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September 7th, 2018

Seattle Members - Sound Transit Elected Leadership Group
Seattle City Hall
600 4th Ave
Seattle, WA 98104

Subject: ST3 WSTBE Level 2 preliminary recommendations

The Seattle Design Commission (SDC) has evaluated Sound Transit's (ST) Level 2 alternatives developed as part of their process to establish a preferred alternative for stations and guideways in the West Seattle to Ballard light rail link extension (ST3). The SDC submits the following recommendations to the Seattle Elected Leadership Group (ELG) in advance of your October 5, 2018 meeting, where ST staff will present recommendations on which station and guideway alternatives should proceed to Level 3 review prior to selection of a preferred alternative.

Our recommendations focus on urban design, placemaking, environmental, and equity outcomes. We have only generally considered questions of cost and technical constraints, as this is not within our area of expertise. We understand that costs and constraints will be evaluated by City experts and will be weighed alongside social and environmental outcomes by elected when deciding which alternatives to move forward for further study.

To develop these recommendations, SDC received detailed briefings from ST and City of Seattle staff on the various station and alignment options. The input of ST and City staff, as always, has been essential to our understanding of the supporting information about the various alignment and station options under review.

The SDC also engaged a variety of City Boards and Commissions to better understand the urban design implications of the various station and alignment alternatives under this phase of review. The SDC held six work sessions that were attended by representatives of the City of Seattle Planning Commission, Transit Advisory Board, Bicycle Advisory Board, Pedestrian Advisory Board, Renters Commission, Community Involvement Commission, and the LGBTQ Commission. The SDC found their perspectives invaluable and appreciate their time and interest in helping the SDC develop these recommendations.

In addition to our six work sessions, SDC members participated in two of the six station-specific all-day design charrettes hosted by Sound Transit for community stakeholders. These sessions also provided SDC members with valuable insight concerning community perspectives on the various station and guideway options.

Since 1999, when the City of Seattle first established a Light Rail Review Panel (LRRP), led by SDC staff, the SDC and its members have been tireless advocates for embedding urban design values into transit investments arising from the various ST segments. With ST3, there is a unique opportunity between the City and ST to embed urban design values into the proposed 14 stations, nearly 12 miles of alignment, and two new water crossings. The City and ST have the potential for creating both a transportation system that reaches into neighborhoods that have been underserved by fixed rail, and a system that elevates opportunities for placemaking, innovative development partnerships, and equitable development.

The following is a summary of SDC key issues and concerns about the Level 2 station and alignment options. This summary is supported by a series of recommendations for each station, water crossing, and various alignment segments. The recommendations are included as an attachment to this letter, based on the various segments established by ST in their Level 2 review, including:

- West Seattle/Duwamish
- SODO and Chinatown ID
- Downtown
- Interbay/Ballard

This effort has given the SDC a deeper understanding of the scope and implications of ST3 within Seattle. We hope these observations help in your work towards developing a transportation system that effectively balances moving people in our region, while creating places that enhance Seattle and its many neighborhoods.

Key observations

1. Stations

Station Tiers – Each station type requires different partnerships and planning efforts to maximize ridership and to appropriately integrate these stations into their respective neighborhoods. We have grouped the Seattle stations into three tiers, ordered below from what the SDC sees as the most impactful to our transportation network and vibrancy of our city, to the least impactful. The higher tier stations will require more robust planning and coordination to effectively integrate stations, while all stations require interagency coordination for successful multi-modal integration.

- Urban Catalyst Stations (Chinatown-ID, Westlake, Seattle Center) – stations that are not only critical transit hubs, but civic and cultural hubs with effects stretching beyond the property line. These stations require planning at and beyond the stations.
- Neighborhood Catalyst Stations (Delridge, Ballard, West Seattle Junction) – stations that will be embedded into vibrant and established neighborhoods where context is critical. Planning and development of these stations and the areas around them holds the potential to strengthen communities while transforming the built environment.
- Emerging Neighborhood Stations (SODO, Stadium, Dravus, Interbay, South Lake Union, Denny, Madison/Midtown, Avalon) – the remaining stations still have many placemaking opportunities and are in areas experiencing substantial changes and growth, requiring contextual station locations to best fit the growing neighborhoods' needs.

We also take special notice of what we call the “Jackson Hub”, a unique location that consists of the existing and future Chinatown-ID Stations, Union Station, and King Street Station. The Jackson Hub is the only location in the ST system where all three light rail transit (LRT) lines will connect. The Jackson Hub also provides one of the only locations that allows for transfers between the ST light rail system and 1) various local and regional bus systems, 2) the Seattle Streetcar, and 3) Amtrak and ST Sounder systems. Currently, these individual stations provide important yet disjointed connections between various transportation modes at one of the key front doors to Seattle. By supporting the idea of a Jackson Hub, there is a unique opportunity to create a highly functional multi-modal transportation hub with strong cultural community place making. Using community partnerships along with facilitating smooth, integrated transfers will help to re-activate Union and King Street Stations to their original intended use - people-focused transportation facilities.

2. TOD and Land Use

- Proactively seek out opportunities and develop innovative strategies for joint development and public private partnerships to knit together stations and alignments into the fabric of neighborhoods. TOD and new growth capacity should be created in partnership with the neighboring communities and their goals.
- Evaluate new governance approaches that would use existing public development authorities and perhaps create a more flexible public development corporation like the Portland Development Commission.
- Realign the City's modal plans and growth strategies to optimize the benefits of the ST3 infrastructure investments.
- Consider new land use typologies to maximize ridership, including industrial areas.
- Proactively integrate transit expansion with future land use by updating land use plans based on future station locations while also planning the system to serve desirable future and not current land use intensities.
- Focus TOD at stations with the greatest amount of transfers and where equity can be addressed in alignment with ST's recently adopted Equitable Development Policy.

3. Provide a Robust and Inclusive Process

- Narrow the range of feasible alternatives considered in the Environmental Impact Statement (EIS), but do not select one preferred alternative until the Draft EIS is published and public comments have been accounted for in subsequent draft documents prior to the publication of a Final EIS.
- Provide 3D visualizations of stations, guideways, bridges, and portals, including views from the pedestrian perspective.
- Share technical information and supporting analytics that are necessary for decision making. Provide clear information on the determining factors and drivers for ST preferred solutions.
- Identify the City's "Designated Representative" per the City/ST partnering agreement. Interdepartmental and interagency coordination is critical to producing integrated solutions that maximize the performance of transit and civic hubs, while minimizing piecemeal and sometimes competing outcomes championed by the different agencies. This coordination effort needs a champion to initiate and sustain this shared vision throughout all phases.
- Native communities must be a key constituent in developing station and alignment options.
- Provide transparency of how input from marginalized communities is being brought to and affecting alternatives and decisions. Reporting on the participation process is meaningless if it is not clear how the project outcomes will be affected by engagement with these communities.
- Develop a framework for future review by a City oversight board like the role of the Light Rail Review Panel (LRRP). This should include tools to evaluate the urban design implications of the preferred station and guideway alternatives. This group could serve to ensure that inter-departmental and interagency coordination is being adequately executed.

4. Summary of alignment and station location recommendations

West Seattle/ Duwamish

The SDC strongly recommends the stations and alignment proposed in the Pigeon Ridge/West Seattle tunnel alternative. The SDC believes the Pigeon Ridge/West Seattle tunnel alternative simplifies the overall route from SODO to Alaska Junction by reducing the number of turns to navigate around several ridgelines and reducing the overall height of the above grade guideway due to the proposed tunnels through Pigeon Point and west of Delridge. This alignment will also reduce the height and distance spanning the Duwamish River, which will also reduce impacts on the Port of Seattle.

Locating the Alaska Junction Station below grade on 42nd Ave will avoid negative impacts to California Ave SW while serving major commercial and residential corridors/areas and north-south transit lines. The north-south orientation of the station will help with future system expansion. The proposed alignment between Alaska Junction and Avalon Station should be located below grade to reduce the negative impacts within an established neighborhood with an existing commercial core.

The proposed Avalon Station should span Fauntleroy Way SW, with station entrances on both sides of the right of way, to improve east/west pedestrian safety and connectivity across Fauntleroy Way SW. The SDC believes locating the Delridge Station above grade within the Right-of-Way (ROW) along SW Genesee St, near Delridge Way SW, will best serve the existing community and social services while minimizing potential negative impacts. The proposed location will also serve as a transfer location for communities located south of the station area.

SODO & Chinatown/International District

The SDC realizes that the proposed alignment along this section will significantly influence the station location and configuration. The SDC recommends ST continue to study alignments along the E-3 corridor and along Occidental Ave S/1st Ave S. The E-3 corridor alignment will continue to serve as important transfer points for local and regional transit. The SDC recognizes the SODO Station as the first transfer point between the future West Seattle LRT line and ST existing light rail alignment. The proposed SODO Station should be located at grade with easy access to the existing SODO Station to limit negative impacts associated with transferring between segments. Similarly, the proposed Stadium Station will serve as a transfer point between the future and existing light rail lines, local and regional transit, and national bus carriers like Bolt Bus and Greyhound.

The SDC recognizes the Chinatown/International District station as a major regional transit and civic hub and strongly recommends locating the station beneath 4th Ave, adjacent to Union Station, with direct connections to Union Station and the existing light rail station on 5th Ave S. The SDC also recommends developing Union Station as a major civic space for both the surrounding community and greater region.

Downtown

The SDC recognizes the proposed station locations along this segment will influence the alignment. The SDC recommends locating the Midtown and Westlake Stations, as well as the alignment between Chinatown/International District Station and Westlake Station, along 5th Ave. This will allow for better transfer to the proposed Madison Bus Rapid Transit (BRT) line.

The SDC also recognizes the Westlake Station as major regional transit and civic hub. The location of the proposed station beneath 5th Ave will allow for easier transfer to the existing light rail station, Streetcar, and bus lines along 3rd Ave, 4th Ave, and 5th Ave.

The proposed Denny Station should be located east of Westlake Ave N near the intersection of Boren Ave and John St. This will provide an opportunity to serve both the existing Cascade Neighborhood as well as the Denny Triangle/SLU area. To address topographical issues, it is recommended the station include an upper entrance along Boren Ave as well as a lower entrance along Terry Ave. The SDC also recommends the South Lake Union Station be located beneath Harrison St. on the west side of SR 99 tunnel. This location will provide direct transfer connections to existing and future transit, including a potential transit hub as imagined in the neighborhood's mobility and urban framework plans.

The SDC recognizes the Seattle Center Station as an important civic hub as it is located near a regional cultural destination. The SDC recommends locating the proposed station below Republican St. and 1st Ave N intersection. The proposed station should span 1st Ave N with station entrances on both sides of the street.

Interbay/ Ballard

The SDC recognizes the proposed alignment will be influenced by several factors such as station location, tunnel portal location, ability to acquire ROW as well as the specification of above grade guideway, bridge, and tunnel options.

The SDC recommends locating the proposed Smith Cove Station at grade along Alaskan Way N near W Galer St. This location will increase access to the existing port and cruise terminals as well as future commercial uses. The SDC strongly recommends utilizing area adjacent to the BNSF ROW for an at grade alignment between the proposed Smith Cove Station and Interbay Station. This will reduce physical and visual impacts in the surrounding area and provides a less expensive alternative to building an elevated guideway through the corridor. The SDC also recommends locating the Interbay Station beneath the Dravus St. Bridge, which will increase access to east west transit modes.

The SDC recognizes the various alternative alignment proposals between the Interbay and Ballard station will have significant visual and physical impacts on the surrounding area. The SDC recommends providing a tunnel from the Interbay Station at Dravus St. to the Ballard Station. If a fixed bridge option is considered, the SDC strongly recommends that the proposed bridge include multi-modal transit options. The SDC recommends locating the proposed Ballard Station below grade along 15th Ave NW with station entrances on both sides. The location would reduce negative impacts on the surrounding area and would provide the best opportunity for future system expansion.

Next steps

This project will not only improve transportation for residents and those who work, study, and play here, it will also have the potential to improve equity and create vibrant places throughout the city. As you prepare to recommend alternatives to be studied further, we ask that you carefully weigh issues addressing urban design, placemaking, environmental, and equity outcomes along with costs and technical constraints.

We thank you for your time and interest in the work of the Seattle Design Commission. We look forward to continuing in our role as advisors on urban design implications of major civic investments like ST3.

Sincerely,

A handwritten signature in black ink, appearing to read "John Savo", with a large, stylized flourish extending to the right.

John Savo, Chair
Seattle Design Commission

CC: Cathal Ridge, ST Central Corridor Director
Samuel Assefa, OPCD Director
Linea Laird, SDOT Interim Director

Seattle Design Commission

ST3 Level 2 Station, Water Crossings,
& Alignment Recommendations

General Recommendations - Process

- ST should not decide on a preferred alternative until the Draft EIS is published and public comments analyzed.
- ST must immediately provide visualizations of stations, guideways, bridges, and portals in three dimension context before alternative analysis proceeds. Visualizations need to be provided at different scales and orientations, from adjacent streets and street level, to understand how people interact with these facilities.
- To comply with the partnering agreements, ST must immediately provide supporting analytics and technical information used for ST decision making. This transparency is essential to address "detail about project risks and opportunities" (p. 10) and the "common goal of early and durable consensus" (p.9).
- ST must provide clear and transparent information on the determining factors and drivers for alternative selection.
- The City should immediately identify the "Designated Representative" as agreed on p. 3 of the partnering agreement.
- In analyzing which alternatives to eliminate, the City should coordinate interdepartmental and interagency discussion and communicate outcomes of these discussions to the public
- ST and the City should convene advisory panels to evaluate complex, costly or contentious project elements, including bridges, tunnels or multi-modal stations.
- Due to the importance of the Duwamish River and Lake Washington Ship Canal to indigenous peoples, ST should provide funding for sustained involvement of indigenous communities in the design of bridges, guideways, and mitigation for ST3. It is important to actively engage with indigenous people to address previous degradation of these waterways due to previous infrastructure investments and the lack of meaningful engagement.

General Recommendations - Design

- Improve pedestrian connectivity near stations through multiple entrances at arterials, intersections or tunnels. Where at grade rail is planned, provide grade separated crossings for non-motorized movements.
- Prioritize multi-modal connections and bus access at stations when deciding on station location and orientation.
- Where transit "interchanges" (transfer stations, transfer between rail corridors or modes, etc.) occur, prioritize wayfinding and universal access provisions to facilitate transfers. Solutions should occur at the station and in the public realm (reduced or modified grade, weather protection, signage, etc.)
- Plan for restrooms at transfer and terminus stations.

Recommendations - TOD & Land Use Transit Integration

- The City and ST should develop strategies that support more intensive land uses near stations, in support of the City's comprehensive plan AND Sound Transit's TOD Policy of 2014. Considerations include:
 - Stations with the highest potential for TOD: Chinatown / ID Station, South Lake Union Station, West Seattle Junction Station, Westlake Station, Dravus Station, and Delridge Station.
 - In addition to conventional transit oriented development (TOD), identify opportunities for joint development of retail and professional services at key station locations
 - Involve developers early in considering potential for TOD
 - Prioritize TOD locations through P3 strategies; tailor strategies to integrate with neighborhood context
 - Explore innovative governance models (PDA's, CDC's, etc.) to support infill development opportunities.
 - Explore innovative new use models that address potential negative outcomes (increased property values, displacement of historic manufacturing base, etc.) for areas around stations in industrial zones
 - In evaluating the potential for TOD the City and ST should consider whether the area is anticipate for job or housing growth.
- The City and ST should evaluate potential locations for equitable TOD projects, as provided in Sound Transits 2018 Equitable Transit Oriented Development Policy
- Design the system for speed, frequency, and reliability that can meet the demands of future land use intensity. Study anticipated rail system performance under land use scenarios with higher growth targets than what are currently in the City's comprehensive plan.
- Move from a linear density model along arterials to creating node-based density to enhance neighborhood integration, placemaking, and to limit sprawl
- The Bike and Pedestrian Master Plans should be re-examined in the context of proposed ST alignment and station locations to elevate transportation integration between City and ST investments.



Alaska Junction Station

Study (in order of preference)

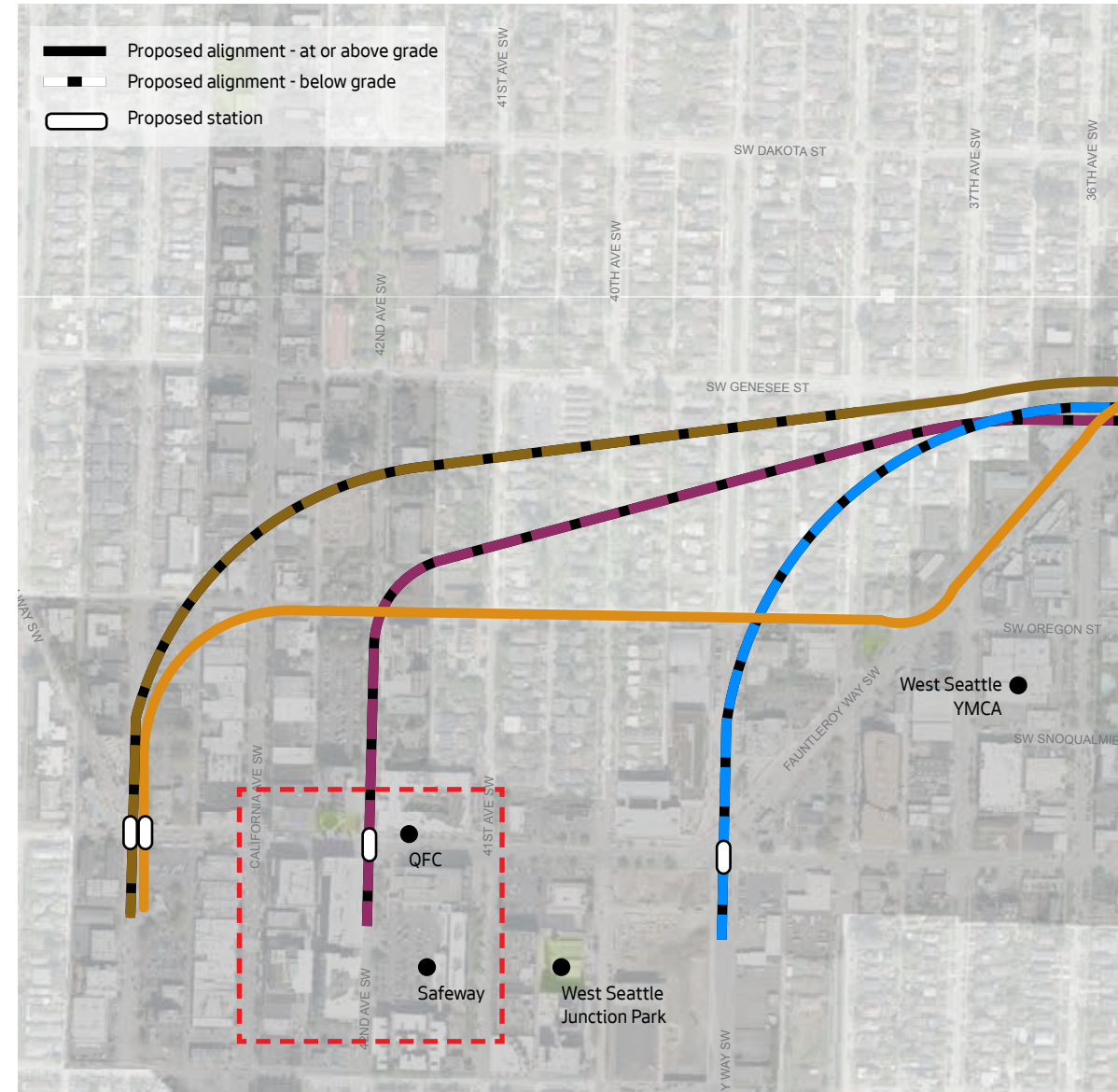
1. 42nd Ave SW & SW Alaska St, below grade
2. 42nd Ave SW & SW Alaska St, above grade

Reasons:

- Avoids impacts to California Ave SW
- Aligns with greater existing and planned residential density east of California
- Proximity to California supports N/S bus corridor
- Better ADA accessibility to California than the Fauntleroy location due to relatively small grade change
- More pedestrian friendly than Fauntleroy
- Reduces potential impacts on existing development and character along California
- Below grade station is preferred because
 - Less impact to the surrounding neighborhood central commercial area
 - Capitalizes on terrain
 - Less disruptive to traffic
 - Need to acquire less property
 - Less disruptive to community in areas where the alignment turns
- If station is located above grade, 42nd Ave SW is the best location given the scale of existing development
- If 35th Ave SW is best corridor for future light rail expansion, station near Fauntleroy might be better option

Recommendations:

- Orient station N/S for future system expansion
- Explore potential joint development options of Jefferson Square block





Alaska to Avalon Line

Study (in order of preference)

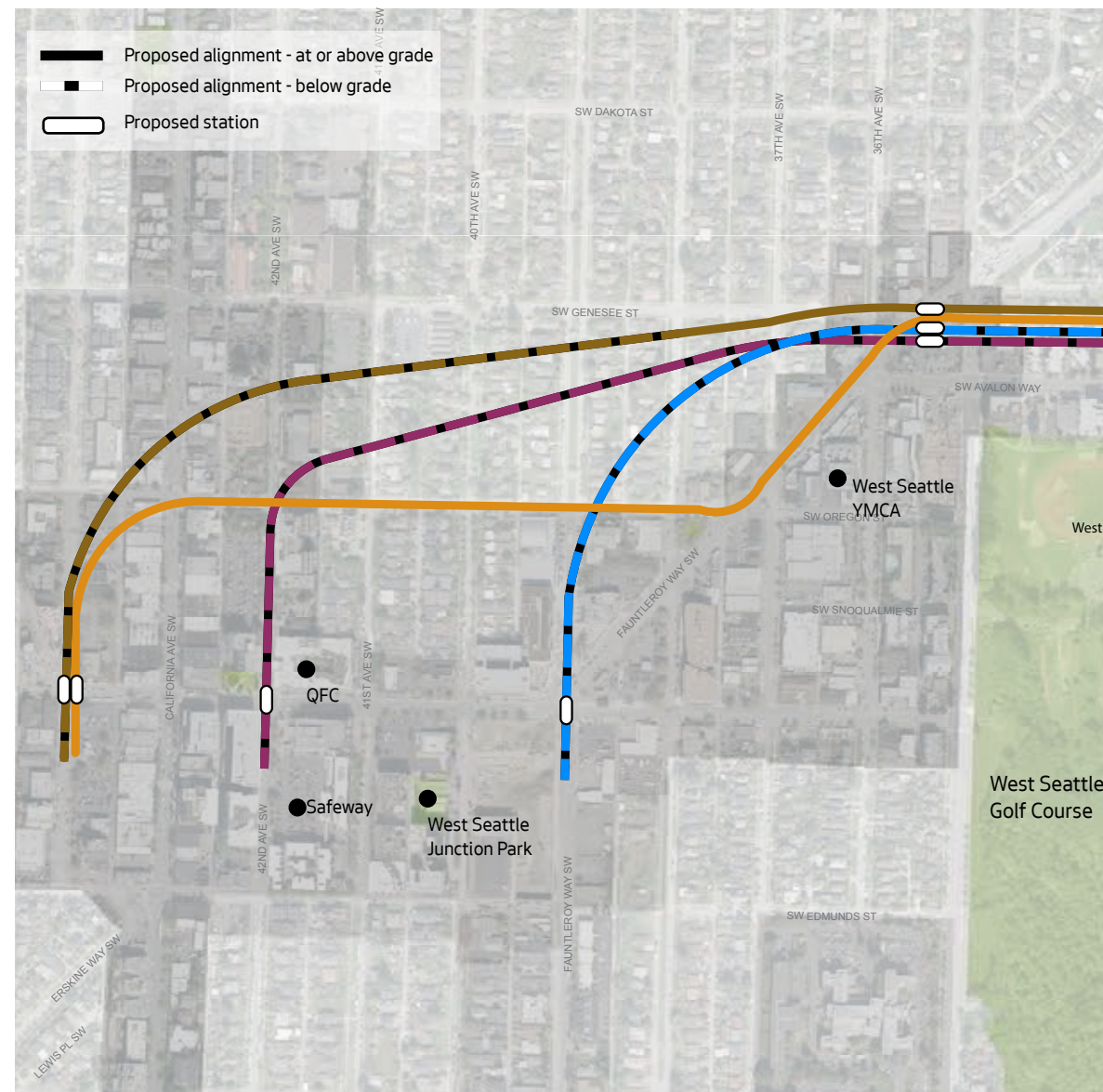
1. Below grade ■
2. Above grade along Fautleroy and Alaska St ■

Reasons:

- Below grade alignment will significantly reduce negative impacts on community experiencing rapid growth
- A below grade alignment eliminates the challenges of significant variation in grades in this segment that will likely result in unusually high guideway and station elevations

Recommendations:

- Provide information and analysis of visual impacts and cost of the above grade alternative





Avalon Station

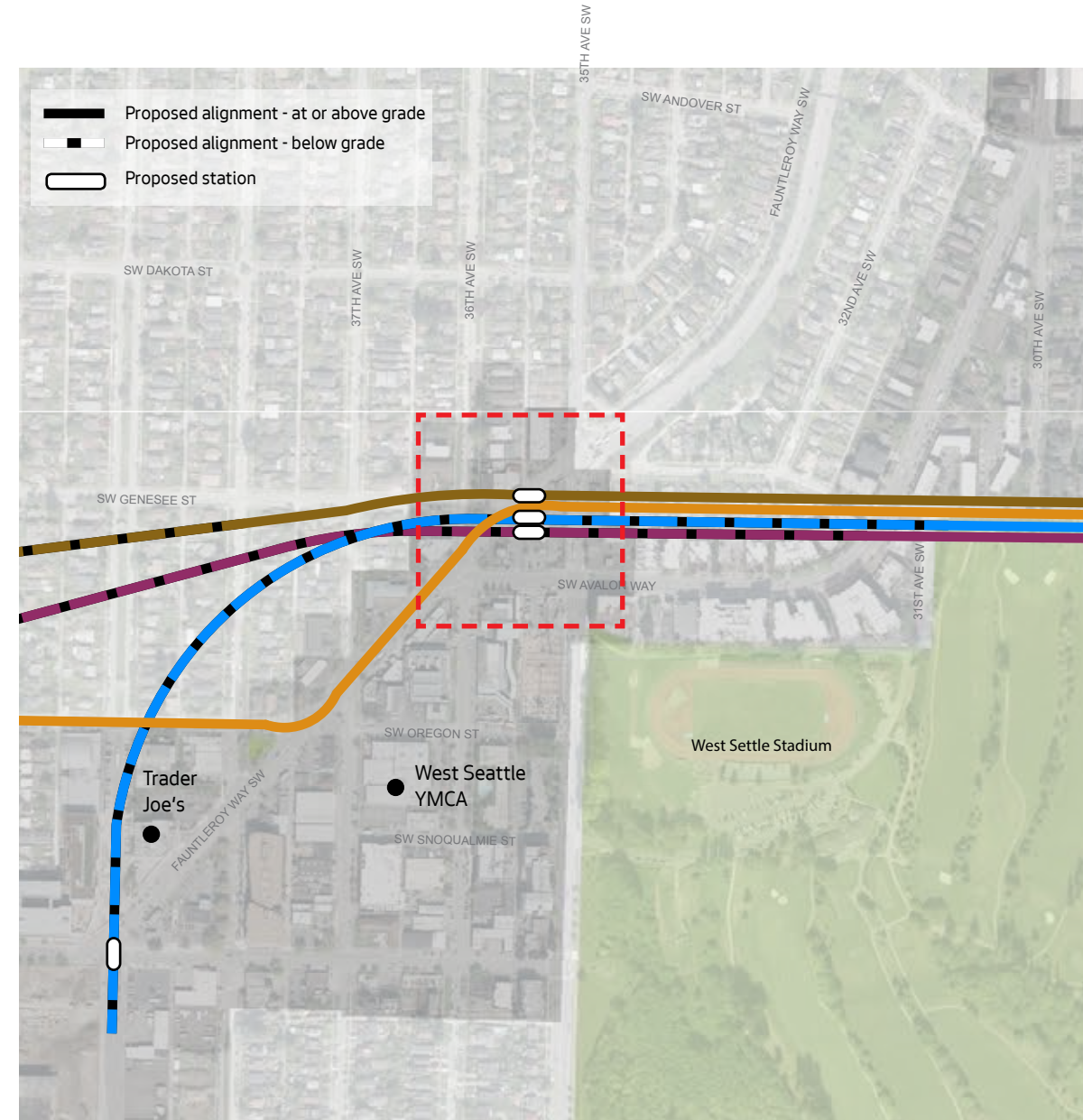
Study: Fauntleroy & SW Genesee

Reasons:

- A station at Avalon supports universal access due to the significant grade changes and distance between West Seattle Junction and Delridge
- Station west of Fauntleroy aligns with greater zone density
- Station spanning street improves pedestrian connectivity to neighborhoods, assuming multiple station entrances are provided

Recommendations:

- Provide an Avalon station. However, if necessary for cost savings, defer station construction and design for future expansion.
- Don't locate station north of Avalon because of lower zone density
- Consider the Taco Time site as a station location due to site size, location and underdeveloped site
- Improve pedestrian crossings at Fauntleroy
- Provide information and analysis of populations that will use station
- City should examine the idea of converting the golf course into a more intensely usable recreation use that will generate greater ridership





Delridge Station

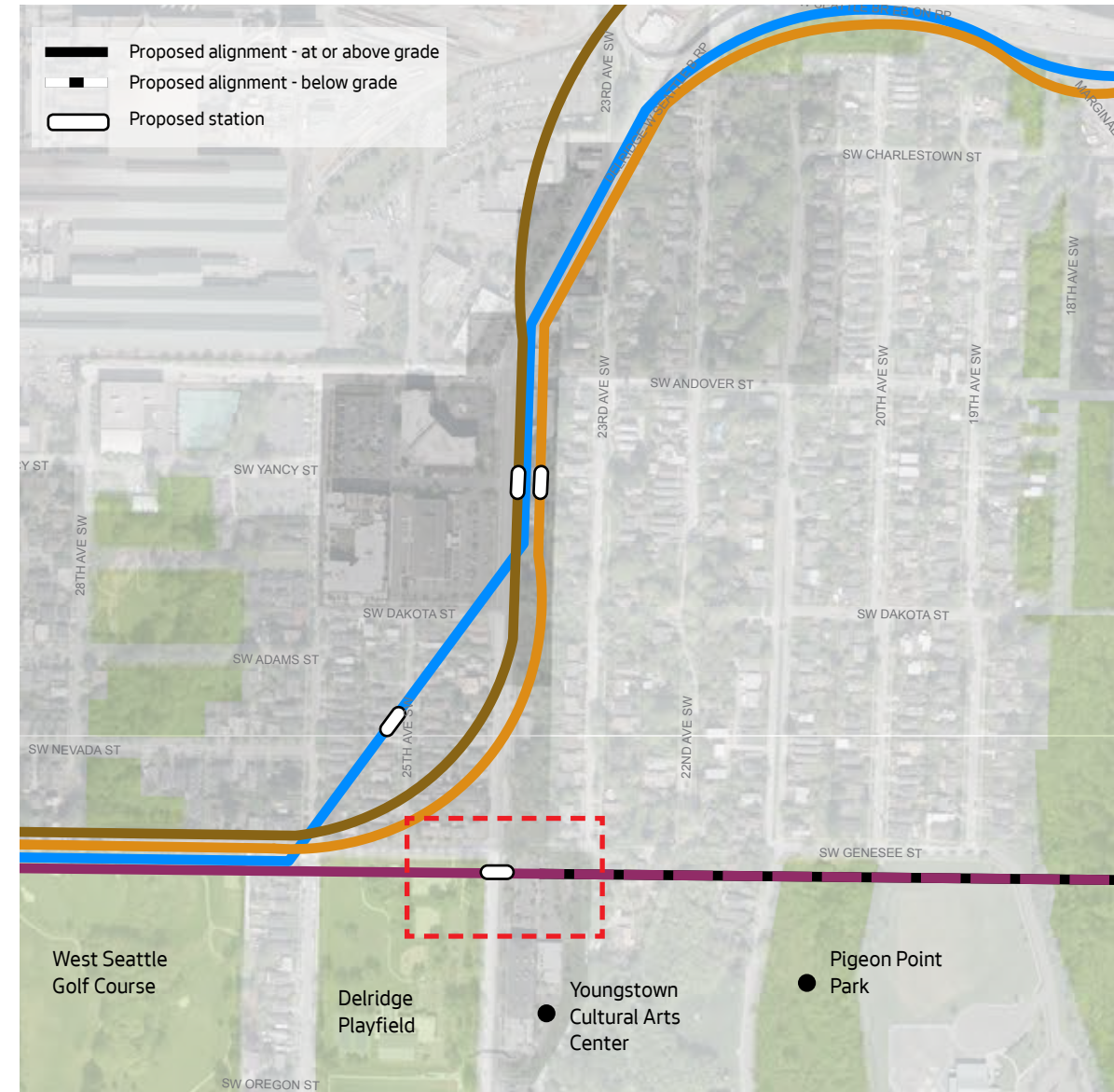
Study: Genesee and Delridge, above or at grade

Reasons:

- Serves the larger community along Delridge Way corridor:
 - Better connection to South Seattle College
 - Better service for underserved communities
 - Provides a transfer location for communities located south of station area
 - Better serves Delridge hub including community center, skate park, and Youngstown Cultural Arts Center
- Has lower station and guideway heights than alternatives to the north
- Supports bike mobility and connections to greenway and surrounding community
- Better connectivity to existing and future bus lines including Rapid Ride

Recommendations:

- Study TOD potential north of Genesee and west of Delridge Way SW, including affordable housing opportunities. Creating permanent affordable housing can reduce or stabilize impacts that the station may have on current market-rate affordable housing in this area
- Due to potential significant economic and social impacts from the station and the guideway on property values, closely consider both construction staging impacts and long term development potential when evaluating station options at this location.





Avalon to SODO Line (part 1)

Study:

1. "Pigeon Ridge" along Genesee or south of it, elevated except for tunnels under Pigeon Ridge and at grade in parts of SODO ■
2. Northern most Duwamish crossing in tunnel or elevated ■

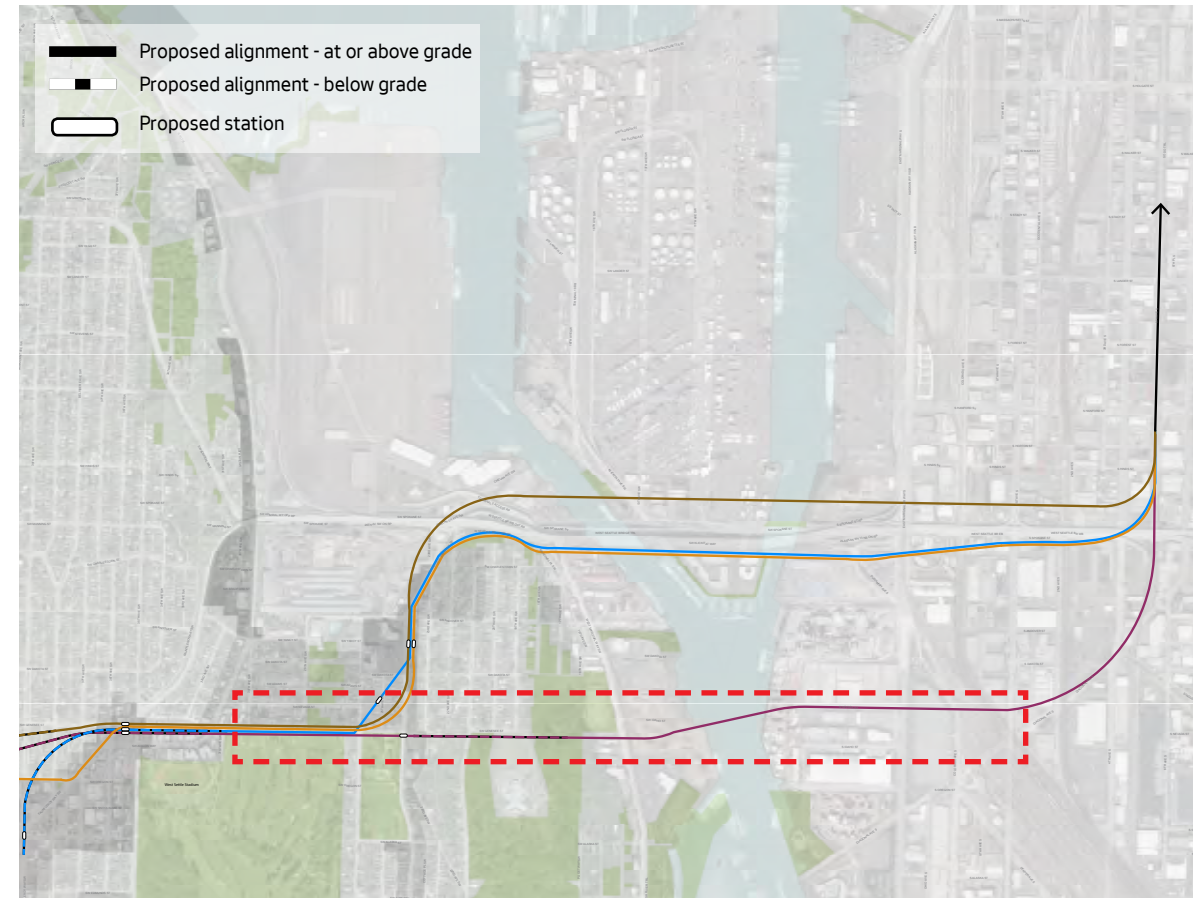
Reasons:

Pigeon Ridge

- Produces less overwater coverage over Duwamish River
- Simplifies alignment between SODO and Alaska Junction (reduces number of curves/turns)
- Has less impact on the Port of Seattle operations at Harbor Island
- Reduce impacts to environmentally sensitive areas and Pigeon Point residential areas
- Avoids technical difficulties of locating guideway in narrow area between West Seattle Bridge and Pigeon Point hillside
- Allows for lower guideways in the neighborhood and lower Delridge station
- Reduces height of elevated sections across Longfellow Creek
- Works best with terrain/grade change
- Avoids extremely high guideways along north end of Delridge Park
- Allows for potential infill light rail station east of E Marginal Way
- A below grade alignment eliminates the challenges of significant variation in grades in this segment that will likely result in unusually high guideway and station elevations

Northern Duwamish Crossing

- Avoids Pigeon Point neighborhood environmental impacts
- If in a tunnel has fewer impacts than other alternatives along existing bridge





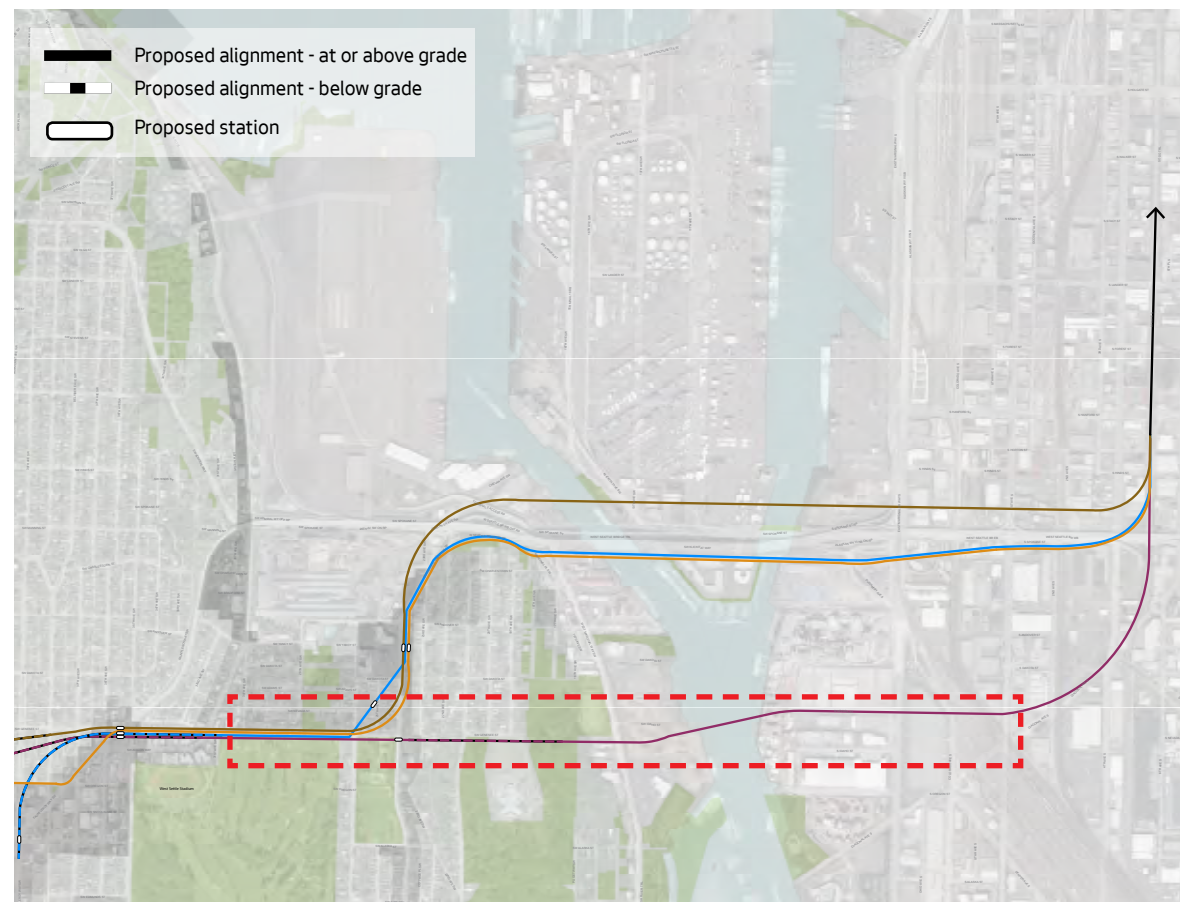
Avalon to SODO Line (part 2)

Recommendations:

- Study possible solutions for routing past the Seattle City Light substation
- A new bridge in any location should be complimentary to its surroundings and sensitive to its natural, cultural, and built context

Study cost savings from eliminating either Pigeon Ridge or Alaska Junction tunnel. Challenges with this option include

- Further impacted communities resulting from insufficient infrastructure investments
- Physical impacts to densest residential neighborhoods in West Seattle





SODO to Chinatown ID Line

Study (in order of preference)

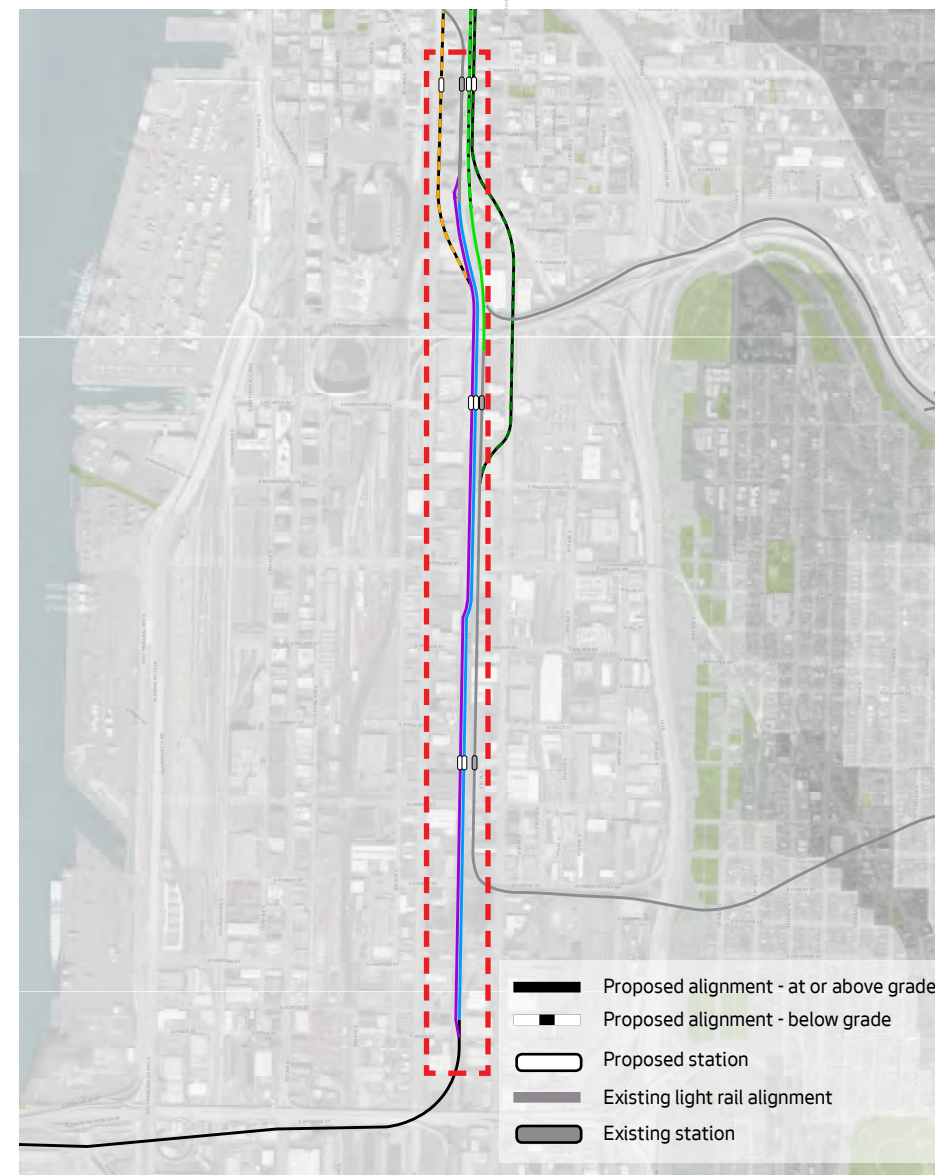
1. E-3 Corridor, at grade at south and below grade at north ■ ■ ■ ■
2. First Ave or another western alignment

Reasons:

- Buses in the existing E-3 corridor provide transit to S. King and Pierce County, where more affordable housing to options are located. Explore and use data on these jobs and housing connections to support preferred option.

Recommendations:

- Continue to study both E-3 and First Ave in Level 3 analysis. The location alignment will significantly affect transfer opportunities for travel to other rail segments.
- Transfer strategies between transit modes (rail, bus, etc.) should be provided for all station and alignment options under review.
- Place the alignment in a location that offers best connections to the Chinatown ID station.
- If the E-3 corridor is used, retain the bike trail in this right-of-way. If not, relocate bike trail after evaluating best alternative options.
- Study at grade pedestrian and bike improvements versus overpasses crossing rail lines at Lander and Holgate. Walking or riding over the tracks is more cumbersome and less attractive. Weigh this with data on anticipated wait times at grade.
- Provide a transfer strategy for the various light rail and high volume bus lines that converge here - Eastside, SeaTac Airport, West Seattle, Tacoma. The transfer strategy will significantly influence station configurations. Knowing the strategy is crucial to evaluating the station options.
- Given the extended interim period between the opening of the West Seattle and Ballard extensions, consider terminating the West Seattle extension at Chinatown/ID rather than SODO. This will allow for multiple transfer opportunities between the existing light rail line and other regional transit modes.





SODO Station

Study (in order of preference)

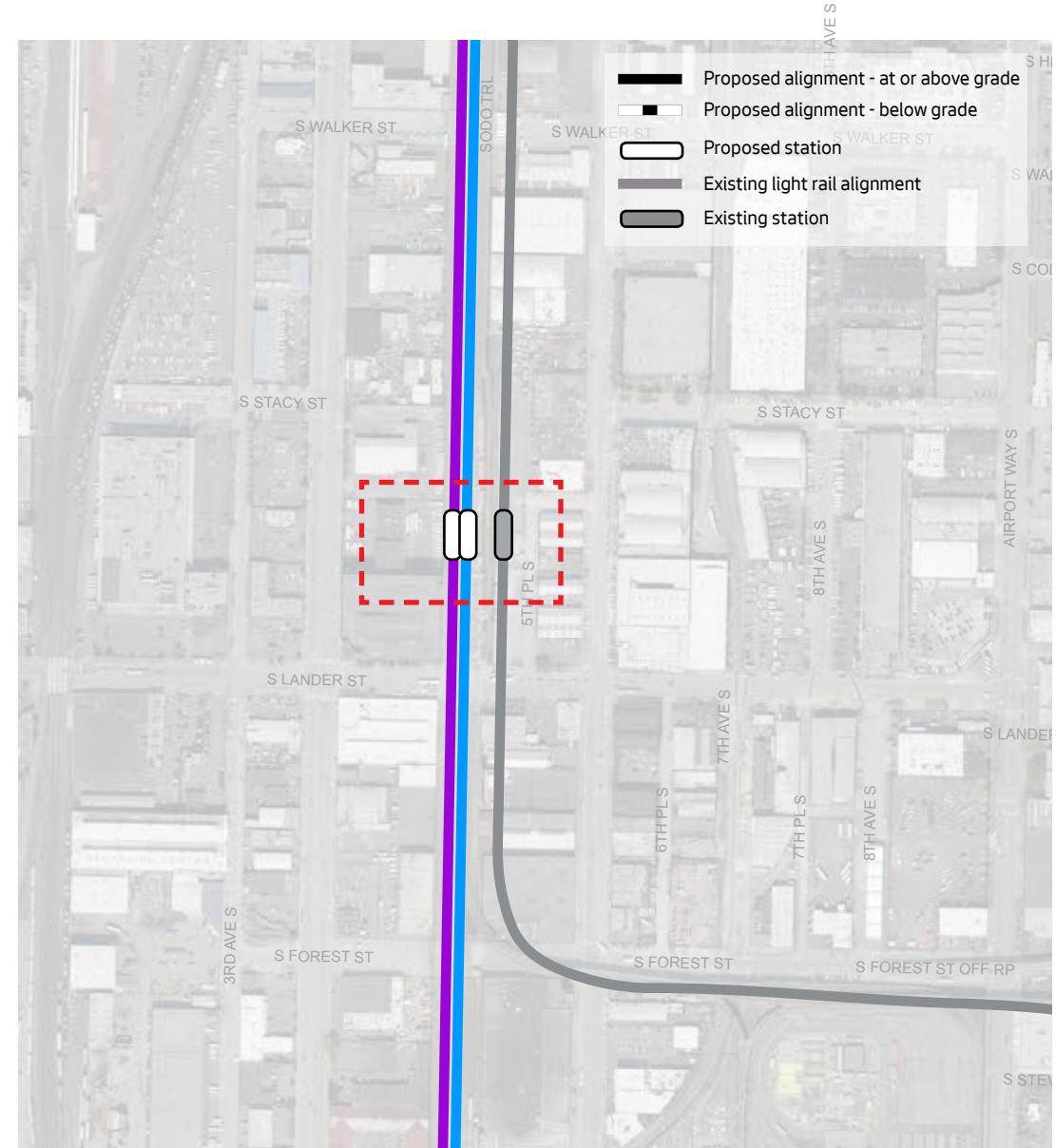
1. E-3 corridor east of current station, at grade with shared platform
2. First Ave or another western location

Reasons:

- Provide a transfer strategy between light rail and high volume bus lines - Eastside, SeaTac Airport, West Seattle, Tacoma
- Plan for bike share and other means to connect from station out into this important employment center

Recommendations:

- E-3 corridor provides essential connections between employment areas and affordable residential areas to the south. Explore and use data on these jobs and housing connections that are increasing due to population growth in these areas.





Stadium Station

Study (in order of preference)

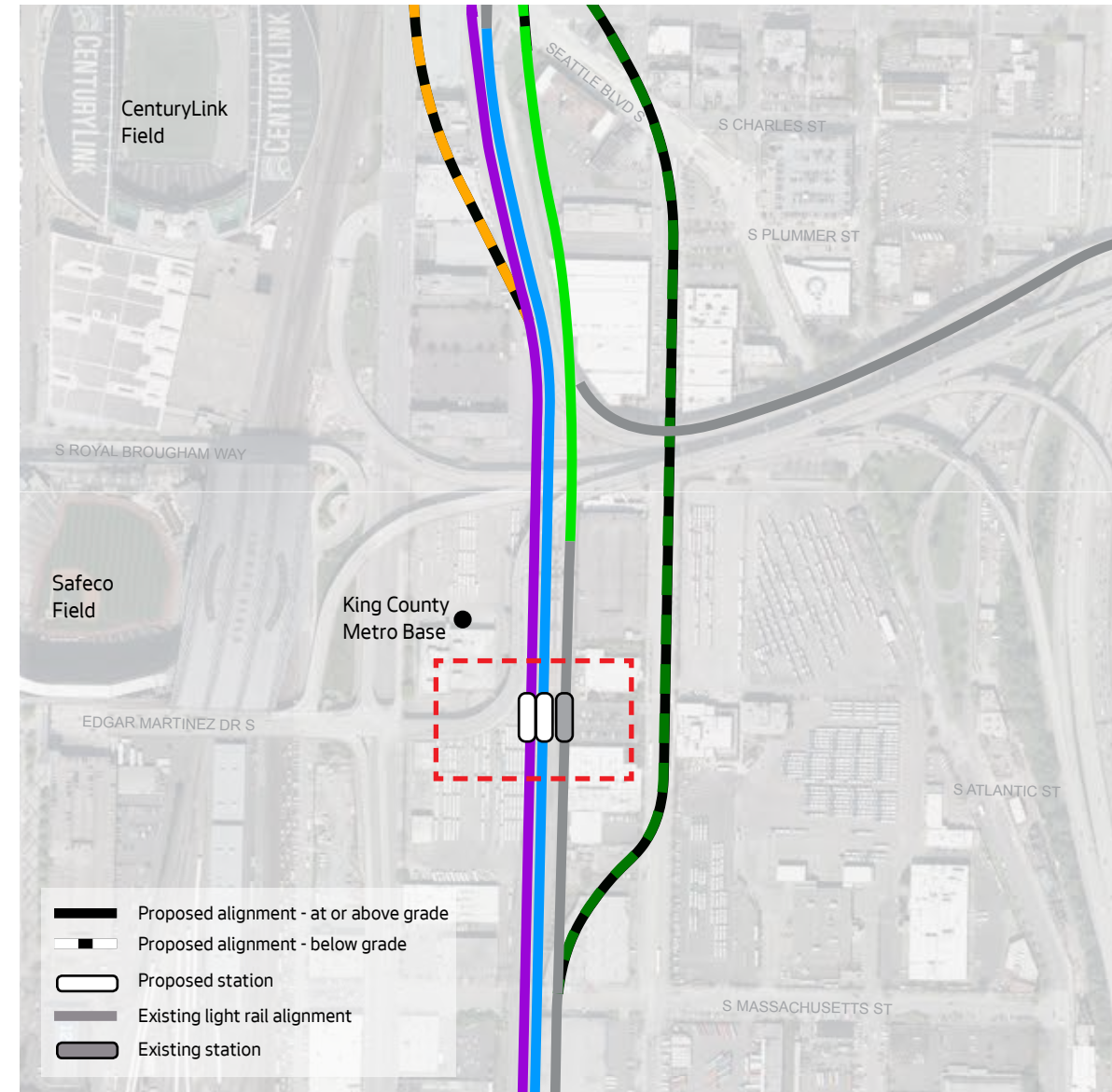
1. Near the existing station, at grade with a shared platform
2. First Ave or another western location

Reasons:

- Strongly support locating a station that serves the stadiums for greater choice and connectivity

Recommendations:

- Provide for transfers directly across one platform
- Connect any new station with the existing stadium station to maximize transfer to and bet ween alignments
- Consider physical and functional relationship to Greyhound station
- Provide for food services/retail and restrooms at this station



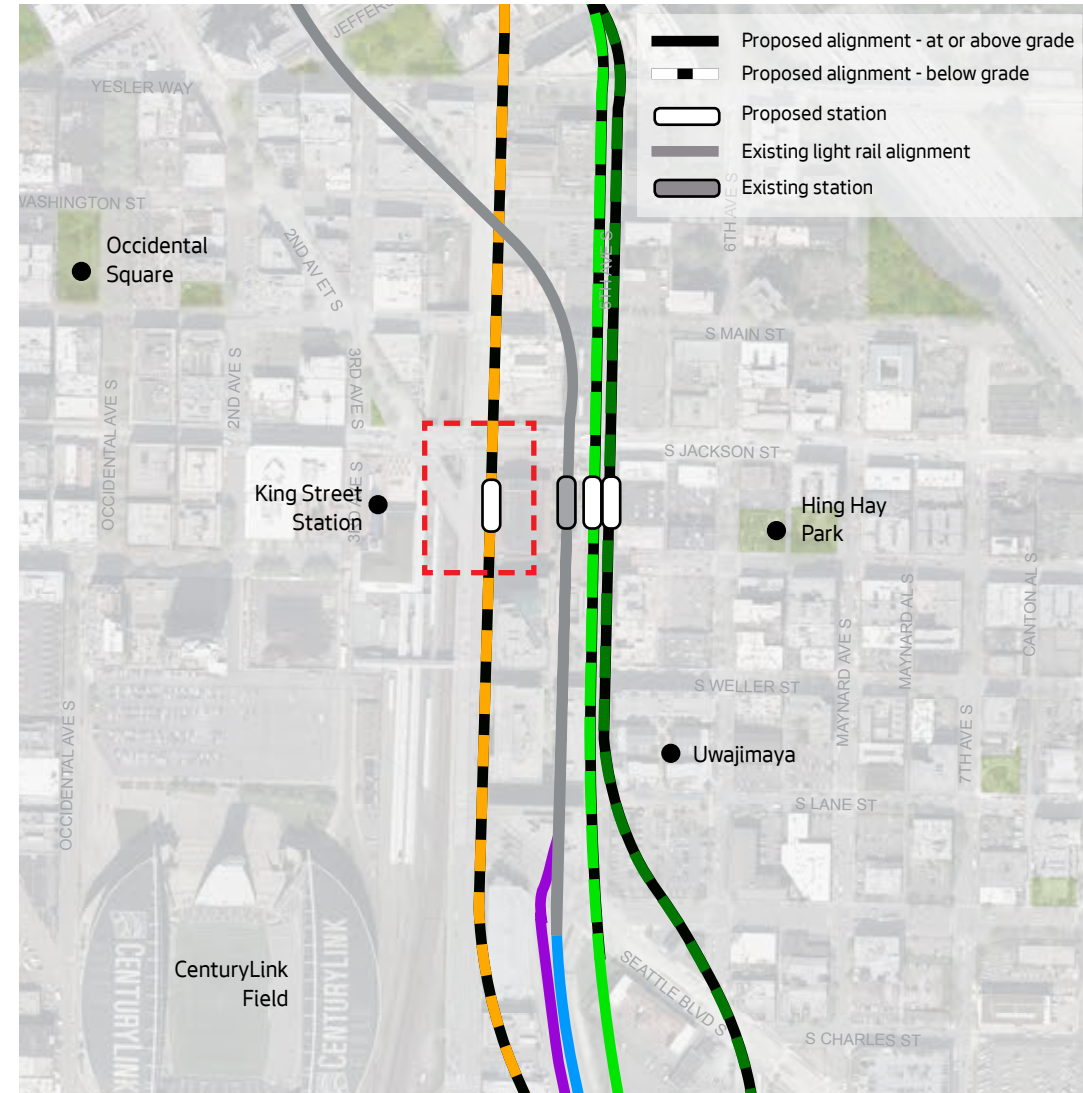


Chinatown ID Station (part 1)

Study (in order of preference):

1. 4th Ave and Union Station
2. A location north of Jackson St

- Designate Union Station as the light rail station, consistent with its original historic purpose
- Locate and design station and surrounding areas to be a cohesive intermodal hub for light rail, buses, streetcar, and other modes of transportation in recognition that the CID station area is a major regional transit and civic hub.
- Explore joining Union and King St Stations into one public authority (PDA, CDC, etc.)
- Develop the Union Station and adjacent public open space to be a cultural hub as it reflects the community's desire for a central space. Recognize the potential to reconcile historic injustices to businesses and the community.
- Make the most of the potential for culturally informed economic development. Given the regional draw of cultural events and amenities here, the station is in an optimal position to support transit access.
- Create a physical connection between Union Station and King Street station to enhance intermodal and neighborhood accessibility
- The City should consider investing in the 4th Ave alternative given the poor condition of the substructure. The City and ST should provide joint funding to replace the 4th Ave Viaduct.



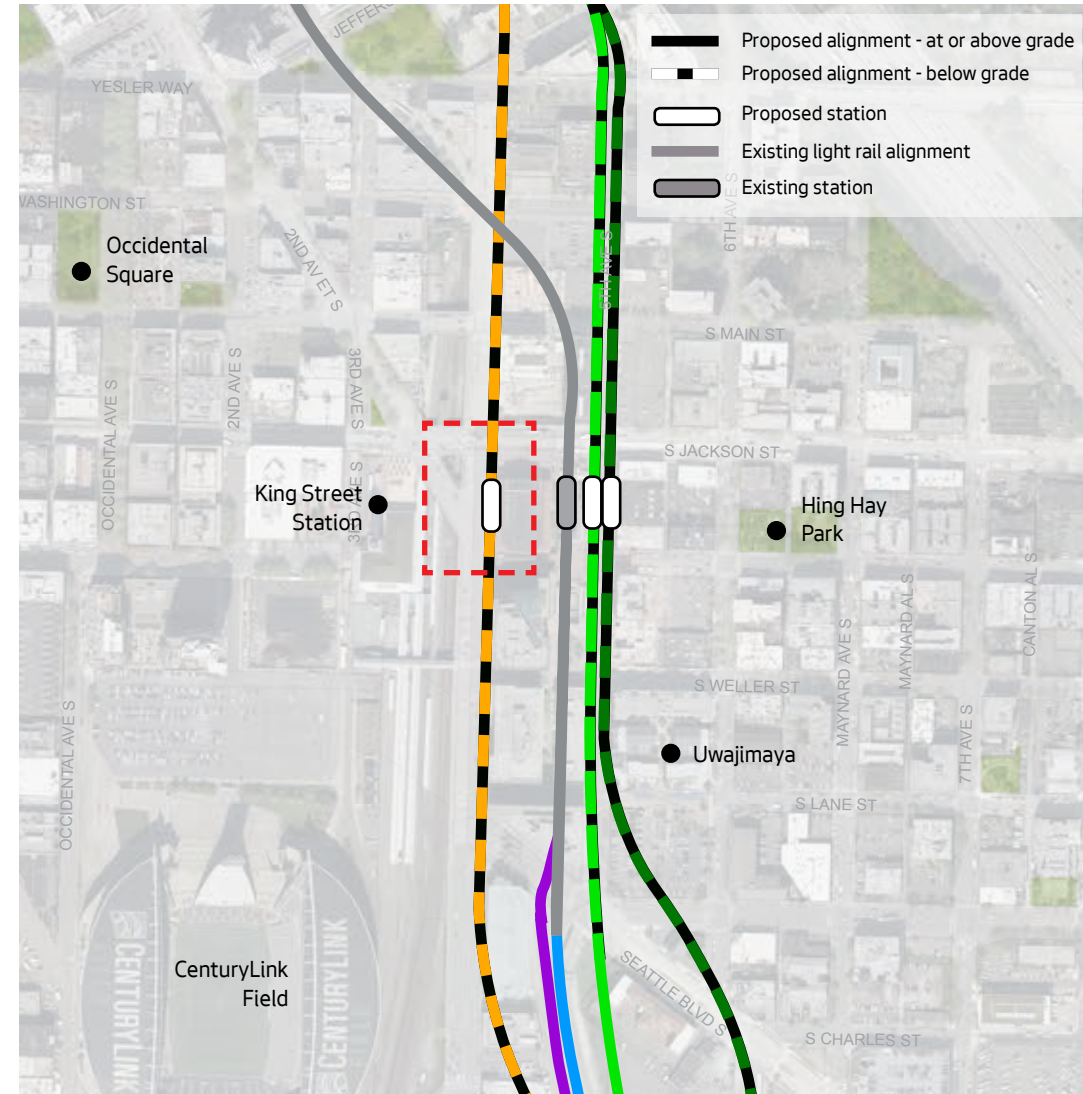
Chinatown ID Station (part 2)

- Advise against a 5th Ave station due to its impacts to culturally significant local businesses and to traffic mobility. If 5th Ave is only option, construct through deep bore tunnel instead of a cut and cover station to reduce impacts on neighborhood
- Advise against a deep bore tunnel that results in a new station under the existing CID station. The stacking of stations in this location poses significant challenges to pedestrian movement between light rail alignments and the other transit modes that serve this station.
- Analyze and weigh openly the long and short term advantages and disadvantages to the 4th Ave alternative. Short term construction impacts shouldn't take precedence over better neighborhood integration
- Consider the economic cost of poor/limited transfers between light rail lines and other transit options (buses, streetcar, etc.). 20% of King County buses pass through here.

Consider a location north of Jackson if the 4th Ave alternative isn't possible

- Provide pedestrian tunnels under Jackson to connect to the CID station
- Solution creates longer connection to King Street Station
- Strongly recommend against any alternative that is in the Jackson right-of-way because of impacts to transit and traffic.

Whether the station is located in 4th or 5th, develop a plan to reduce short and long-term traffic impacts given its role as a carefully plan for as a hub between Central District, Beacon Hill and downtown.





Midtown Station

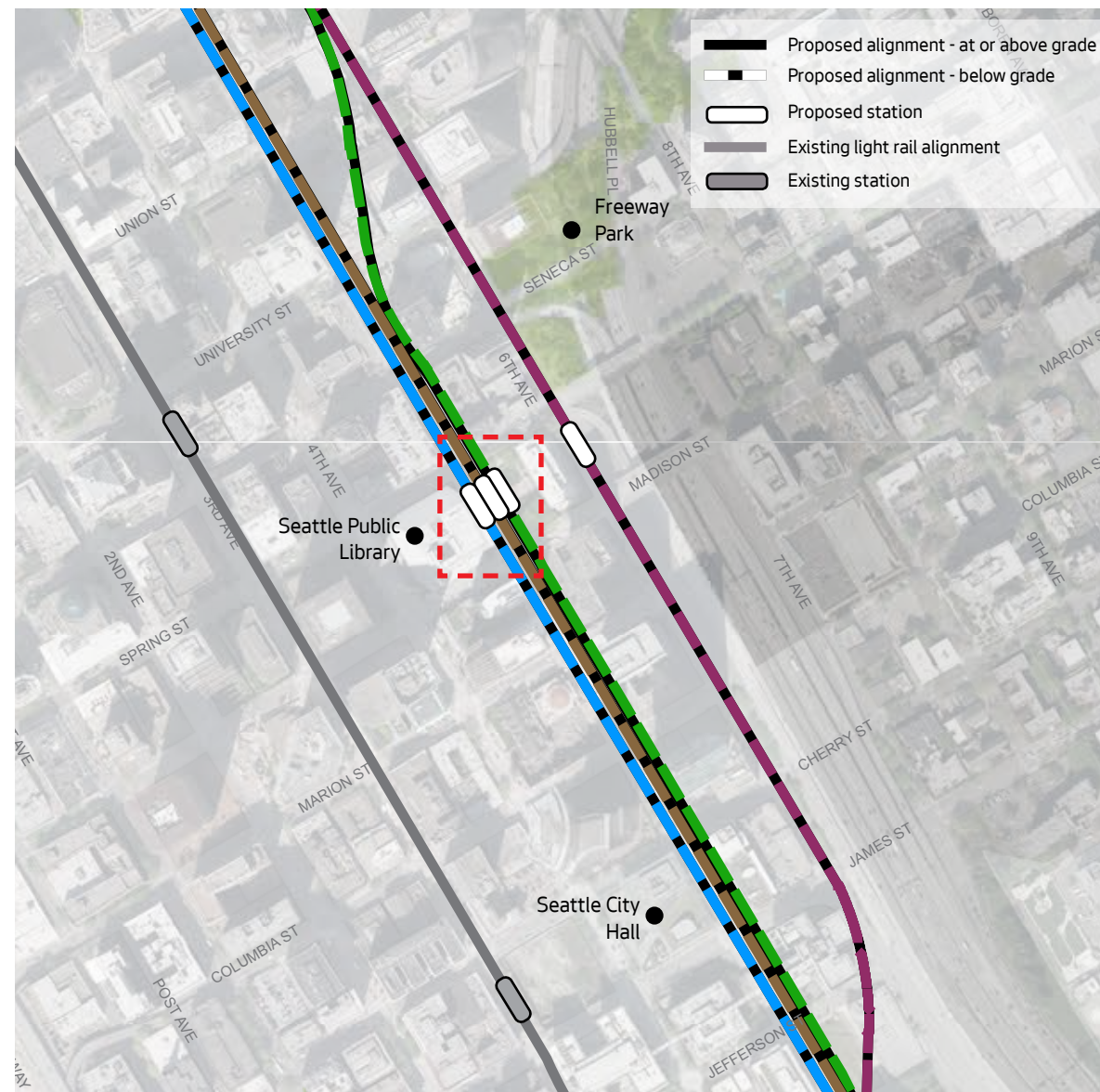
Study : 5th Ave near Madison St

Reasons:

- This location is closer to the proposed Madison BRT stop between 4th Ave and 5th Ave
- This location has less intense existing use of curb space

Recommendations:

- Improve pedestrian connections across I-5 to businesses and residents in First Hill neighborhood





Westlake Station

Study (in order of preference):

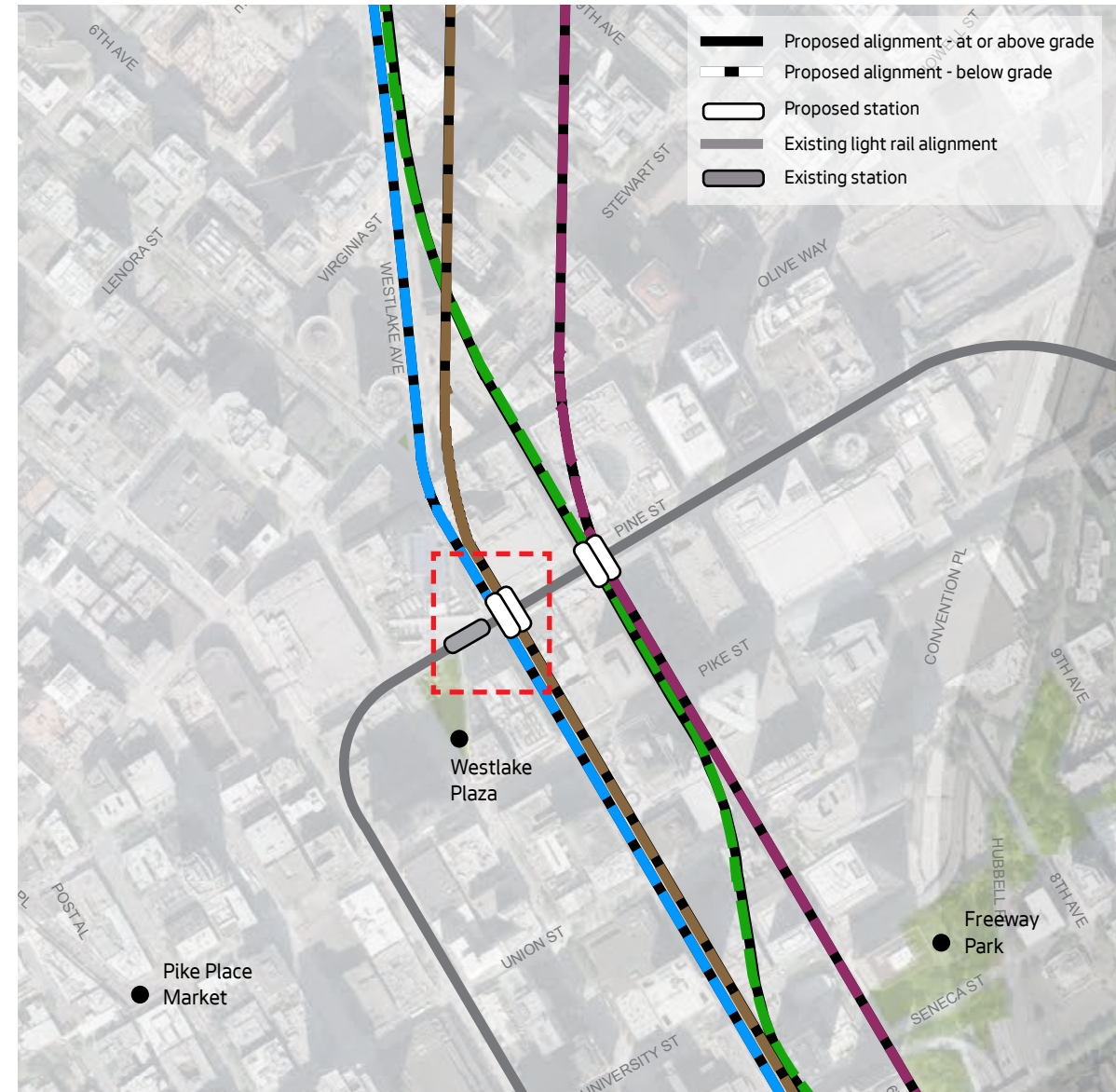
1. 5th Ave location
2. 6th Ave location

Reasons:

- 5th Ave will provide superior transit connections because it is closer to
 - Existing Westlake Station
 - 3rd Ave transit corridor
 - Regional buses on 4th and 5th
 - SLU streetcar station at McGraw Square

Recommendations:

- If along 6th Ave, provide accessible tunnel between existing and new stations

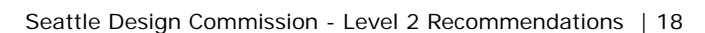




Reasons:

- ### Recommendations:

- Due to significant grade changes, recommend siting and designing the station to include access to system along Terry.
- Create a hillclimb within the John Street right of way to link Terry and Boren streets
- Make station entrances highly visible from Westlake Ave
- If the Terry and John location is pursued, the station should include measures to facilitate universal accessibility up and down the hill





South Lake Union Station

Study:

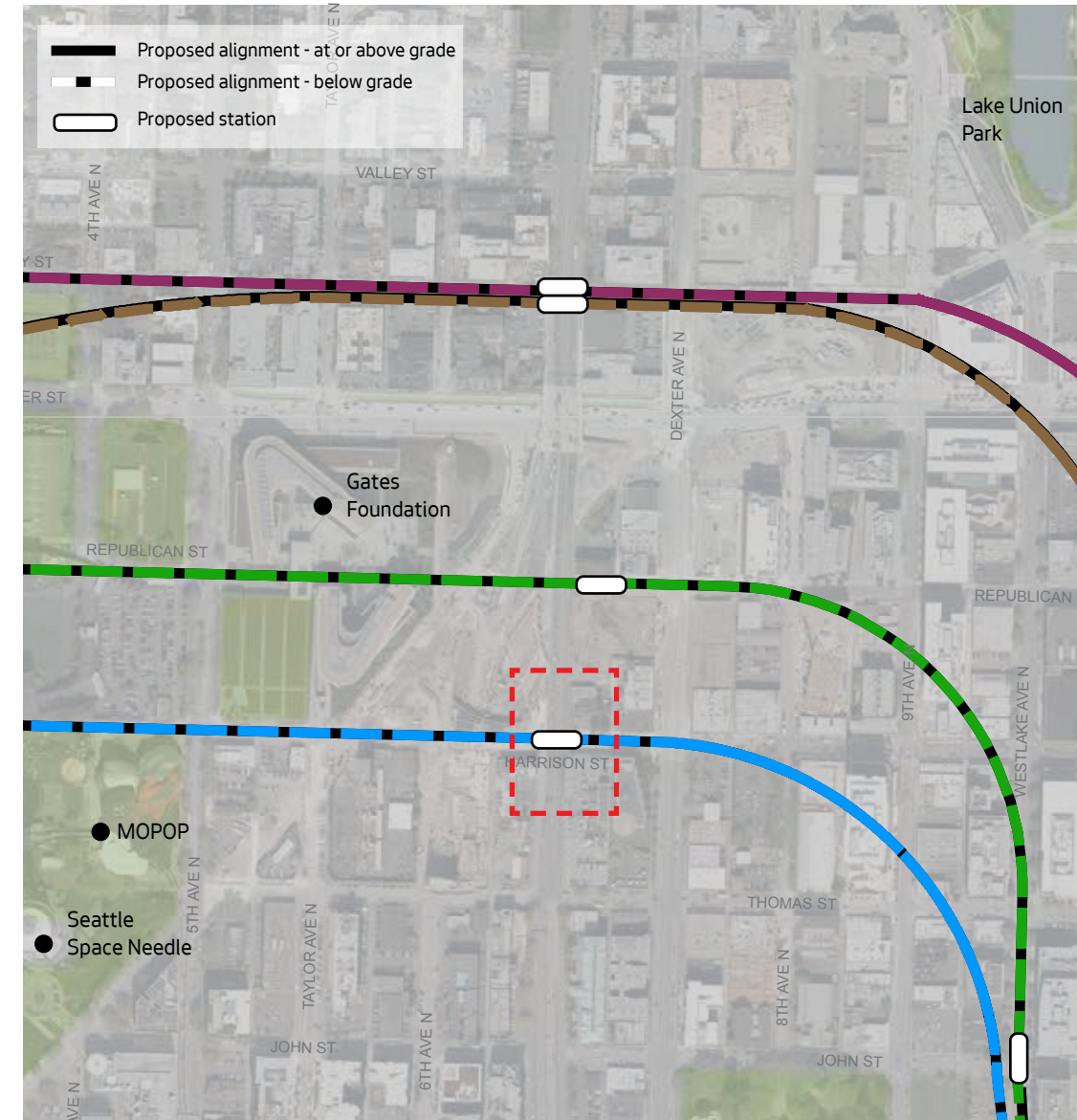
1. Underground at Harrison on the west side of Aurora Ave N

Reasons:

- City and state investments (North portal, reconnecting grid, etc) in this vicinity included generous design of right-of-way to accommodate Harrison as a transit street
- Zoning around Harrison would likely generate higher ridership

Recommendations:

- Provide east/west connectivity across SR 99 at Roy and other streets that will not be connected in the near future
- Study the additional complication and cost of running the tunnel between SLU Station and the Seattle Center Station diagonally instead of along just one road (mix and match)
- Provide and consider information on the future east west bus service along Harrison





Seattle Center Station

Study (in order of preference):

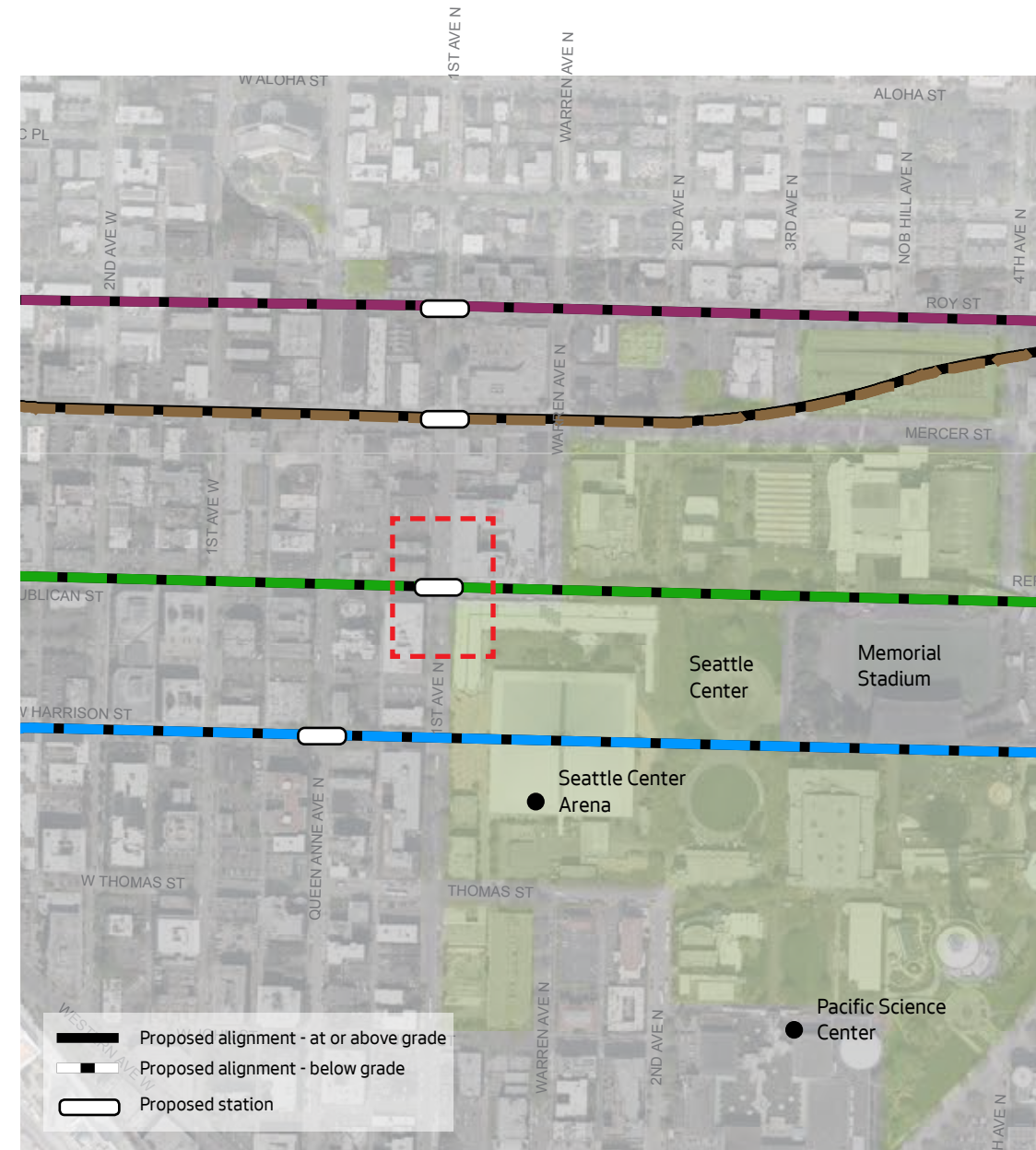
1. Underground at Republican and 1st Ave N
2. Underground at Roy

Reasons:

- Harrison Street alignment would require a deep tunnel that can result in a station location too far from Seattle Center and retail hub

Recommendations:

- Consider universal accessibility between the station and the places that people will be trying to reach by light rail. This includes sidewalk grades and street crossings.
- If considering a station at Roy, enhance pedestrian access across Mercer St.
- Do not allow large Seattle Center events to drive the location decision. Consider that an entrance too close to the Arena could pose crowd dispersal problems.



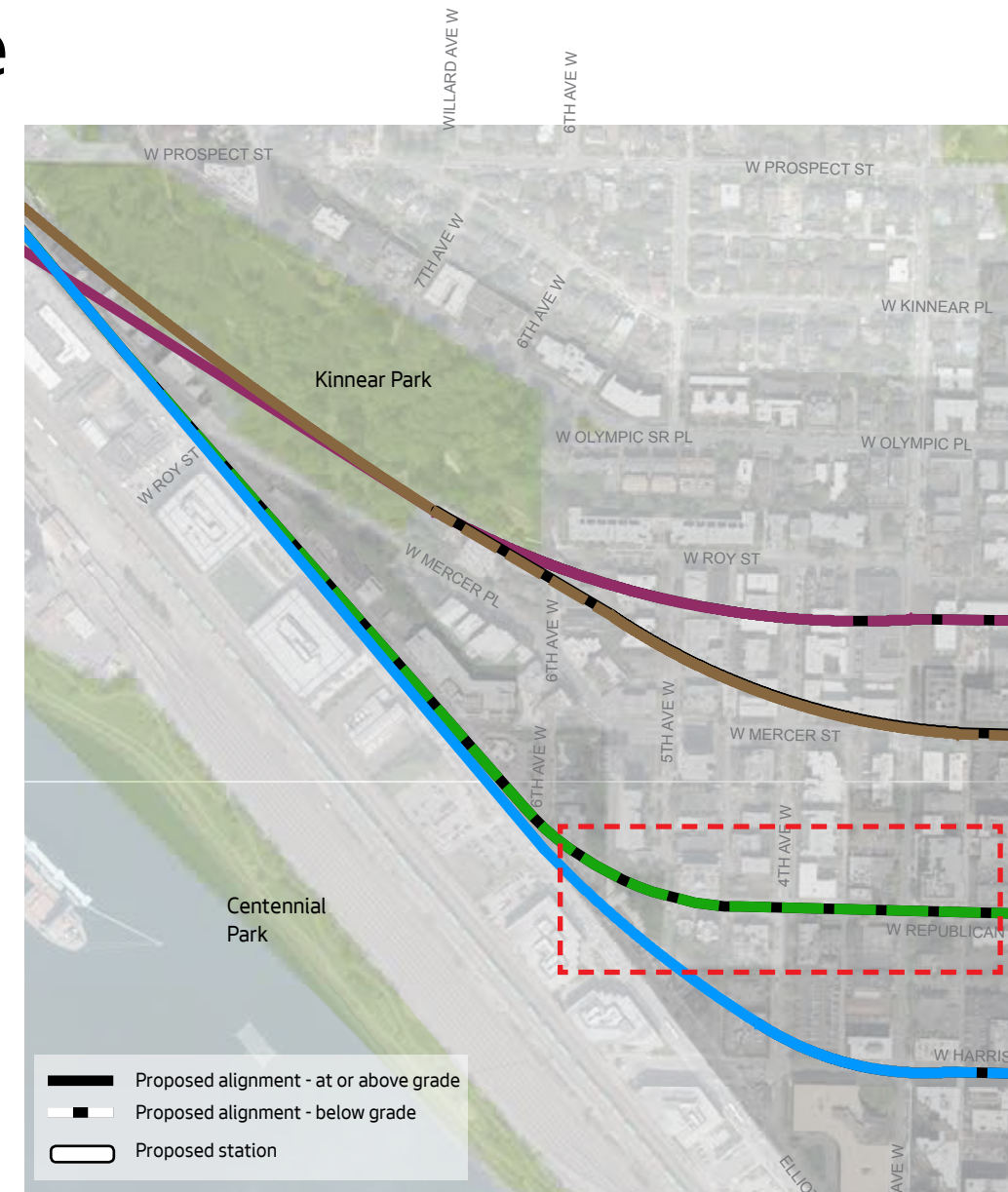


Seattle Center to Smith Cove Line

Study (in order of preference):

1. Tunnel under Republican and elevated along Elliott
2. All alternatives as needed to connect wherever the Seattle Center Station is located

- Need technical information from Sound Transit to gauge impacts of possible tunnel portal and guideway locations to buildings, park, and traffic





Smith Cove Station

Study, in order of preference:

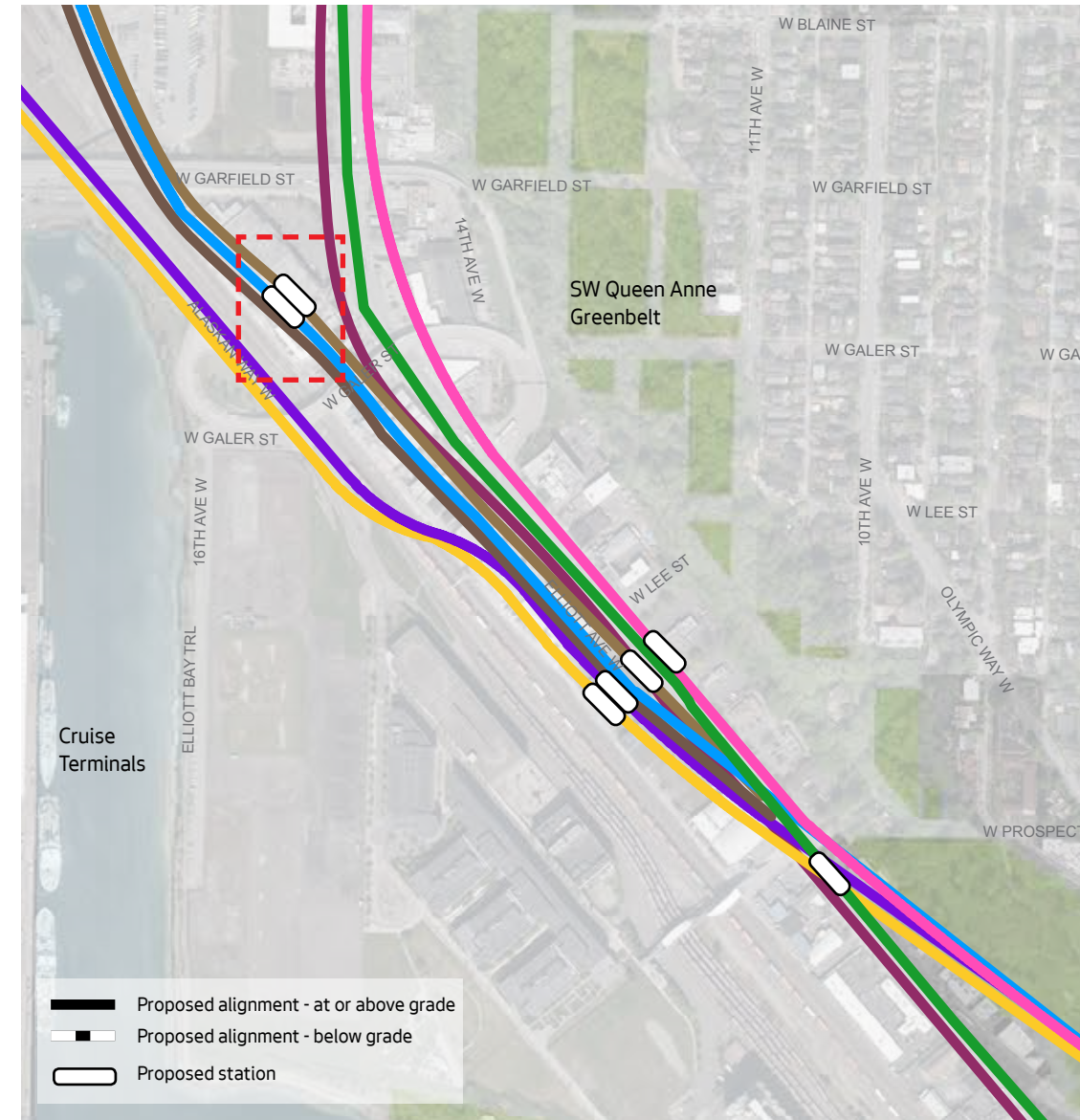
1. At grade at Alaskan Way W and North of W Galer St flyover
2. Above grade at Alaskan Way W and North of W Galer St flyover

Reasons:

- Opportunity to serve growing employment base and expanded tourism facilities
- Opportunities and likelihood of future residential and job density is higher to the north, including possible TOD at the Armory site

Recommendations:

- Locate and plan the station to serve the cruise ship terminals
- Connect the station to the bike network
- Improve non-motorized connections from the station to Smith Cove Park and Expedia. Provide maps and diagrams to illustrate how the station connects to these community assets.
- Locate station at grade so that the guideway can cross below the Magnolia Bridge
- Provide cost and visual analysis of alternatives for the line to cross below/above the Magnolia bridge. Include an alternative where the Magnolia bridge is removed.





Smith Cove to Salmon Bay Line

Study (in order of preference):

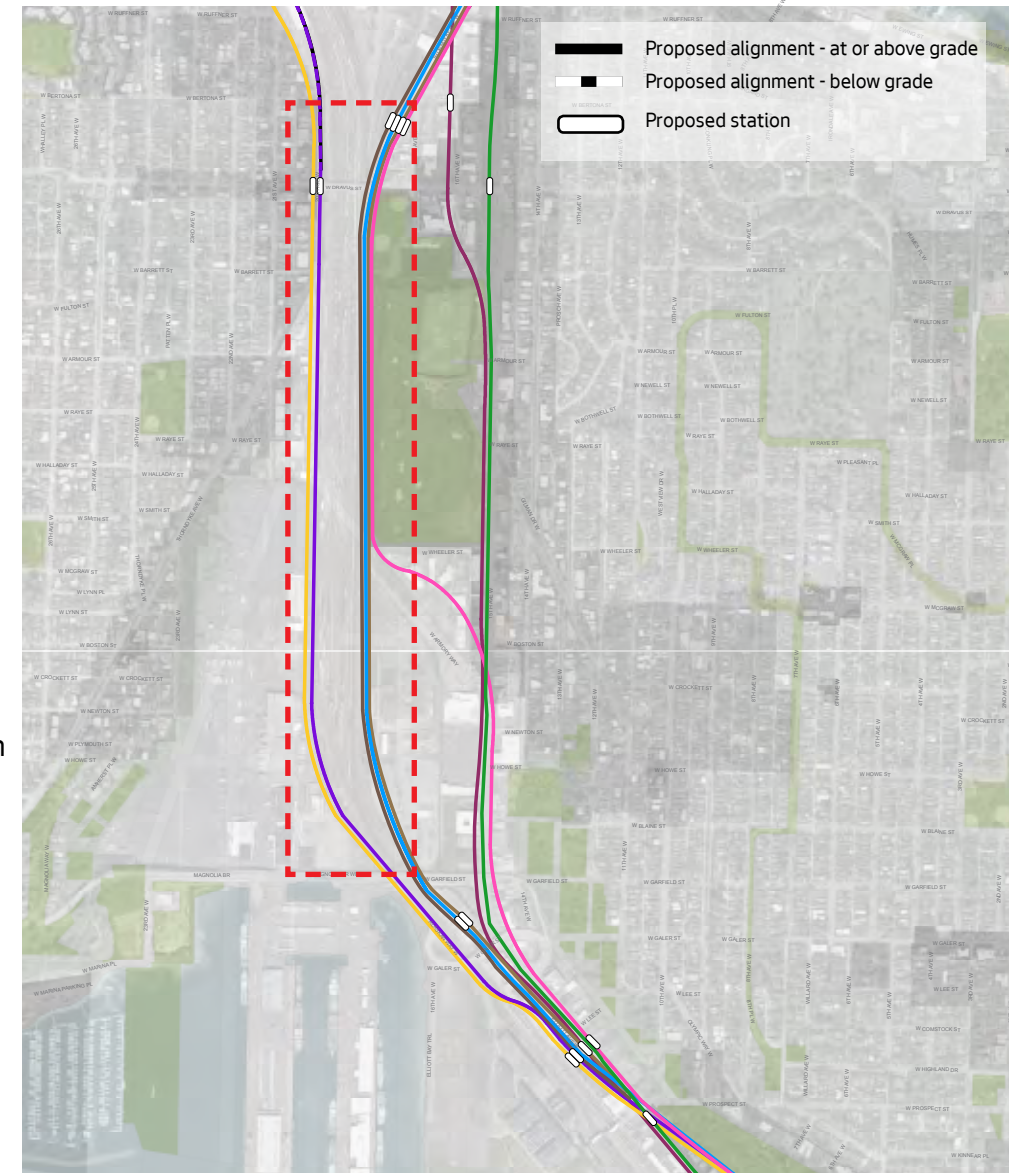
1. At grade, in a trench in or next to the BNSF right-of-way 
2. Elevated along the BNSF right-of-way

Reasons:

- 15th Avenue W option poses too many impacts on transportation network
- Fewer impacts by placing the line in the existing railroad right-of-way where surrounding areas are already impacted by trains

Recommendations:

- Study how the alignment will cross Magnolia Bridge
- Study placing the line at grade and/or in a trench along either side of the existing railroad right-of-way in part to reduce costs compared to an elevated guideway
- Provide grade separated crossings for east west cross streets
- Examine the possibility of making this a corridor for cyclists and pedestrians in addition to transit.
- Examine and update City plans for the non-motorized circulation network in this corridor.
- Do not postpone City decisions about the future of the Magnolia bridge because the opportunities and imperatives for both the Smith Cove Station, Dravus Station, and guideways north of the Smith Cove Station are impacted by these decisions.





Dravus Station

Study (in order of preference):

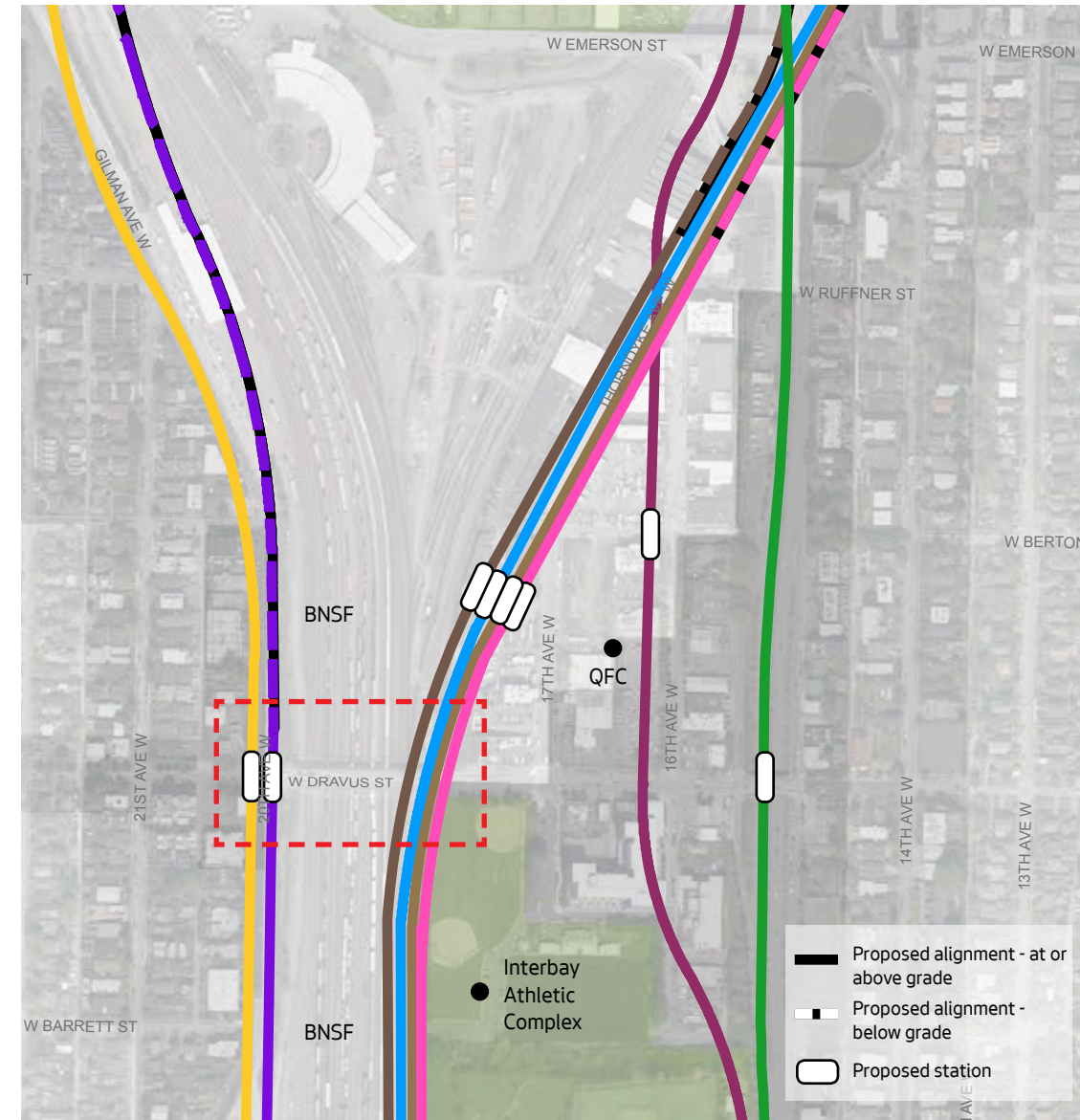
1. On Dravus in the BNSF right-of-way
2. On Dravus between BNSF ROW and 17th Ave W

Reason:

- Dravus St. provides the best access for all transit modes
- Corridor already includes rail activity

Recommendation

- Study locating the station in the railroad right-of-way in a trench below Dravus St. Explore combining the station with Dravus St. bridge
- Explore replacing the existing Dravus St. Bridge
- Explore possibility of creating multimodal connections on Dravus St.





Dravus to Ballard & Salmon Bay Crossing

Study (in order of preference):

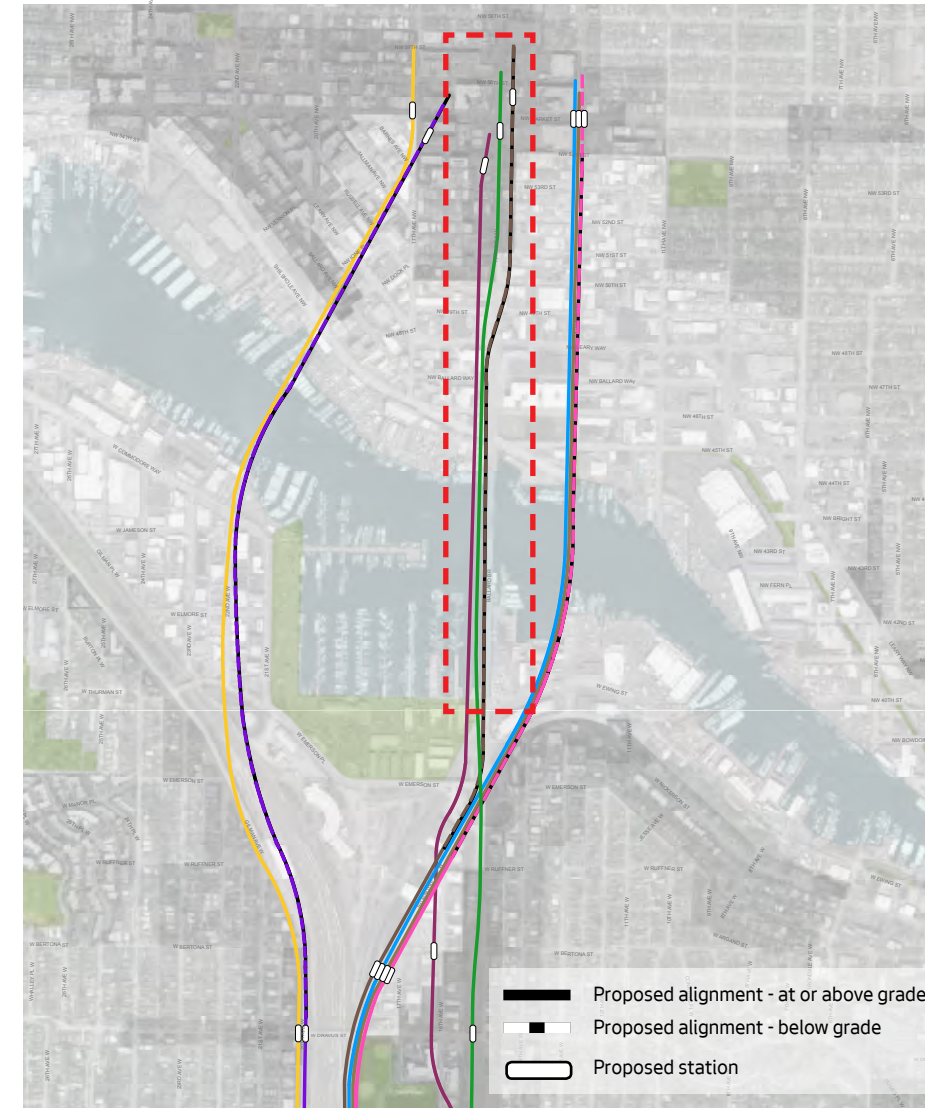
1. Tunnel from Dravus Station to Market & 15th with underground station ■
2. Tunnel from Dravus Station to Market & 17th with underground station ■
3. Elevated line from Dravus to 15th & 54th or 56th with a new, multi-modal, fixed bridge in the current Ballard Bridge alignment and station above or at grade (new bridge carries current Ballard Bridge traffic, light rail, and non-motorized modes) ■

Reasons:

- A movable bridge is the least desirable alternative because of impacts to traffic and vulnerability to system disruption
- 15th and Market Street provides the best location for future system expansion
- A tunnel in historic Ballard generally eliminates impacts on historic resources and neighborhood character

Recommendations:

- To maximize efficiency, control construction costs and reduce neighborhood impacts, Sound Transit and the City should explore the idea of replacing the Ballard Bridge with a new bridge that provides room for transit, autos and non-motorized
- Any bridge type in any location should provide multimodal transit and non-motorized facilities. The City should partner with Sound Transit in fully examining this idea.
- Any bridge type in any location should be complimentary to its surroundings and sensitive to its natural, cultural, and built context
- In the 15th Ave corridor, in a fixed or movable bridge scenario, study options for alignment that result in an at-grade station at Market
- If a movable bridge is pursued provide the most technically advanced bridge to avoid service disruption
- If a fixed bridge is pursued consider visual impacts where bridge aligns in Ballard





Ballard Station

Study (in order of preference):

1. An underground station at Market and 15th
2. An underground station at Market and 17th
3. An above grade station at 15th and either 54th or 56th
4. An above grade station at 15th and Market

Reasons:

- 15th and Market provides best opportunity for system expansion
- A below grade station reduces transportation system impacts and increases TOD potential.
- 14th Ave location is least desirable because:
 - distance from district core
 - poor location within the Urban Village
 - lack of development opportunities
 - it currently provides public water access
 - Impacts on maritime industrial base

Recommendations:

- Station should be on or within a block of Market St for orientation and multi-modal connections.
- Consider TOD development along 15th south of Market St. An integrated station would have less impact to streets and the pedestrian experience.
- Consider that Market and 15th is transforming from auto-oriented to transit and pedestrian oriented. Potential for contributing to changing the nature of this location.
- Provide pedestrian crossings over 15th at all intersections near the station.
- SDOT should be analyzing short, mid and long term impacts and plans for the street grid in this area.

