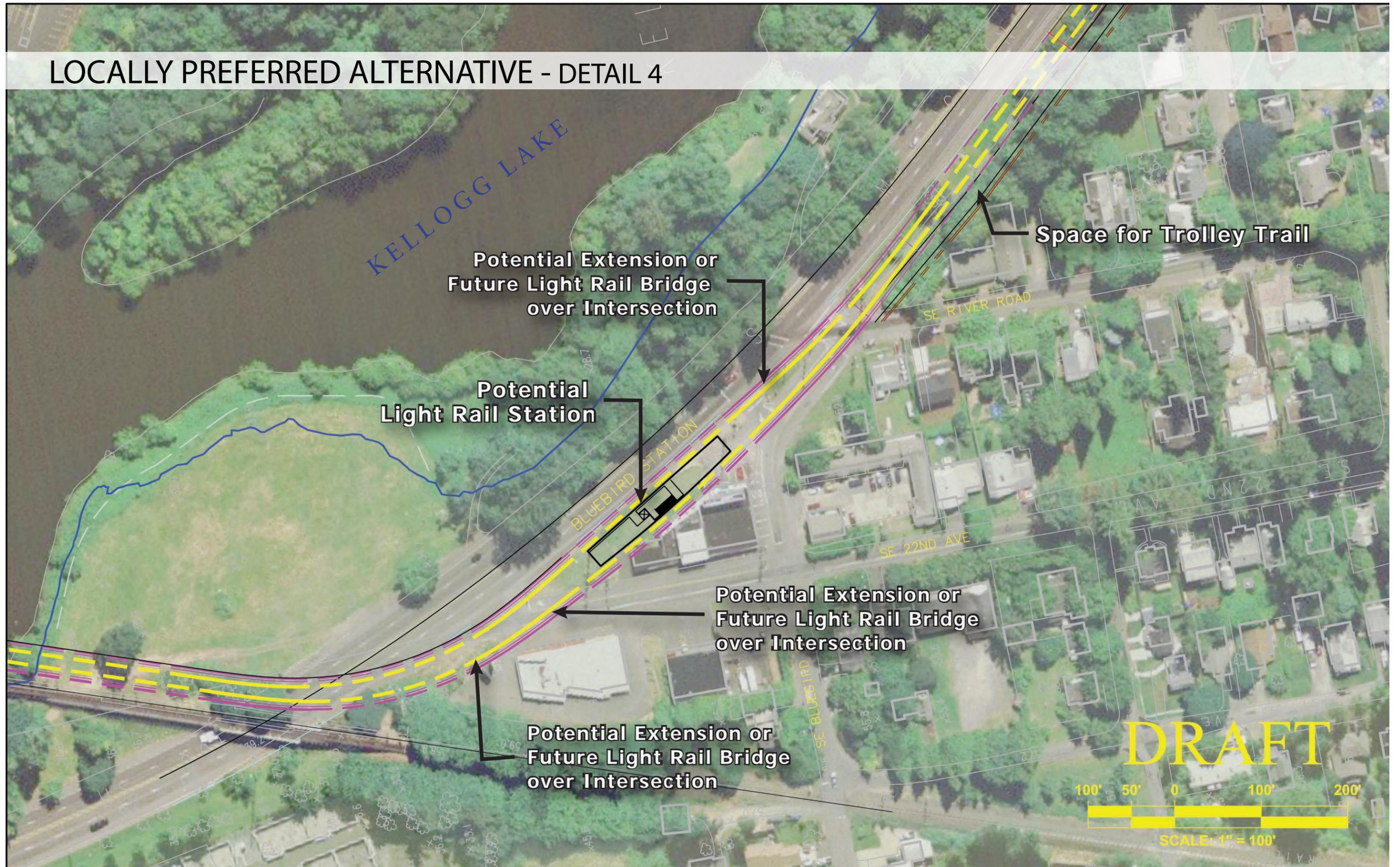
LOCALLY PREFERRED ALTERNATIVE - DETAIL 2



LOCALLY PREFERRED ALTERNATIVE - DETAIL 3

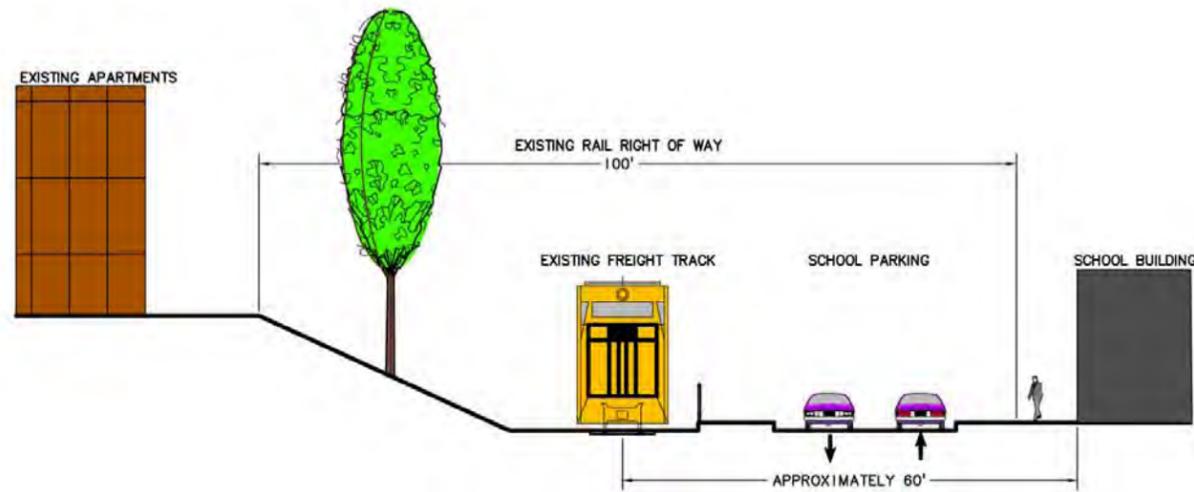


LOCALLY PREFERRED ALTERNATIVE - DETAIL 4



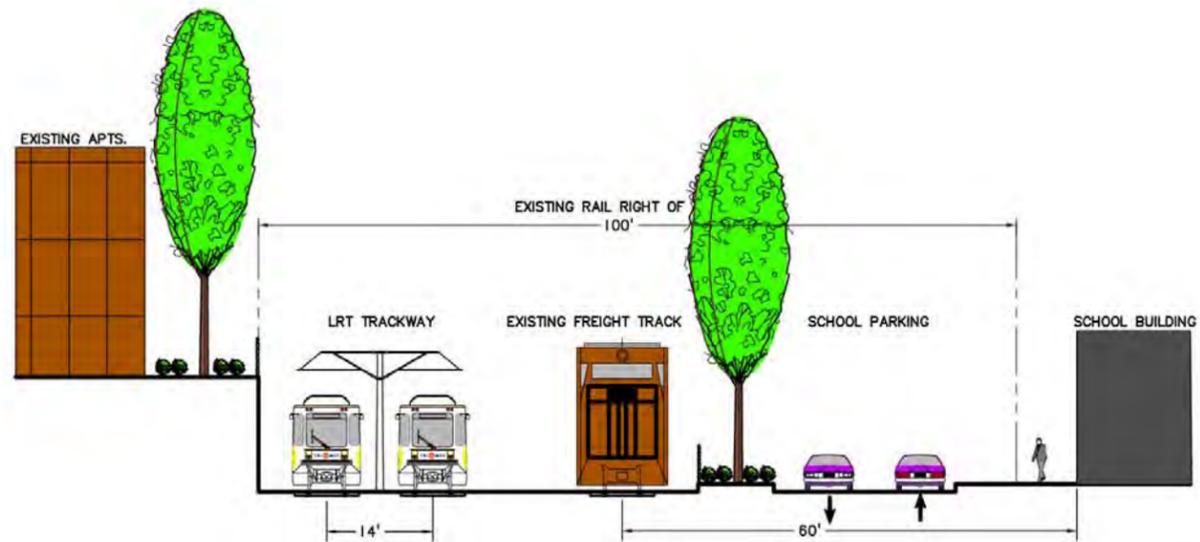
LOCALLY PREFERRED ALTERNATIVE - cross sections

Existing Tillamook Branch Alignment*



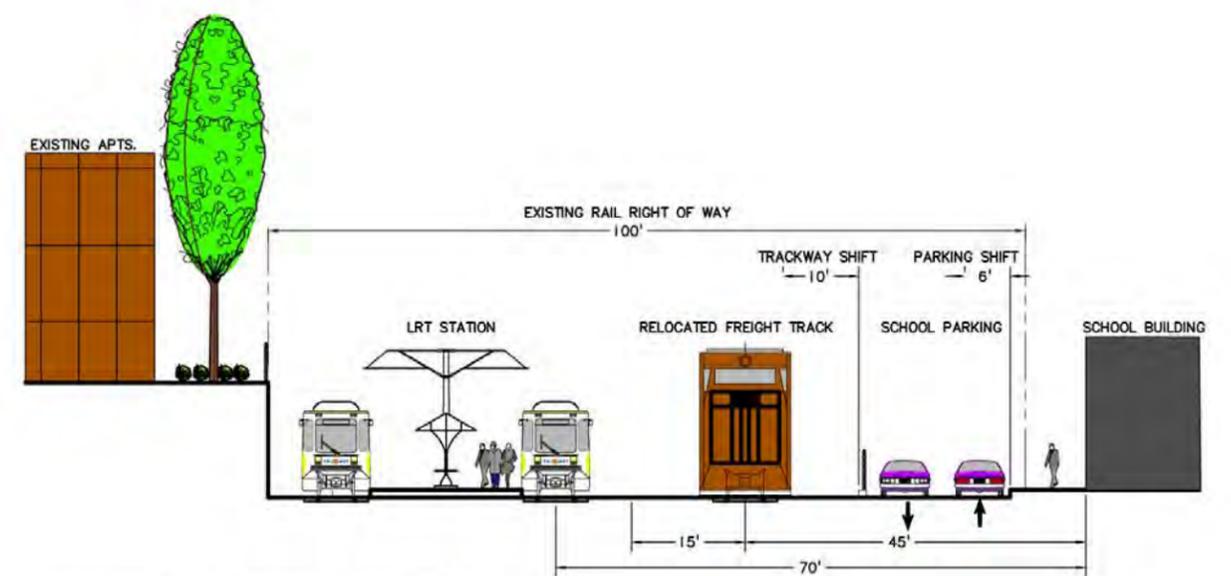
* Cross section represents narrowest section between buildings along alignment

Tillamook Branch Alignment - Proposed Light Rail



* Cross section represents narrowest section between buildings along alignment

Tillamook Branch Alignment - Proposed Light Rail with Station



* Cross section represents narrowest section between buildings along alignment