

Burke-Gilman Trail Missing Link Project



Design Advisory Committee Meeting #7
October 26, 2017



Seattle
Department of
Transportation

Agenda

Time	Item
2:30 – 2:45 PM	Introductions
2:45 – 3:25 PM	Design updates
3:25 – 4:00 PM	DAC input
4:00 – 4:15 PM	Next Steps
4:15 – 4:25 PM	Public comment
4:25 – 4:30 PM	Wrap up
4:30 p.m.	Adjourn

Design Updates

Missing Link outreach to date

MAY 2017

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

JUNE

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

JULY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

AUGUST

S	M	T	W	T	F	S
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6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

SEPTEMBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

OCTOBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

LEGEND

DAC meetings

- 5/4 DAC Meeting #1
- 5/25 DAC Meeting #2
- 6/14 DAC Walking Tour
- 6/15 DAC Meeting #3
- 7/27 DAC Meeting #4
- 8/17 DAC Meeting #5
- 9/28 DAC Meeting #6
- 10/2 DAC Field Test
- 10/26 DAC Meeting #7

Workshops/Briefings

- 6/14 Ballard District Council Briefing
- 6/27 NW Market St Segment Workshop
- 6/29 Shilshole Ave NW Segment Workshop
- 7/11 45th St NW Segment Workshop
- 8/3 Industrial Community Workshop
- 8/3 Seattle Design Commission (30%)
- 8/10 Ballard Ave Landmark District Board Briefing
- 9/28 All Segment Workshop
- 10/5 Ballard Alliance Briefing
- 10/11 Seattle Pedestrian Advisory Board Briefing
- 10/17 Seattle Freight Advisory Board Briefing
- 10/19 Seattle Design Commission (60%)

Public events

- 6/25 Ballard Farmer's Market
- 7/8-7/9 Ballard Seafood Fest
- 7/13 Open House #1
- 10/1 Ballard Farmer's Market
- 10/12 Open House #2
- 10/14 Self-guided Public Walking Tour

Online open houses

- 7/10-7/23 (Share pre-30% design)
- 10/9-10/23 (Share 60% design)

Missing Link outreach to date



36 briefings and meetings



3 local fairs and festivals with **370+** attendees



31,300+ mailers sent



300+ flyers distributed to local properties



6 in-person public events and workshops, and **1** self-guided walking tour with **530+** attendees



7 meetings, **1** walking tour, and **1** field test with the 11-member Design Advisory Committee

7 notification emails to **240+** recipients



2 14-day, **24/7** online open houses with **800+** visitors

12 social media posts to **260,000+** followers

Design materials provided at **8** local gathering places



Walking Tour – October 14

Burke-Gilman Trail Missing Link Project

CAUTION: This is an active street! As you tour, be aware of your surroundings, use your best judgment, and stay safe!

Want to explore more of the Missing Link corridor?

Scan the QR code to download a digital walking tour guide containing more information about this stop and current design of the Missing Link corridor



Did you know... 

On a busy weekday, nearby businesses have a lot of vehicles, trucks, and boats coming and going.

For example, CSR Marine, a boatyard that specializes in repairing and servicing boats, may have nearly 450 vehicles, including large trucks or cars with trailers, crossing the Missing Link each day.

Stop
Shils
NW, &

Department of Transportation



Signs were placed at unstaffed tour stops to provide visitors with a sense of what busy days on the corridor look like

Walking Tour – October 14



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Did you know... 

On a busy weekday, nearby businesses have a lot of vehicles and trucks coming and going.

For example, Salmon Bay Sand and Gravel, which supplies concrete, sand, gravel, and other construction and building materials to our growing region, has up to 375 vehicles, including large trucks, crossing the Missing Link each day.



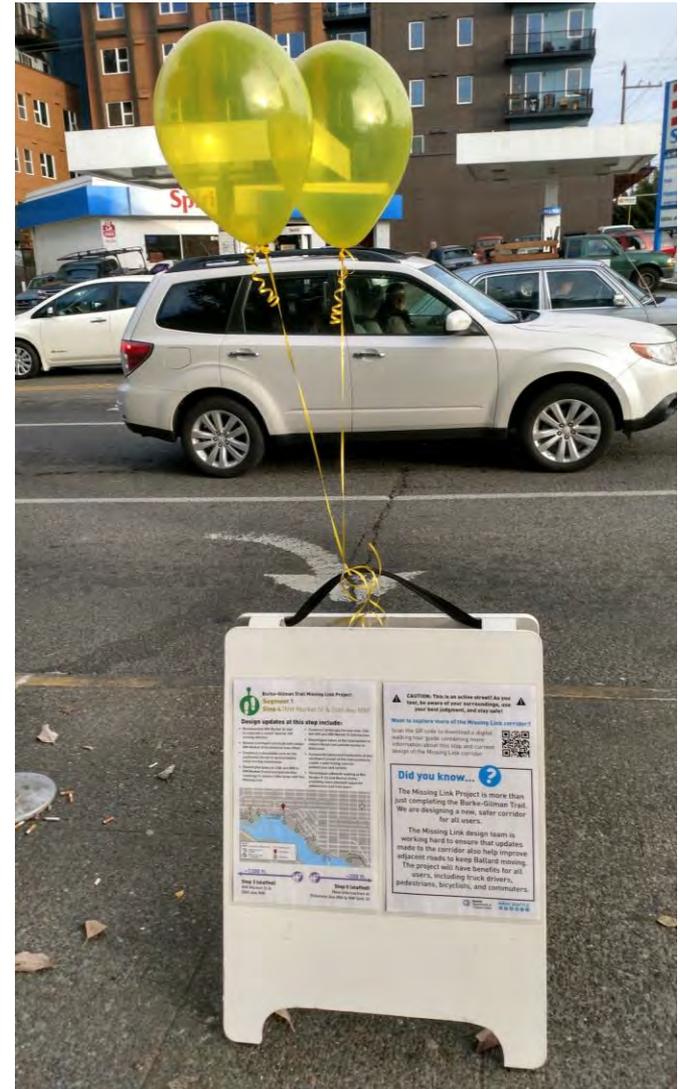
Stop
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~85

LEGEND: Existing, Walk, Staff, Walk, Use It!

Seattle Department of Transportation

Powered by MOVE SEATTLE



Unstaffed sign at NW Market St and 24th Ave NW tour stop

What we heard at Schematic Design

- Design suggestions for improving specific intersections along the corridor, including:
 - NW Market St & 24th Ave NW
 - Shilshole Ave NW & NW Market St
 - Shilshole Ave NW & 17th Ave NW
- Concern about the conflict between freight traffic on Shilshole Ave NW and trail users
- Concern about parking, especially near Ship Canal public access points
- Excitement about a safer route for trail users and a more predictable experience for all users
- Interest in enhancing connections between the Missing Link and other nearby bike facilities
- Continued concern with trail alignment

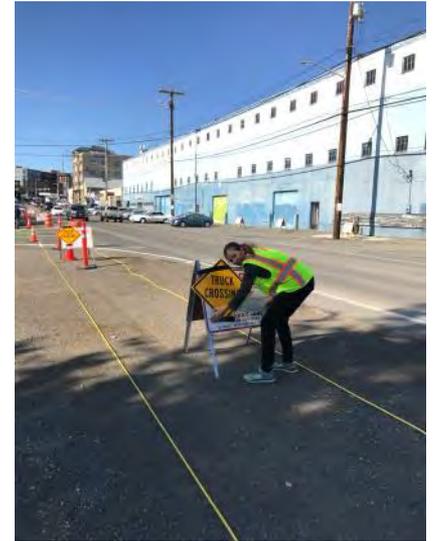
Field Testing the Driveways

Trail Driveway Crossing Field Test



Field Test Questions

- Driveway Width
- Driveway Crossings for Trail Users
- Traffic Exiting from Driveway
- Left-Turns into Driveway
- Right-Turns into Driveway



Driveway Width

Does the proposed design accommodate the trucks anticipated to use the driveways?

- *Yes. No modifications suggested.*



Driveway Crossings for Trail Users

Does the design clearly communicate to trail users the location of the driveways and where they should be positioned when yielding to driveway traffic?

- *Green driveways are clearly visible*



Driveway Crossings for Trail Users

Does the design clearly communicate to trail users the location of the driveways and where they should be positioned when yielding to driveway traffic?

- *May not be clear where to wait*
- *Suggestions:*
 - *Extend green paint*
 - *Narrow driveway crossing area*
 - *Revisit sign placement*



Traffic Exiting from Driveway

How do vehicles exiting the driveways interact with trail users?

- *Sufficient sight distance in all directions.*



Traffic Exiting from Driveway

How do vehicles exiting the driveways interact with trail users?

Confirmed 3-step process for drivers:

1. Stop before trail and find gap in trail users.
2. Proceed to road edge; block trail; find gap in vehicle traffic
3. Proceed to enter roadway when gap is available.



Left-Turns into Driveway

Can trucks safely make a left-turn into the driveway?

- *Yes, no modifications suggested.*



Right-Turns into Driveway

Can trucks safely make a right-turn into the driveway?

- *There is a large blind spot for right-turning trucks after the turn is initiated.*



Right-Turns into Driveway



From truck cab, looking west

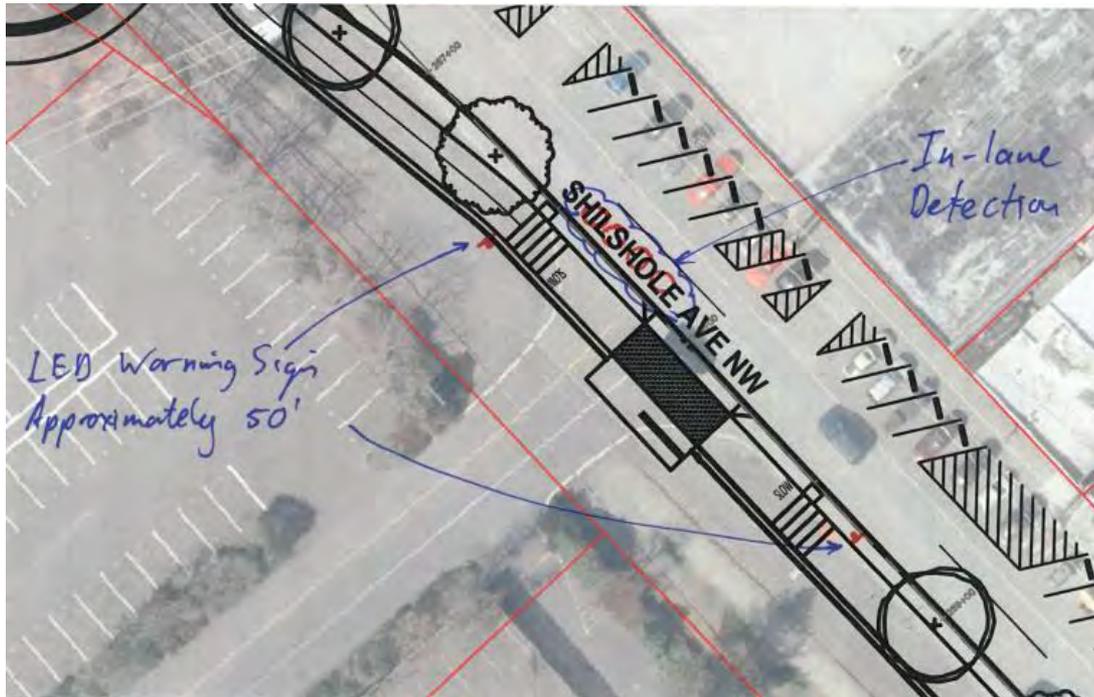


From Missing Link, looking east

Right-Turns into Driveway

Can trucks safely make a right-turn into the driveway?

- *Several options have been explored to date*
- *Trail users need to wait once the turn has been initiated.*

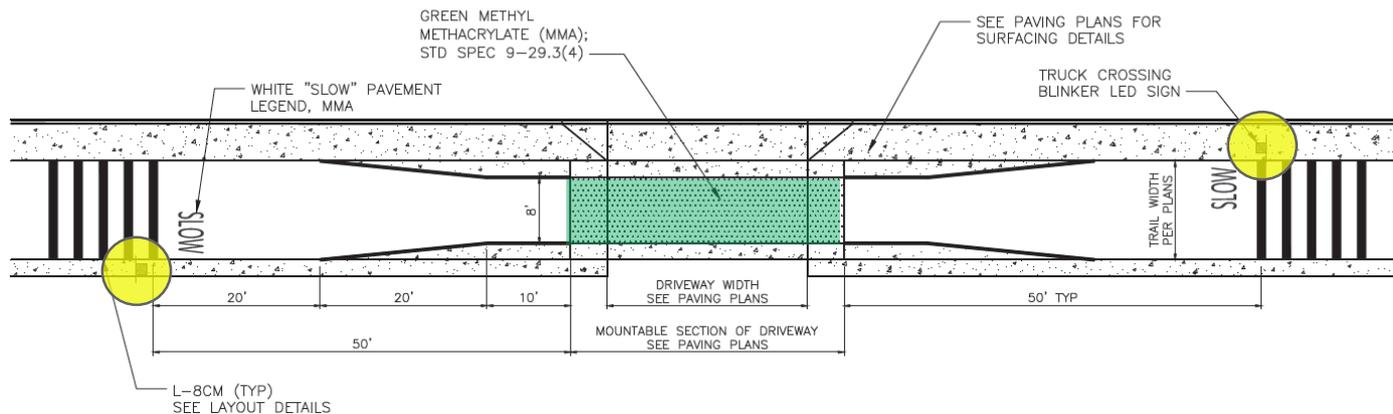


Latest: In-lane Detection

- *Provide detection for right-turns*
- *Set dwell time of 3-6 seconds*
- *Actuate LED warning signs*

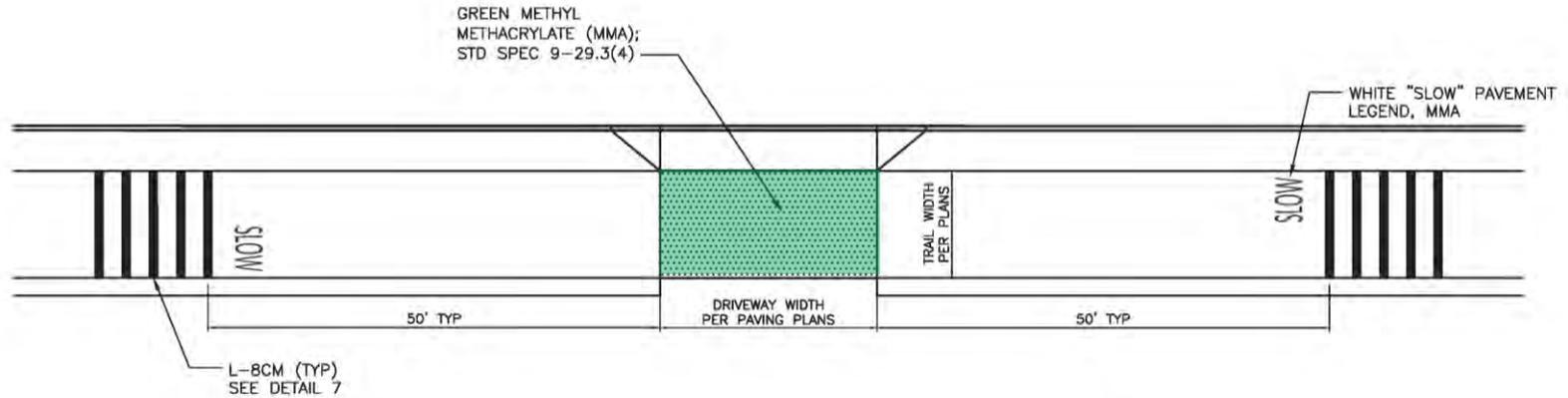
Summary of design suggestions

- Narrow trail at driveway crossings
- Extend green paint to indicate conflict area
- Revisit LED warning sign locations
- Explore potential additional signage, if needed
- Consider including in-lane detection for right turning vehicles

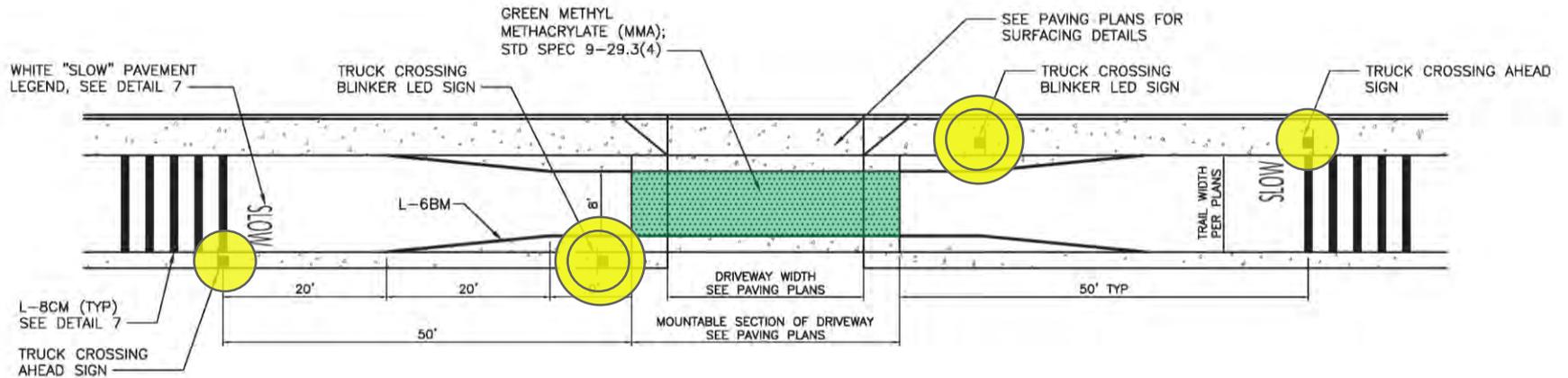


- THANK YOU!
- Hermanus Steyn at Kittelson & Associates, Inc.
 - Phone: (503) 535-7455
 - Email: hsteyn@kittelson.com
 - Other Team Members: Conor Semler, Caitlin Doolin and Karla Kingsley

Typical vs Industrial Driveway



TYPICAL DRIVEWAY MARKINGS 5
NOT TO SCALE CT-122



INDUSTRIAL DRIVEWAY MARKINGS 6
NOT TO SCALE CT-122

Existing



Proposed



Proposed



Proposed

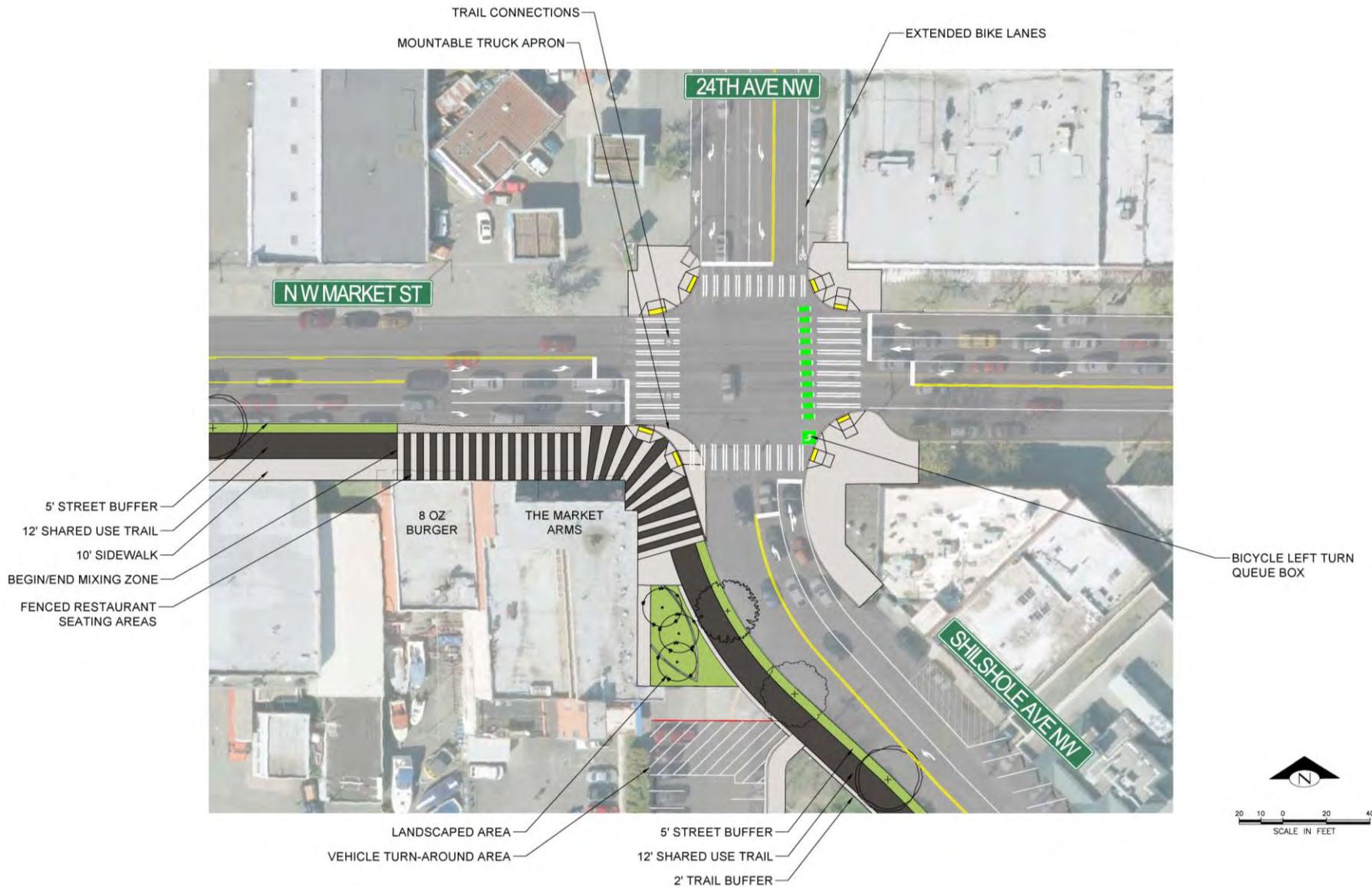


Corridor Parking Update

- Upcoming parking changes on Ballard Ave
- Meeting with the Ballard Alliance / Wayfinding signage
- Private parking potential (Stimson, Nordic Heritage Museum)



NW Market St & 24th Ave NW



Public Education & Post-Construction Monitoring Opportunities

Phase 1: pre-construction (early 2018)

- **Public pre-construction meeting**
- **Meeting with adjacent affected property owners**
- **One-on-one and organization briefings**
- **Website/social media**
- **Active phone line**
- **Frequent on-site visits/flyering**

Public Education & Post-Construction Monitoring Opportunities

Phase 2: pre-opening (early 2019)

- **Ribbon cutting event focusing on safety**
- **Safety-oriented web updates & social media posts**
- **Video and other multimedia strategies highlighting corridor “rules” and right of way**
- **Trail/yard sign campaign**
- **Educational briefings with partners (cycling, pedestrian, truck/freight, adjacent businesses)**
- **Work with local news outlets**

Public Education & Post-Construction Monitoring Opportunities

Phase 3: after opening (2019 & beyond)

- **Ongoing education campaigns**
- **Post-completion conversations with business owners, property owners, and residents**
- **Monitoring of design/incidents through field observations**
- **Design and implementation of corridor changes, as needed**

DAC Input

Review Roll Plots

Next Steps

Getting to 90% Design (What to expect at the next DAC meeting)

Between 60-90:

- Vertical elements of the design are incorporated i.e. curb ramp slopes, sidewalk slopes, profile and elevation of the trail, drainage infrastructure profiles and elevations
- Pavement restoration limits are clearly defined
- Finalize geometry of the corridor
- All site preparation work needed to construct is finalized (removals, relocations, etc.)
- Striping and signing locations are close to being finalized
- All truck turning movements that are needed to be analyzed are complete
- Coordination with utility companies and agencies should be in progress
- Traffic signal pole locations finalized

Between 90-100:

- Add any details that are missing
- Finalize all horizontal and vertical design elements
- Finalize traffic signal design, including wiring, conduit routing, and other underground work
- Project specs are finalized

Public Comment

**Wrap-up/
Next Steps**

DAC Work Plan

Meeting	Date
DAC Meeting #7	October 26, 2017
DAC Meeting #8	November 16, 2017
DAC Meeting #9	January 11, 2018
Open House #3	January 18, 2018
DAC Meeting #10	February 1, 2018

Thank you!

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www.seattle.gov/transportation/BGT_MissingLink.htm

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