Washington State Department of Transportation

SR 520 BRIDGE REPLACEMENT AND HOV PROGRAM

MEETING SUMMARY
Montlake Project Signage Workgroup – Meeting #2

Wednesday, Dec. 13, 2023 | 2-4 p.m.
2345 Eastlake Avenue E., Seattle, WA 98102
Hybrid meeting format

Facilitator: Angie Thomson, Thomson Strategic

Speakers: Dave Becher, SR 520 Director of Construction
Todd Harrison, SR 520 Director of Project Development
David Goldberg, SR 520 Community Liaison and Ombudsman
Suryata Halim, SR 520 Disciplines Manager

Participants:

WSDOT – SR 520 Program
- Cassie Manetas (online)
- Chelsey Funis
- Tony Black

WSDOT – Northwest Region
- Christina Strand (online)

Seattle Department of Transportation (SDOT)
- Tom Le
- Ganth Lingam (online)
- Amanda Tse (online)

Seattle Design Commission (SDC)
- Valerie Kinast

U District Partnership
- Katy Ricchiuto

Washington Department of Archaeology and Historic Preservation (DAHP)
- Maureen Elenga

University of Washington (UW)
- Aaron Hoard

Friends of Seattle's Olmsted Parks (FSOP)
- Kyle Capizzi

Neighbor representatives
- Bruce Balick, Montlake
- Gayle Seely, Montlake
- Erin Baebler, Montlake
- Rachel Ben-Shumel, Montlake
- Michael VonKorff, Arboretum
- Peter Haley, Eastlake

Meeting materials (see Appendix A):
- Meeting agenda
- Signage examples & glossary of terms
- Web link to the Manual on Uniform Traffic Control Devices (MUTCD)
- List of ideas and technical team analysis for Sign Bridge #1
- Sign alternative drawings for Sign Bridge #1
- Current sign dimension for Sign Bridge #1

Welcome and re-introductions

Angie Thomson welcomed everyone to the meeting and did a round of re-introductions for participants. She refreshed the group on what was accomplished in the first workgroup meeting: goals and expectations for both WSDOT and the workgroup/community. She went over the decision-making process for how the group would come up with recommendations to share with the community and 43rd legislators.

Angie went through the full list of signage ideas provided by the community. Based on the previous meeting, the workgroup asked the technical team to focus their work on numbers 1-11 and 26 as those options were most consistent with the community's needs and priorities. The bulk of the meeting would be focused on the technical team's work and their assessment of each sign location.

Angie noted that we will start the discussion with sign location #1 and the group could take as much time as needed to get through it. If there's consensus about the recommendations for location #1, we'll move on to the others, but this meeting is prepared to focus on #1.

Glossary and terms

Todd Harrison went over the sign structure examples and glossary handout provided to the workgroup prior to the meeting (see images below or page 14 and 15 of Appendix A). The handout included visuals of some of the terminology the technical team would be using during today's meeting.

Workgroup member question: What is the truss part of the "cantilever truss support system"? Why are these types of structures more prone to failing?
Answer: The truss is basically like a metal box or frame that the signs are attached to. You occasionally see some of those types of structures on I-5. There are a lot of different parts to the structure and connection points that tend to wear out or get damaged over time. WSDOT commonly used this type of structure in the 1960s, including on SR 520, but we've had to take them down over the years for maintenance reasons.

Workgroup member question: Can you compare the signal mast arm to cantilever support? The cantilever looks like it's a heavier structure.
Answer: Yes, the cantilever is a heavier structure and is used to carry heavier signs. The cantilever is also large because it has to support itself too, in addition to carrying heavier signs. A cantilever could be even heavier than sign bridges.

Manual on Uniform Traffic Control Devices

Suryata Halim went over the Manual on Uniform Traffic Control Devices (MUTCD), which is the guiding document that traffic engineers need to follow when developing signage plans. The MUTCD defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public travel. The state of Washington adopted into the law the MUTC standards as guiding traffic control standards.

Suryata mentioned that WSDOT has to follow MUTCD standards when developing signs, such as text size and spacing, and the size and color of the symbols. These elements are all guided by MUTCD. Another important note: because of the number of lanes and the complexity of the Montlake Boulevard/SR 520 interchange, the standards suggest overhead signs instead of signs on the side of the road.

Workgroup member question: You mentioned some of these things are state law and that would be important to know. Second, does the manual differentiate between highways and local roads?
Answer: Yes, the sizes mentioned in the manual are what is "minimally acceptable" for the area. But there is a different set of standards for local roads versus highways. The state law adopts this as a guiding document, but the document itself is not law.

Workgroup member (and Friends of Seattle's Olmsted Parks (FSOP) representative) question: In terms of criteria, what specifically elevates this location to being considered complex? Is it because of the width of the roadway and the number of lanes or is it because of the interchange?
Answer: All the above. When the intersection/interchange is complex, MUTCD leans towards overhead signing. The new Montlake lid has nine travel lanes and a lot of different movements to convey. On top of that, we're adding new HOV on- and off-ramps in the middle of the lid. This specific situation really guides the need for all signs to be overhead.

Workgroup member question: Does SDOT also use MUTCD when designing city signage?
Answer from SDOT: Yes, we do.

Sign Bridge #1: Technical team review of options – feasibility & regulatory compliance

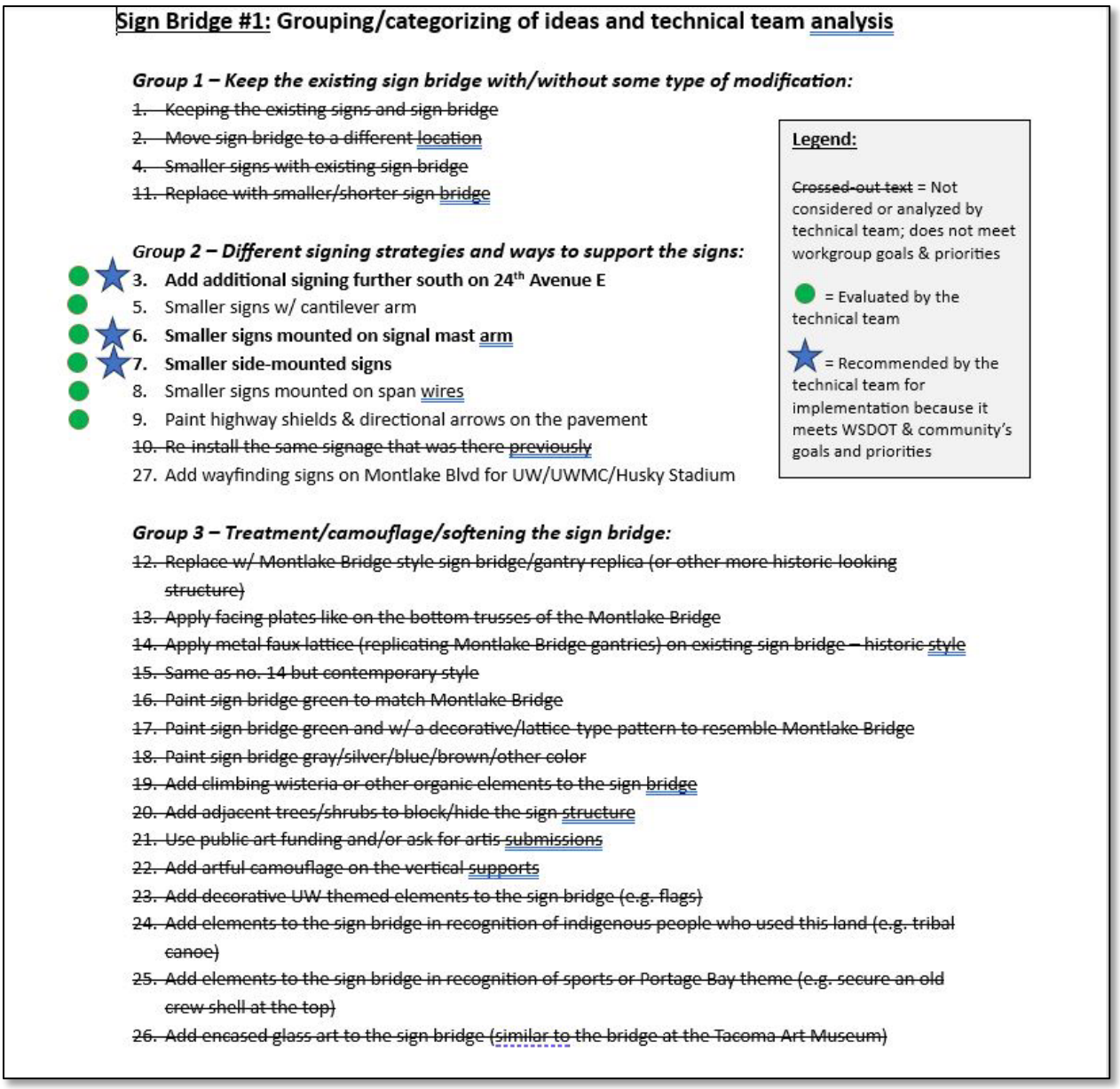
Angie passed out a document that listed the 27 signage ideas provided by the community (either via the community survey, the community meeting or in an email). The 27 items were broken down into the three previously defined categories from workgroup meeting #1 (see image below or page 17 of Appendix A):

- Group 1: Keep the existing sign bridge with/without some type of modification.
- Group 2: Use different signing strategies and ways to support the signs.
- Group 3: Apply treatment/camouflage/softening the look of the sign bridge.

Todd walked through the document and explained the three symbols attached to each of the 27 items:

- Ideas that are ~~crossed out~~ indicate they were not considered or analyzed by the technical team because they did not meet the goals or priorities of the workgroup.
    - Todd noted that, for example, the ideas in Group 1 focus on keeping the sign bridge up, so the technical team crossed those ideas out. The technical team also did not consider the ideas in Group 3 for similar reasons.
- Ideas with a green dot indicate they were evaluated by the technical team.
    - Todd noted that while all the ideas with green dots were evaluated for sign location #1, some were technically feasible while others had significant problems.
- Ideas with a star indicate that the idea or strategy is recommended by the technical team because it meets the goals and priorities of both WSDOT and the community.
    - Todd noted that the ideas marked with stars in the document are not decisions. The stars are meant to show what alternatives are preferred and recommended by the technical team.

Todd explained that #27 is not crossed out nor has a symbol because it's related to additional way-finding signage for UW/Husky Stadium/UWMC. This idea is not specific to the sign bridges per se, but the team wanted to recognize the comment and have the group discuss. For northbound drivers, there is not a lot of signage for UW/UWMC in the current signage plans. WSDOT is open to hearing the group's thoughts about adding that signage during this process.



Sign Bridge #1: Grouping/categorizing of ideas and technical team analysis

Group 1 – Keep the existing sign bridge with/without some type of modification:

~~1. Keeping the existing signs and sign bridge~~
~~2. Move sign bridge to a different location~~
~~4. Smaller signs with existing sign bridge~~
~~11. Replace with smaller/shorter sign bridge~~

Group 2 – Different signing strategies and ways to support the signs:

3. Add additional signing further south on 24th Avenue E
5. Smaller signs w/ cantilever arm
6. Smaller signs mounted on signal mast arm
7. Smaller side-mounted signs
8. Smaller signs mounted on span wires
9. Paint highway shields & directional arrows on the pavement
~~10. Re-install the same signage that was there previously~~
27. Add wayfinding signs on Montlake Blvd for UW/UWMC/Husky Stadium

Legend:

~~Crossed-out text~~ = Not considered or analyzed by technical team; does not meet workgroup goals & priorities

● = Evaluated by the technical team

★ = Recommended by the technical team for implementation because it meets WSDOT & community's goals and priorities

Group 3 – Treatment/camouflage/softening the sign bridge:

~~12. Replace w/ Montlake Bridge style sign bridge/gantry replica (or other more historic looking structure)~~
~~13. Apply facing plates like on the bottom trusses of the Montlake Bridge~~
~~14. Apply metal faux lattice (replicating Montlake Bridge gantries) on existing sign bridge – historic style~~
~~15. Same as no. 14 but contemporary style~~
~~16. Paint sign bridge green to match Montlake Bridge~~
~~17. Paint sign bridge green and w/ a decorative/lattice-type pattern to resemble Montlake Bridge~~
~~18. Paint sign bridge gray/silver/blue/brown/other color~~
~~19. Add climbing wisteria or other organic elements to the sign bridge~~
~~20. Add adjacent trees/shrubs to block/hide the sign structure~~
~~21. Use public art funding and/or ask for artis submissions~~
~~22. Add artful camouflage on the vertical supports~~
~~23. Add decorative UW-themed elements to the sign bridge (e.g. flags)~~
~~24. Add elements to the sign bridge in recognition of indigenous people who used this land (e.g. tribal canoe)~~
~~25. Add elements to the sign bridge in recognition of sports or Portage Bay theme (e.g. secure an old crew shell at the top)~~
~~26. Add encased glass art to the sign bridge (similar to the bridge at the Tacoma Art Museum)~~

Todd reminded the group where sign bridge #1 is located (south of Lake Washington Boulevard and SR 520), as well as sign bridge #2 (in the middle of the new Montlake lid) and the uninstalled sign bridge #3 (near E Hamlin Street). David Goldberg suggested the group refer to them as "sign locations" since some of the alternatives do not involve a sign bridge. The group agreed with this suggestion.

Workgroup member question: Where will the bus stop on southbound Montlake Boulevard be located?
Answer: The previous bus stop for southbound Montlake Boulevard was located further north over SR 520. The new location will be further south, just south of sign location #1. The bus stop will be a standard in-lane bus stop without a bus pull in lane.

Workgroup member question: What will you do with the old Montlake Market property?
Answer: WSDOT has committed to disposing of the property once the Montlake Project is complete. In 2019, the 43rd District legislators (Sen. Pedersen, Rep. Macri and former Speaker Chopp) added language to the 2019-2021 transportation budget that required WSDOT to sell all surplus market/gas station property not used for transportation improvements once the Montlake Project is complete.

Workgroup member question: Do the options for sign location #1 include keeping the sign bridge up?

Answer: No, the recommended alternatives include a different type of support structure other than the sign bridge. However, as a reminder, the sign bridges will not be taken down in the interim between now and whenever the recommended alternatives can be implemented.

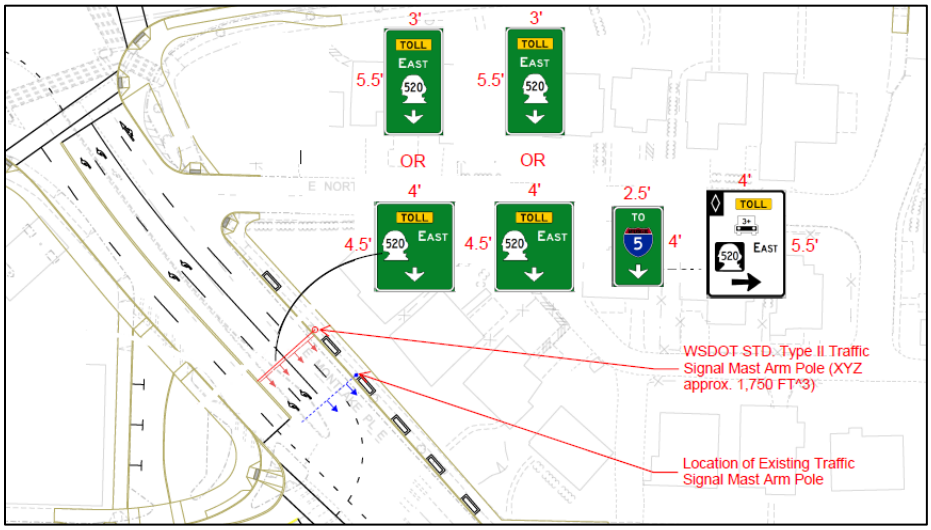
Review of options for sign location #1

Suryata walked through the two recommended options currently on the table for sign location #1.

***OPTION 1:* (#3) Add additional signing further south on 24th Avenue E (overhead on a signal mast arm) | (#6) Smaller signs mounted on a signal mast arm**

Suryata showed a side-by-side of the original sign bridge plan versus this new Option 1. When the technical team was looking at this location, the first priority was to reduce the size of the signs, and then once the sign size was determined, the team could figure out how to actually support the signs.

The technical team looked at the minimum text size allowed by MUTCD for a location of this nature. For example, the new sign size options are 5.5' x 3' or 4.5' x 4' (versus the original 17' x 9'). The technical team pushed down the text size to six inches for the capital letters and 4.5 inches for the lower-case letters. The technical team recommend the 4.5' x 4' signs which provide more of a balanced look and shorter signs. In trying to maximize the space used on the signs, the team also split the "Eastbound SR 520" sign into two, using two identical signs versus one larger one. Suryata noted there would be two identical signs for this movement because there are two left turn lanes for drivers and the arrows need to be over the lanes (see image below). The new signs would be in a similar location to where sign bridge #1 exists today. It would still be located south of E North Street and Lake Washington Boulevard.



As a result of reducing the size of the signs, additional advance signs at 24th Avenue East would be needed to give drivers a heads up before they get to the East Roanoke Street intersection. For this first option, the advance signs would be placed overhead on a signal mast arm (see image below).

Workgroup member question: Is there a problem with moving the sign bridge further north out of the neighborhood?
Answer: Yes, because we need people who are turning left onto eastbound SR 520 to see the signs before they approach those turn lanes. The signs with the newly reduced text size would have less legibility distance. As a reminder, MUTCD guidance is 30 feet of legibility distance for every one inch of text height. There are also issues with moving this sign structure elsewhere due to foundation/ground issues and conflicts with underground utilities. Seattle Public Utilities (SPU) has a large water main that runs along Montlake Boulevard. This is what led the contractor to put the original sign bridge where they did.

Workgroup member question: So, there's no way to move the sign bridge further north because of the underground utilities? Even moving it 10 feet would make a difference so it's not in front of someone's home.
Answer: We need the signs to be visible enough for drivers approaching the intersection and we need the signs to be south of E North Street. However, the technical team will look into the possibility of moving the sign structure at location #1 further north in the order of 10 feet or so.

Workgroup member question: Is there an option for the signs to be placed on a cantilever arm and for the cantilever to be installed on the other side (the west side) of Montlake Boulevard?
Answer: It would be too difficult to have the sign foundation on the opposite side of the street because the arm of the structure would need to span not only the southbound lanes of traffic, but the northbound lanes as well. The signage would be too heavy, so it is not structurally feasible.

Workgroup member question: Have you considered putting both the signals and signs on the same signal mast arm?
Answer: Yes. Putting the signs on the existing signal mast arms with the traffic signals poses spacing issues. Even though we have scaled down the size of the signs, trying to fit the four signs and the three traffic lights all onto a single mast arm is too much. Additionally, the arrows – which must be centered over the lanes – would compete with the signal's placement. And the location of the signals is not where the signs need to be along the roadway. Last, there are also weight concerns with having all that infrastructure on one mast arm.

Workgroup member question: What other signs are going to be along Montlake Boulevard? We heard someone from Graham say there is a lot of signage going up.
Answer: Yes, there are a number of other signs such as speed signs, no parking signs, etc. that will be installed in addition to the directional signs. For the next meeting we'll share the signage plans which show all the signs that will be installed along Montlake Boulevard.

Workgroup member question: In the spirit of eliminating clutter along Montlake Boulevard, could you mount the advance signs on an existing pole on the east side of the road?

Answer: There aren't a lot of poles along this section of roadway. There is one existing pole, but it isn't in the correct location for the advance signs. However, we'll go back and check if there is an opportunity for this suggestion for our next workgroup meeting.

<u>OPTION 2</u>: (#3) Add additional signing further south on 24th Avenue E (side mounted signs on the side of the road) | (#6) Smaller signs mounted on a signal mast arm

Suryata described Option 2 for sign location #1. Option 2 is the same as Option 1 in that it includes the main signs at East Roanoke Street on a new signal mast arm. However, the advance signs at 24th Avenue East would be mounted on a pole on the side of the road (in the planting strip) instead of overhead on a mast arm. This advance signage would take drivers a little bit longer to process because the signs are combined, instead of over the lanes (see image below).

Additional context about other signage alternatives

#8 Smaller signs mounted on span wires
Suryata noted that span wires aren't a feasible alternative for similar reasons as the other options. Specifically the signs are too big and too heavy to be supported by a span wire. Signs on span wires are usually very small, or if the signs are large, there is only one on the wire. Additionally, span wires have a lot of maintenance and weather issues (e.g. windstorms can knock the signs out of place).

#9 Paint highway shields and directional arrows on the pavement
Suryata noted that painted shields on the pavement are used for "supplemental signing" and as a traffic engineer you wouldn't prioritize this type of signage over other more practical solutions. The paint looks nice for the first few months and then it fades and often isn't maintained well.

Workgroup member question: Would painting shields on the roadway allow you to take signs away?
Answer from SDOT: No, pavement markings are supplemental. We would need to order custom sign markings which requires a lot of lead time, and we don't rely on these markings in place of signs.

Workgroup member question: Can you just put two arrows on one sign for the drivers turning left onto eastbound SR 520?

Answer: We're required to have the arrows directly over the travel lanes. Since that's the requirement, if we combined the arrows onto one sign, the sign would need to be larger and have more green space. It's more efficient to separate the signs into two identical signs.

Sign Bridge 1: Group discussion & consensus

Angie invited the workgroup to raise questions about what has been discussed so far.

Workgroup member question: Is there a difference in the look of the base of the signal mast arm foundation versus the sign bridge foundation?
Answer: Yes. The base for the mast arm is smaller than the base for the sign bridge. We will bring a comparison drawing to the next workgroup meeting showing the dimensions of both foundations.

Workgroup member question: Is there a difference in the height of the mast arm versus the sign bridge?
Answer from SDOT: Yes, the sign bridge is slightly taller than the signal mast arm but they're similar in height. WSDOT will share the height of both structures at the next meeting.

Workgroup member question: What is the current height of the trolley wires? Do the signs need to be above the trolley wires?
Answer: The trolley wires were removed for construction. When they're reinstalled, there will be 18.9 feet of clearance for the trolley wires. Yes, the signs do need to be above the trolley wires.

Group consensus

Angie asked the group members their stance on the two options discussed for sign location #1. She reminded participants that there are three cards: green = approved/can live with it, yellow = neutral/needs more discussion, red = no/disagree. Each workgroup member needs to vote. WSDOT and SDOT group members do not vote.

Angie asked the group if they were ok with the smaller signs, knowing it will go from three large signs to four smaller ones? The workgroup all raised green cards (approved).

Angie asked the group if they were ok with the shift from signs on the sign bridge to signs on a signal mast arm. The workgroup all raised green cards (approved).

Angie asked the group if they were ok with the advance signing at 24th Avenue East – either mounted on a pole or a signal mast arm. A majority of the workgroup raised green cards (approved), while there were at least two yellow cards (neutral/need more discussion).

Workgroup member question: Is having the additional advance signing required to have the smaller signs near East Roanoke Street?
Answer: Yes.

Workgroup member comment: The advance signing that is mounted on a pole and "stacks" the arrow directions vertically is logically inconsistent.

Additional discussion

Workgroup members made the following comments during the discussion around use of a signal mast arm (over roadway) for the advance signage or using a pole/side mounted sign on the side of the roadway.

Workgroup member comment: The more things look like a freeway, the more people will treat it like a freeway and a sign bridge suggests that.
Workgroup member comment: I feel like a 6-foot sign on a post may be larger than it seems in the picture here. I think it's more important that neighbors walking on the sidewalk in this area are comfortable and don't have to look at giant signs next to the sidewalk.

Workgroup member comment: The signal mast arm puts the non-human scale things into the non-human scale area, which is the roadway, versus the human side (e.g., in the sidewalk).

Workgroup member question: I'm wondering if it's better to have three poles to have even smaller signs? Having a huge 6-foot sign on the sidewalk seems huge.

Workgroup member comment/request: It would be helpful if we could see scaled pictures of what the mast arm signs and the pole-mounted signs would look like.
Answer: We can bring those graphics to the next workgroup meeting for discussion.

Workgroup member question: Can you duplicate the advance signs at 24th Avenue East further south so that the signs at East Roanoke Street can be even smaller?
Answer: No. The signs have been minimized as much as they can be per MUTCD. As drivers approach East Roanoke Street, the roadway goes from two lanes to four lanes so it's important for the signs to communicate the right thing at the right place. Additionally, if you start signing too far ahead (e.g., too early), people forget or don't pay attention.

Workgroup member question: For clarification, where will the 10-foot sidewalks be located?
Answer: The sidewalks on the west side of Montlake Boulevard near the new Montlake Lid will be 10 feet wide. The sidewalk near 24th Avenue East where the advance signing is being proposed would remain as is because that location is outside the Montlake Project area.

Discussion items for workgroup meeting #3

Angie noted the workgroup seems in lockstep about the smaller size options. However, some discussion is needed at the next workgroup meeting to find consensus on the type of structure used for the advance signs at 24th Avenue East.

The group also agreed to discuss #27*: Additional signage for UW/UWMC/Husky Stadium*. Katy Ricchiuto requested U-District signage be added to the discussion. The group also wanted to add Historical Neighborhood signage to the discussion. Last the workgroup asked for a scaled graphic for the advance sign support options to review at the next meeting.

Interim signage plan

Dave Becher reviewed the plan for opening traffic on Montlake Boulevard in early 2024. He shared that WSDOT plans to open the dual left turn lanes from northbound Montlake Boulevard onto westbound SR 520 in January. Drivers will no longer need to do the U-turn at East Hamlin Street to get onto westbound SR 520. This should improve traffic flow. That said, WSDOT needs to make sure the signage is clear when we open this new turning movement.

Dave noted that some of the interim signing can be side-mounted, but we may need to put smaller signs on sign bridge #2, and possibly on sign bridge #1, so people know where they are going. Dave reiterated that this will be a temporary signage setup for this area while the workgroup figures out the long-term solution.

Workgroup member comment: I think it will be important to communicate to the Montlake neighborhood that this will be an interim setup.
Answer: We'll share that information in our weekly newsletters. We're also looking to you as workgroup members and neighborhood representatives to share this information with your community and neighbors.

Workgroup member question: To clarify, you may need to put signs on sign bridge #2 [over SR 520] but not sign bridge #1? [south of Lake Washington Boulevard]?
Answer: We think we can mount some of the signs on the side of the road near sign bridge #1 but we're still working on it. We may need to use sign bridge #1 for the interim signs.

Workgroup member question: How long would you expect the interim signage to be in place before a permanent solution can be implemented?
Answer: It could be up to a year. It depends on the workgroup's final recommendations. Right now, fabrication of signal mast arms are running 8-10 months to build.

Next steps and timeline

The next meeting is scheduled for Wednesday, January 10 from 2 to 4 p.m.

During the next meeting, the group will look to make final recommendations for sign location #1 and then turn our attention to working through sign locations #2 and #3.

Appendix A

Montlake Project
Signage Workgroup Meeting #2

Materials packet

WSDOT

SR 520 BRIDGE REPLACEMENT AND HOV PROGRAM

AGENDA

Montlake Signage Workgroup Meeting #2
Wednesday, December 13, 2023 – 2-4 p.m.
2345 Eastlake Avenue E, Seattle, WA 98102

Purpose: Reviewing Technical Team analysis and building to consensus for each of the sign bridge locations

Time	Topic	Lead	Materials
2:00 p.m. (15 min)	**Welcome, agenda overview & meeting recap** • Agenda review • Quick re-introductions • Summary of where we ended last time	Angie Thomson	Handout: Meeting agenda
2:15 p.m. (15 min)	**Visual examples and review of terms**	Todd Harrison	Handout: Signage examples & glossary of terms
2:30 p.m. (10 min)	**Overview of the Manual on Uniform Traffic Control Devices (MUTCD)** • What is it • Why is WSDOT using it is as the standard • Technical considerations from MUTCD (text size, spacing, color, overhead placement)	Suryata Halim	Handout: Web link to MUTCD with QR code
2:40 p.m. (30 min)	**Sign Bridge 1: Technical team review of options - feasibility & regulatory compliance**	Todd Harrison Suryata Halim	In-meeting materials: - List of ideas and technical team analysis - Sign alternative drawings - Current sign dimension visualizations
3:10 p.m. (30 min)	**Sign Bridge 1: Group discussion & consensus** • Where are we after hearing this information? • Fill in the matrix for the workgroup • Prioritize remaining options/adjustment for further investigation and discussion	Angie Thomson	
As time allows	**Sign Bridge 2: Technical team review of options**		
As time allows	**Sign Bridge 2: Group discussion & consensus**		
As time allows	**Sign Bridge 3: Technical team review of options**		
As time allows	**Sign Bridge 3: Group discussion & consensus**		
3:40 p.m. (10 min)	**Interim signage plan update**	Dave Becher	
3:50 p.m. (10 min)	**Review next steps and timeline** ***NOTE: Cars parked on the east side of Eastlake Ave need to be moved by 4 p.m.***	Angie Thomson	
4:00 p.m.	**Adjourn**		

WSDOT

SR 520 BRIDGE REPLACEMENT AND HOV PROGRAM

Attendees

Facilitator

- ☐ Angie Thomson – *Founder of Thomson Strategic*

Community representatives

- ☐ Bruce Balick, Montlake
- ☐ Gayle Seely, Montlake
- ☐ Erin Baebler, Montlake
- ☐ Steve Beaudry, Montlake
- ☐ Rachel Ben-Shmuel, Montlake
- ☐ Michael VonKorff, Arboretum
- ☐ Peter Haley, Eastlake

WSDOT – SR 520 Program

- ☐ Cassandra Manetas – *WSDOT Cultural Resources Lead*
- ☐ Chelsey Funis – *SR 520 Program Communications*
- ☐ Dave Becher – *SR 520 Program Director of Construction*
- ☐ David Goldberg – *SR 520 Program Community Liaison and Ombudsman*
- ☐ Suryata Halim – *SR 520 Program Disciplines Manager*
- ☐ Todd Harrison – *SR 520 Program Director of Project Development*
- ☐ Tony Black – *SR 520 Program Communications*

WSDOT – Northwest Region

- ☐ Christina Strand – *Area Traffic Engineer, King County*

WSDOT – Headquarters Traffic

- ☐ Trevor McCain – *Transportation Signing Specialist*

Seattle Department of Transportation (SDOT)

- ☐ Amanda Tse – *Interagency Project Manager*
- ☐ Ganth Lingam – *Interagency Program Manager*
- ☐ Tom Le – *Supervisor, Design and Layout, Transportation Operations Division*

Seattle Office of Planning and Community Development (OPCD)

- ☐ Lyle Bicknell – *Principal Urban Designer*

Seattle Design Commission (SDC)

- ☐ Valerie Kinast – *Strategic Advisor*

WA Department of Archaeology and Historic Preservation (DAHP)

- ☐ Maureen Elenga – *Architectural Historian*

Friends of Seattle's Olmsted Parks (FSOP)

- Anne Knight – *Advisory Board Member*
- Kyle Capizzi – *Board Member*

University of Washington (UW)

- ☐ Aaron Hoard – *Interim Director, Office of Regional & Community Relations*

The U District Partnership

- ☐ Katy Ricchiuto – *Urban Vitality Manager*

Sign structure examples and glossary

Sign bridge: Structure supporting signs spanning across a roadway. *Pictured above: Sign bridge over Lake Washington Boulevard in Bellevue.*

Use of existing structures (e.g., bridges and poles): Existing infrastructure used to hang signage. In the left-hand example above, the lattice-looking structure is part of the overall bridge design and serves multiple purposes in addition to supporting signage. *Pictured above (left to right): Sign mounted on the Montlake Cut Bridge structure which also serves as trolley wire support; sign on a light pole on Brooklyn Ave NE in Seattle.*

Painted directional shields on pavement: Navigational symbols or markings painted directly onto road surfaces. They serve as supplemental information for overhead and side-mounted signs, offering additional guidance to drivers. *Pictured above: Painted directional shields on pavement on NE 8th Street in Bellevue.*

Cantilever arm: Single beam or support that extends horizontally from a fixed point without additional support underneath, allowing it to hold weight or carry loads (such as signs) at its free end. *Pictured above: Cantilever arm on NE 8th Street in Bellevue.*

A.) Side-mounted sign: Signs attached or affixed to posts positioned alongside the road. *Pictured above on the left: Side-mounted signs on Montlake Boulevard in Seattle.*

B.) Cantilever truss support system: Framework of interconnected members to provide support for extended structures (such as signs). Note that WSDOT has largely phased out of the use of truss structures due to their high maintenance costs and increased risk of failure. *Pictured above on the right: Cantilever truss support system on Montlake Boulevard in Seattle from 2019.*

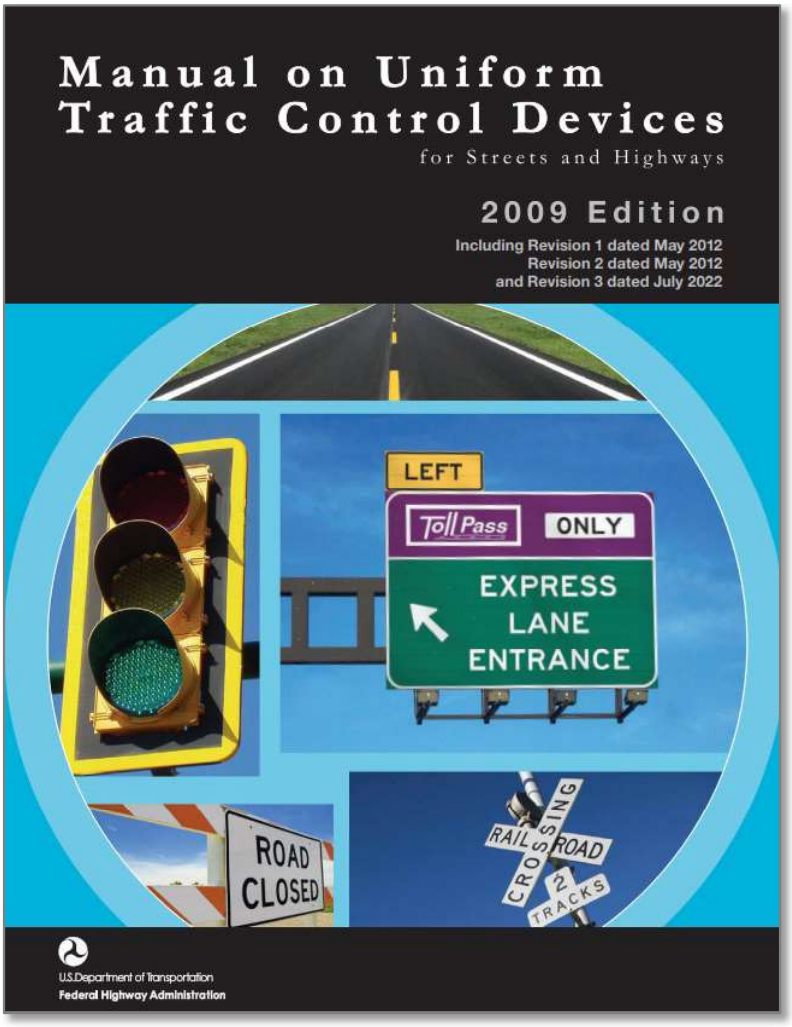
Signal mast arm: Horizontal arm bolted to vertical pole that supports traffic signals, signage, or other equipment used over traffic at intersections and along roadways. *Pictured above (left to right): Signal mast arm with signs only on Mercer St. in Seattle; signal mast arm supporting signals and signs on Grady Way in Seattle.*

Span wire system: Set of cables or wires used to suspend traffic signals, signs, or equipment over roads or intersections. *Pictured above (left to right): Span wire system over Montlake Boulevard; span wire system over 15th Ave NE in Seattle.*

U.S. Department of Transportation
Federal Highway Administration (FHWA)
Manual on Uniform Traffic Control Devices (MUTCD)

The MUTCD defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public travel.

The state of Washington adopted MUTCD standards into state law – the Revised Code of Washington (RCW). WSDOT aims to meet or exceed the MUTCD standards when designing signage within state right of way.



Montlake Project signage ideas

Feedback received via email, the community survey and/or the community meeting on 10/26/2023
Ideas reorganized into groups by the workgroup on 11/29/2023

Sign Bridge #1: Grouping/categorizing of ideas and technical team analysis

Group 1 – Keep the existing sign bridge with/without some type of modification:

~~1. Keeping the existing signs and sign bridge~~
~~2. Move sign bridge to a different location~~
~~4. Smaller signs with existing sign bridge~~
~~11. Replace with smaller/shorter sign bridge~~

Legend:

~~Crossed-out text~~ = Not considered or analyzed by technical team; does not meet workgroup goals & priorities

● = Evaluated by the technical team

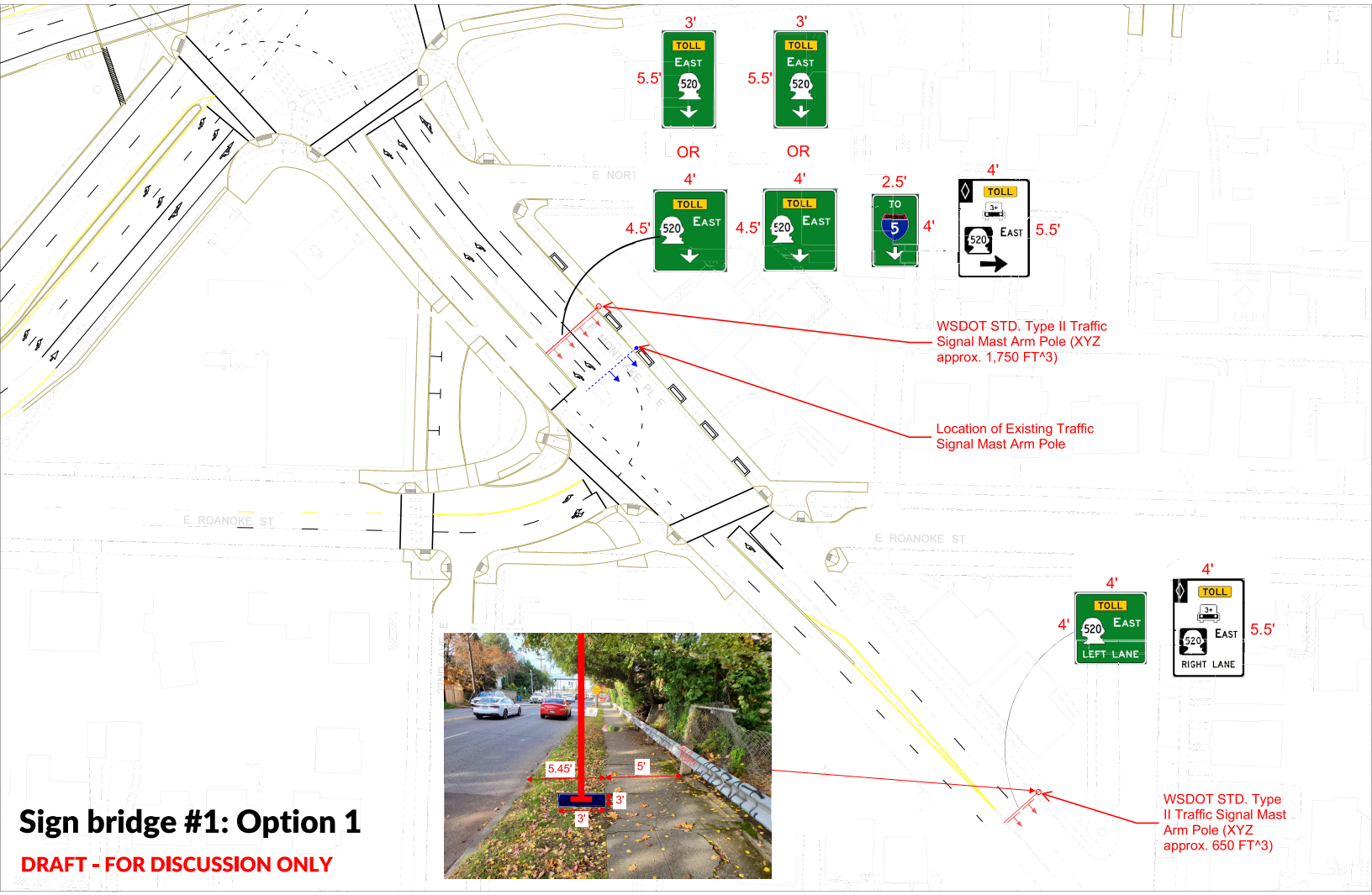
★ = Recommended by the technical team for implementation because it meets WSDOT & community's goals and priorities

Group 2 – Different signing strategies and ways to support the signs:

● ★ **3. Add additional signing further south on 24th Avenue E**
● 5. Smaller signs w/ cantilever arm
● ★ **6. Smaller signs mounted on signal mast arm**
● ★ **7. Smaller side-mounted signs**
● 8. Smaller signs mounted on span wires
● 9. Paint highway shields & directional arrows on the pavement
~~10. Re-install the same signage that was there previously~~
27. Add wayfinding signs on Montlake Blvd for UW/UWMC/Husky Stadium

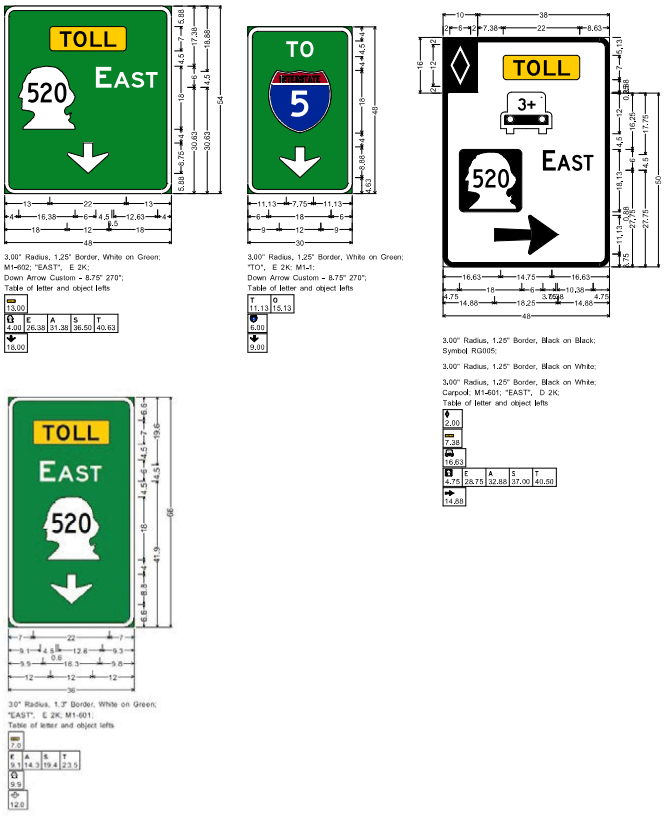
Group 3 – Treatment/camouflage/softening the sign bridge:

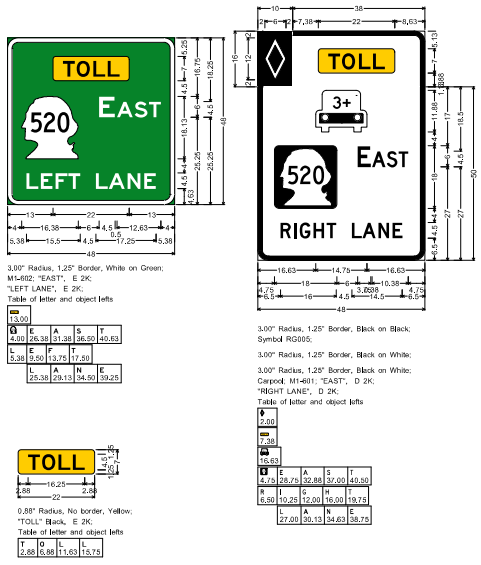
~~12. Replace w/ Montlake Bridge style sign bridge/gantry replica (or other more historic-looking structure)~~
~~13. Apply facing plates like on the bottom trusses of the Montlake Bridge~~
~~14. Apply metal faux lattice (replicating Montlake Bridge gantries) on existing sign bridge – historic style~~
~~15. Same as no. 14 but contemporary style~~
~~16. Paint sign bridge green to match Montlake Bridge~~
~~17. Paint sign bridge green and w/ a decorative/lattice-type pattern to resemble Montlake Bridge~~
~~18. Paint sign bridge gray/silver/blue/brown/other color~~
~~19. Add climbing wisteria or other organic elements to the sign bridge~~
~~20. Add adjacent trees/shrubs to block/hide the sign structure~~
~~21. Use public art funding and/or ask for artis submissions~~
~~22. Add artful camouflage on the vertical supports~~
~~23. Add decorative UW-themed elements to the sign bridge (e.g. flags)~~
~~24. Add elements to the sign bridge in recognition of indigenous people who used this land (e.g. tribal canoe)~~
~~25. Add elements to the sign bridge in recognition of sports or Portage Bay theme (e.g. secure an old crew shell at the top)~~
~~26. Add encased glass art to the sign bridge (similar to the bridge at the Tacoma Art Museum)~~



Sign bridge #1: Option 1

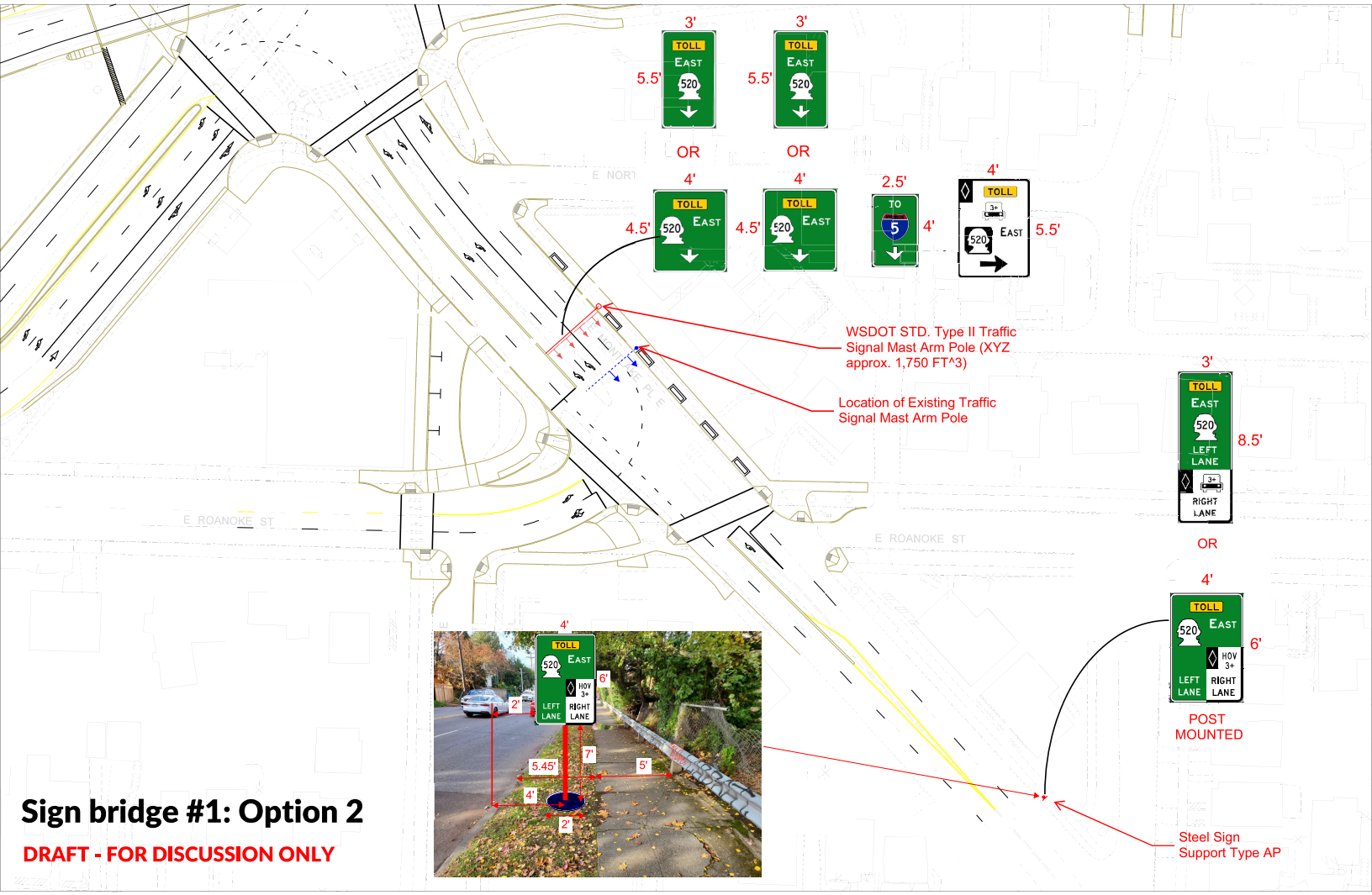
DRAFT - FOR DISCUSSION ONLY





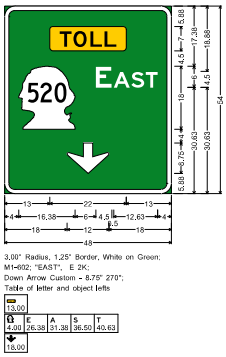
Sign bridge #1: Option 1

DRAFT - FOR DISCUSSION ONLY

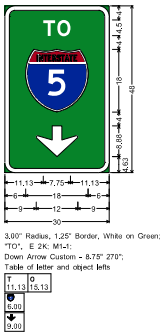


Sign bridge #1: Option 2

DRAFT - FOR DISCUSSION ONLY



3.00" Radius, 1.25" Border, White on Green;
M1-602; "EAST", E 2K;
Down Arrow Custom – 8.75" 270";
Table of letter and object lefts



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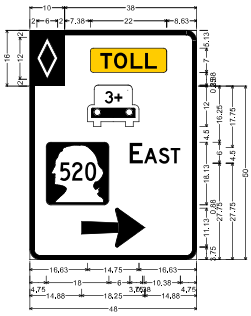
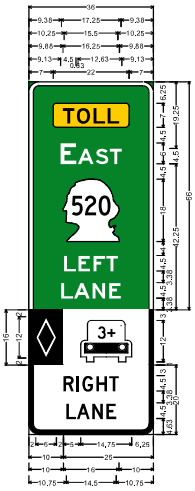
"TO", E 2K; M1-1;
Down Arrow Custom – 8.75" 270";
Table of letter and object lefts



3.00" Radius, 1.25" Border, Black on Black;
Symbol RG005;

3.00" Radius, 1.25" Border, Black on White;

3.00" Radius, 1.25" Border, Black on White;
Carpool; M1-601; "EAST", D 2K;
Table of letter and object lefts

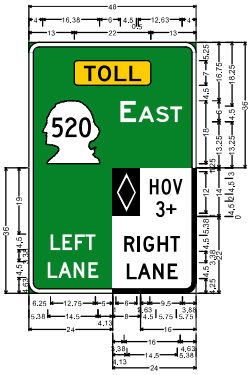


3.00" Radius, 1.25" Border, White on Green;
"EAST", E 2K; M1-602;
"LEFT", E 2K; "LANE", E 2K;

3.00" Radius, 1.25" Border, Black on Black;
Symbol RG005;

3.00" Radius, 1.25" Border, Black on White;
Carpool;

3.00" Radius, 1.25" Border, Black on White;
"RIGHT", D 2K; "LANE", D 2K;
Table of letter and object lefts



3.00" Radius, 1.25" Border, White on Green;
M1-602; "EAST", E 2K;

3.00" Radius, 1.25" Border, White on Green;
"LEFT", D 2K; "LANE", D 2K;

No border, Black on Black;
Symbol RG005;

3.00" Radius, 1.25" Border, Black on White;
"HOV", C 2K; "3+", C 2K;

3.00" Radius, 1.25" Border, Black on White;
"RIGHT", D 2K; "LANE", D 2K;
Table of letter and object lefts

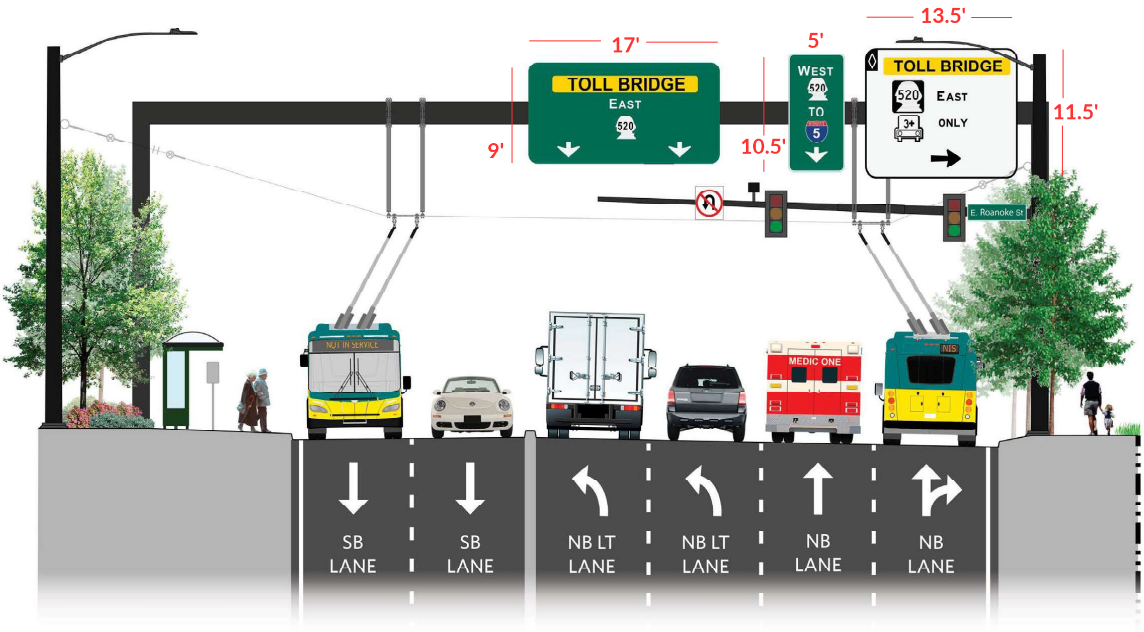
3.0" Radius, 1.3" Border, White on Green;
"EAST", E 2K; M1-601;
Table of letter and object lefts

Sign bridge #1: Option 2

DRAFT - FOR DISCUSSION ONLY

Sign bridge #1

(Located at Montlake Blvd E; south of the Montlake interchange near E Roanoke St, looking north)



Trees shown at 5-year maturation. Also pictured: established trees on right side, signal poles, street lights, and trolley poles.