

# WELCOME

## TO THE MAGNOLIA BRIDGE PLANNING STUDY DROP-IN SESSION

Talk with staff and share your feedback on 3 possible lower-cost alternatives for replacing the Magnolia Bridge.

Later this year, once a lower-cost alternative is recommended from the planning study, it will be presented to decision-makers alongside the cost and traffic impacts of the in-kind replacement selected through the 2002-2008 Magnolia Bridge Study.





# HISTORY OF MAGNOLIA BRIDGE



**1887**

Seattle, Lake Shore & Eastern built railroad in Interbay to move timber, coal, and connect with Canada.

**1892**

Great Northern Railway constructed railroad to Seattle through Interbay. Great Northern built a depot at Smith Cove and piers into the cove to handle cargo from Asia.

**1924**

The W Wheeler St trestle, one of three major routes to Magnolia, burned down due to a train passing underneath and throwing a spark that started a devastating fire.

*Photos courtesy of Seattle Municipal archives.*

**1930**

West Garfield St Bridge was constructed between 15th Ave W and Dartmouth Ave W. The new concrete bridge replaced a timber trestle that ran from 15th Ave W to 23rd Ave W. A Local Improvement District (LID) was formed assessing Magnolians for a little over 50% of the costs. The remaining 50% of the costs were shared between the railroad companies and the City.

**1931**

Dravus St Bridge was opened to traffic.

**1942**

A wood trestle that connected the W Garfield St bridge to 23rd Ave W was removed.

**1957**

A new structure over 15th Ave W on the east end of the bridge was constructed.

**1960**

Bridge was renamed as Magnolia Bridge.

**1961**

West half of the bridge was strengthened by installing steel cross bracing on piers and trusses under deck.

**1974**

East half of bridge was strengthened similar to west half.

**1981**

Concrete barriers added to both sides of roadway.

**1991**

New ramps were added to serve Elliot Bay Marina.

**1997**

Landslide damaged piers on west end of bridge requiring closure until repaired.

**2001**

The Nisqually earthquake damaged nearly half of the original concrete lateral bracing requiring closure until replaced with tubular steel bracing.

**2001**

W Galer St Flyover was constructed.

**2010**

Admiral's House situated near the west end of the Magnolia Bridge was designated a Seattle Landmark.

**2015**

Start of construction of King County's Magnolia Wet Weather Storage Facility at Smith Cove.





# MAGNOLIA BRIDGE PLANNING STUDY

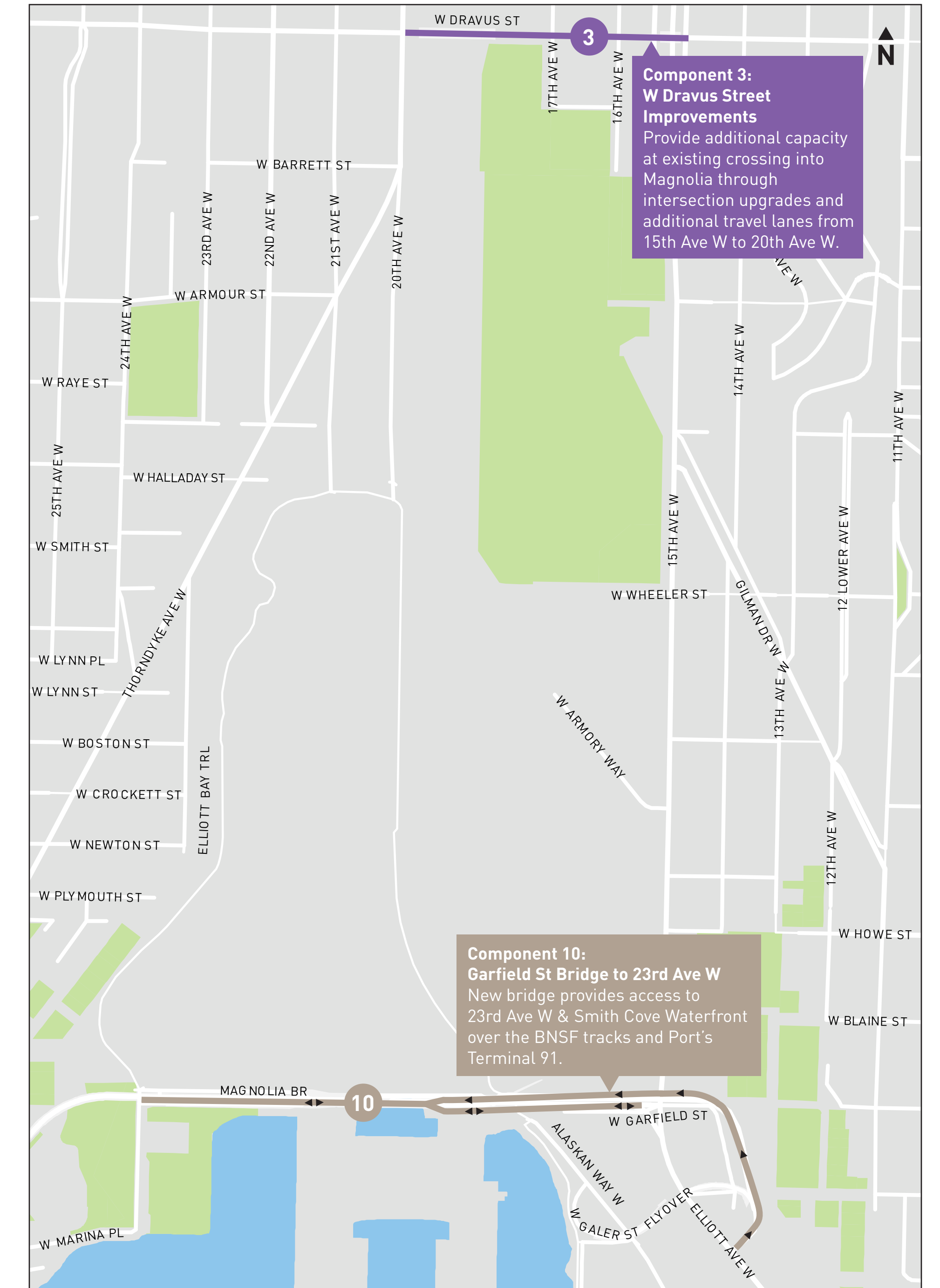
## Alternative I - Armory Bridge, etc.



## Alternative II - Dravus, etc.



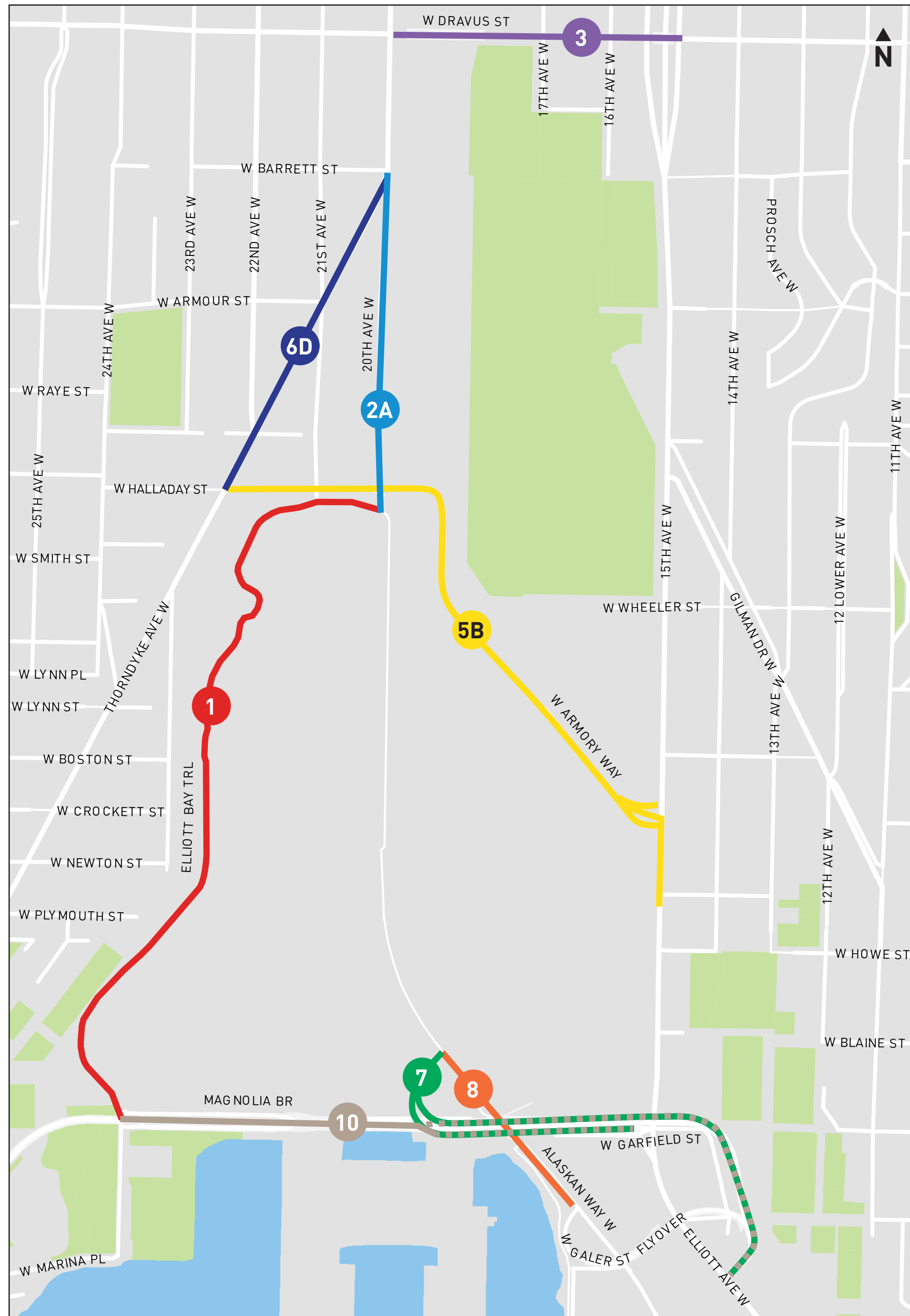
## Alternative III - Dravus & Garfield Bridge





# MAGNOLIA BRIDGE PLANNING STUDY

## Project Components



### Component 1: West Uplands Perimeter Road

- Component 1 provides more direct access between Magnolia and the Smith Cove Waterfront and Elliott Bay Marina.
- It will parallel the alignment of the existing Elliott Bay Trail but may deviate at certain points to provide a more direct route.
- The Elliott Bay Trail will be maintained.
- This component must be combined with component 2A at a minimum to provide access to Smith Cove Waterfront.

### Component 2A: 20th Ave W Improvements

- Component 2A is required to provide access between Magnolia and the Smith Cove Waterfront via the West Uplands Perimeter Road (1).
- 20th Ave W is preferred over 21st Ave W because it better accommodates traffic both geometrically and operationally.
- This component must be combined with component 1 at a minimum to provide access to Smith Cove Waterfront.

### Component 3: W Dravus St Improvements

- Component 3 would increase capacity along W Dravus St, an existing access point to Magnolia, by widening the roadway and making intersection improvements at 15th Ave W and 20th Ave W.
- The 15th Ave W interchange would be re-designed to a Single Point Urban Interchange (SPUI) providing significant additional capacity.
- This component provides access to and from Magnolia independent of other components.

### Component 5B: W Armory Way Bridge

- Component 5B would create a new access point to Magnolia via an elevated bridge structure from 15th Ave W along Armory Way W, crossing perpendicularly over the BNSF railroad, and connecting to Thorndyke Ave W at W Halladay St.
- The structure will have a northbound, on-ramp from 15th Ave W designed to allow grade-separated free-flow access to the bridge.
- This component provides access to and from Magnolia independent of other components.

### Component 6D: Thorndyke Ave W Improvements

- Component 6D provides access between the new Armory Way Bridge and the Smith Cove Waterfront via 20th Ave W (2A) and the West Uplands Perimeter Road (1).
- It would include improvements to the intersection of Thorndyke Ave W and 20th Ave W to accommodate turns for freight vehicles and buses.
- This component must be combined with components 2A and 1 to provide access to Smith Cove Waterfront via the new Armory Way Bridge.

### Component 7: W Garfield St Flyover

- New bridge is important for future traffic on 15th Ave W. It provides Southbound traffic on 15th Ave W a right turn option to access Elliott Bay over the BNSF tracks.
- It also relieves future traffic demands on the Galer Street Flyover.
- It has been designed to accommodate freight vehicles due to its proximity to the Port property.
- This component must be combined with component 8 to provide maximum traffic benefits to 15th Ave W.

### Component 8: Alaskan Way W Extension

- Provides connection between Garfield St Flyover (7) and existing Galer St Flyover via an extension of Alaskan Way W
- Provides access between the Garfield Street Flyover and Galer St Flyover
- Relieves pressure on the Galer St Flyover
- This component must be combined with component 7 to provide any traffic benefits to 15th Ave W.

### Component 10: W Garfield St Bridge to 23rd Ave W

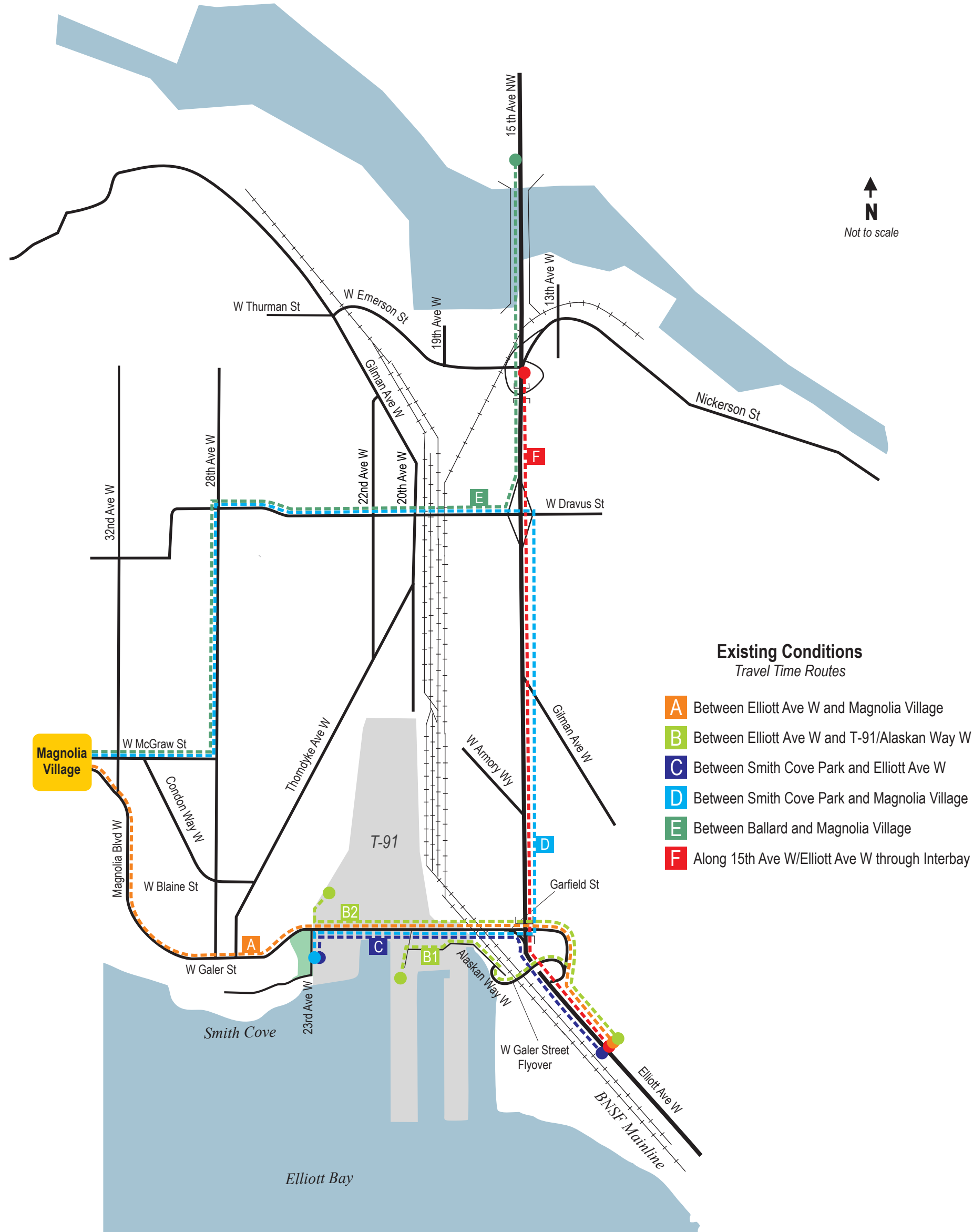
- New bridge provides access to 23rd Ave W (Smith Cove Waterfront & western Port property) over the BNSF tracks and the Port's Terminal 91 operations.
- Does not provide access to Magnolia.
- Particularly important to marina and freight traffic
- This component provides access to and from Smith Cove Waterfront area independent of other components.



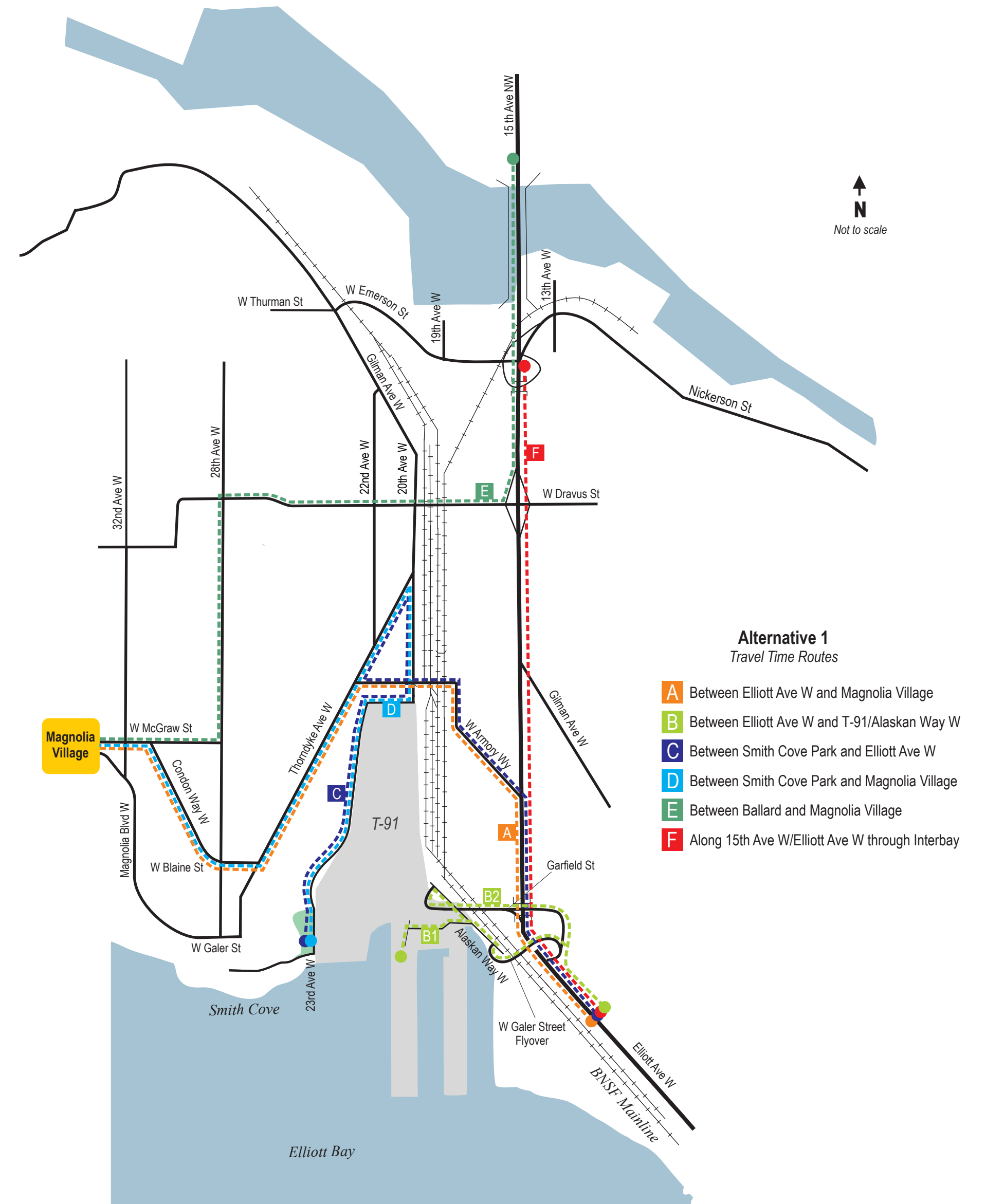
# MAGNOLIA BRIDGE PLANNING STUDY

## Travel Time Routes

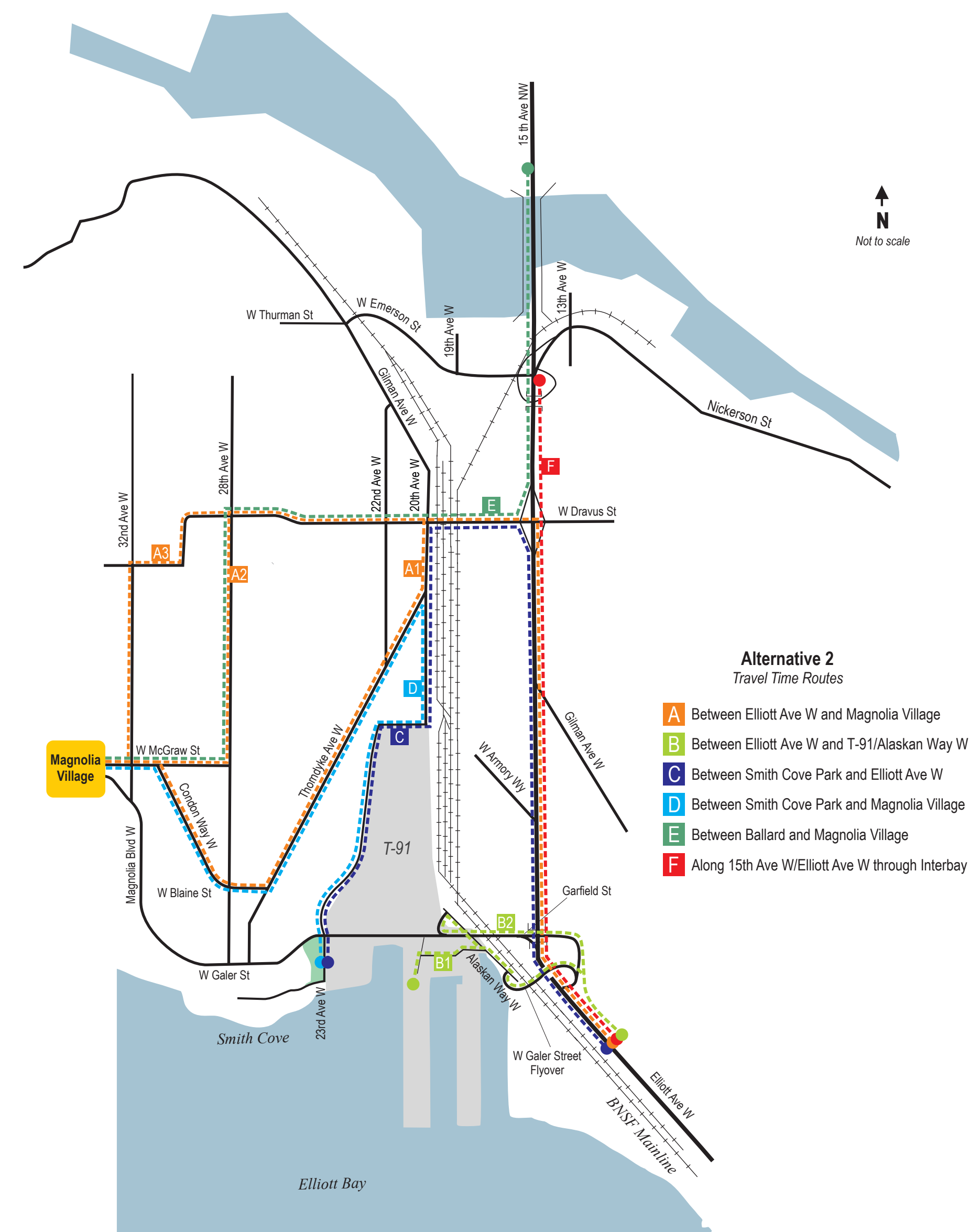
### Existing Conditions



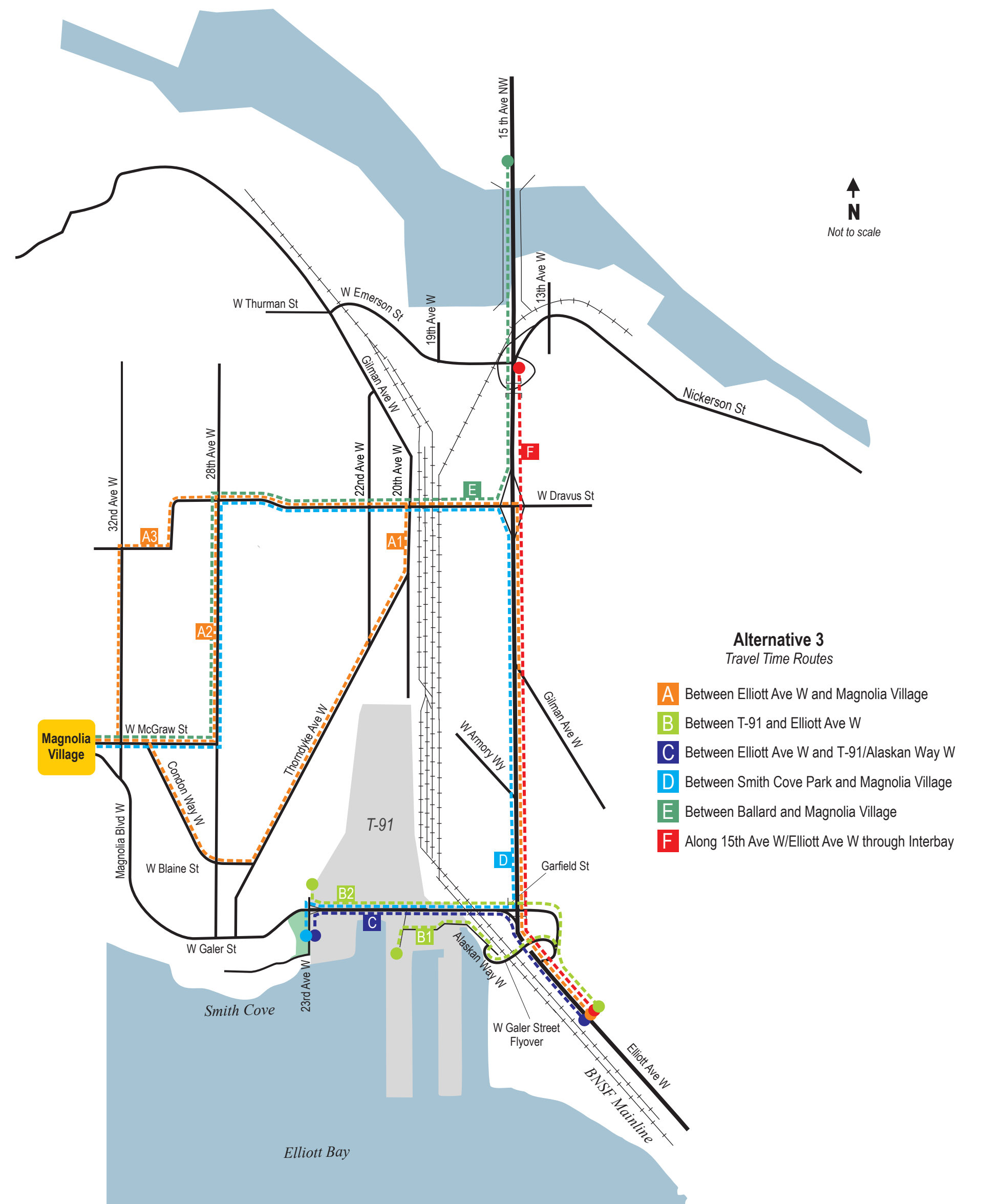
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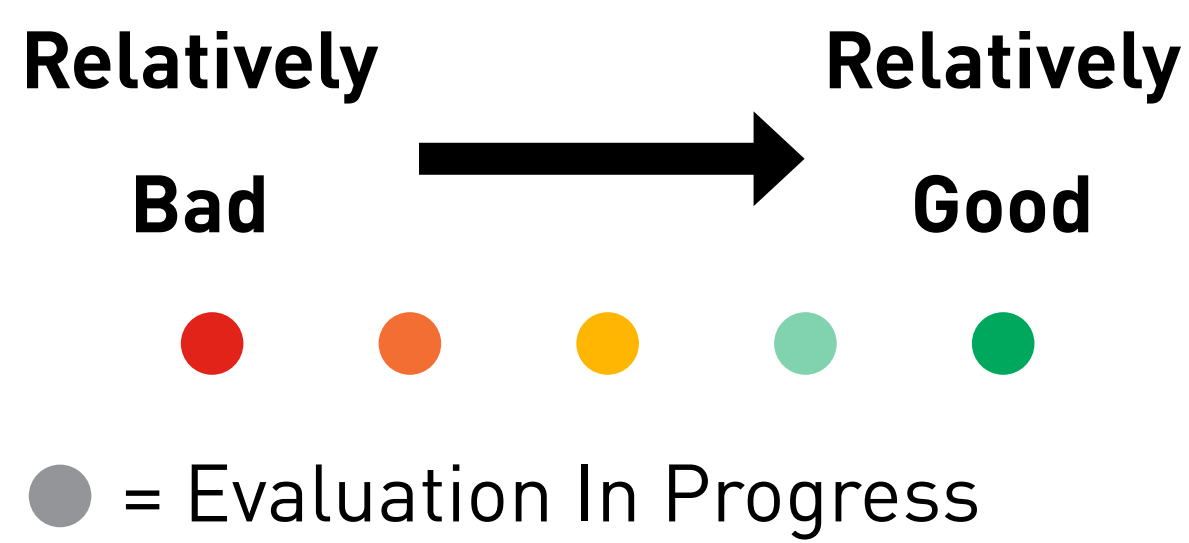
### Alternative III - Dravus & Garfield St Bridge



# MAGNOLIA BRIDGE PLANNING STUDY

## Lower-Cost Alternatives Analysis

### Preliminary Results



	Alternative I	Alternative II	Alternative III
<b>COST (30%)</b>			
Estimated Cost (2018\$)	\$250,000,000	\$237,000,000	\$216,000,000
<b>MOBILITY AND CONNECTIVITY (25%)</b>			
Access to and from Magnolia Village	●	●	●
Access between Smith Cove/Marina and 15th Ave W	●	●	●
Access between Smith Cove/Marina and Magnolia	●	●	●
Access to and from T-91 and Alaskan Way W	●	●	●
Traffic Flow on 15th Ave	●	●	●
Pedestrian and Bicycle Connectivity	●	●	●
Freight Access	●	●	●
Transit Access	●	●	●
<b>★ COMMUNITY INPUT (15%)</b>			
Public Input	●	●	●
Agency Input	●	●	●
<b>ENVIRONMENTAL IMPACT (15%)</b>			
Adjacent Land Use	●	●	●
Sensitive Areas	●	●	●
Natural Hazards	●	●	●
<b>IMPLEMENTATION CHARACTERISTICS (15%)</b>			
Construction Duration	●	●	●
Construction Impacts	●	●	●
Construction Phasing	●	●	●

*We are here*

*Tell us what you think!*





# MAGNOLIA BRIDGE PLANNING STUDY

## Alternatives Ranking

We need your help selecting a lower-cost alternative to be presented in a planning study alongside an in-kind replacement.

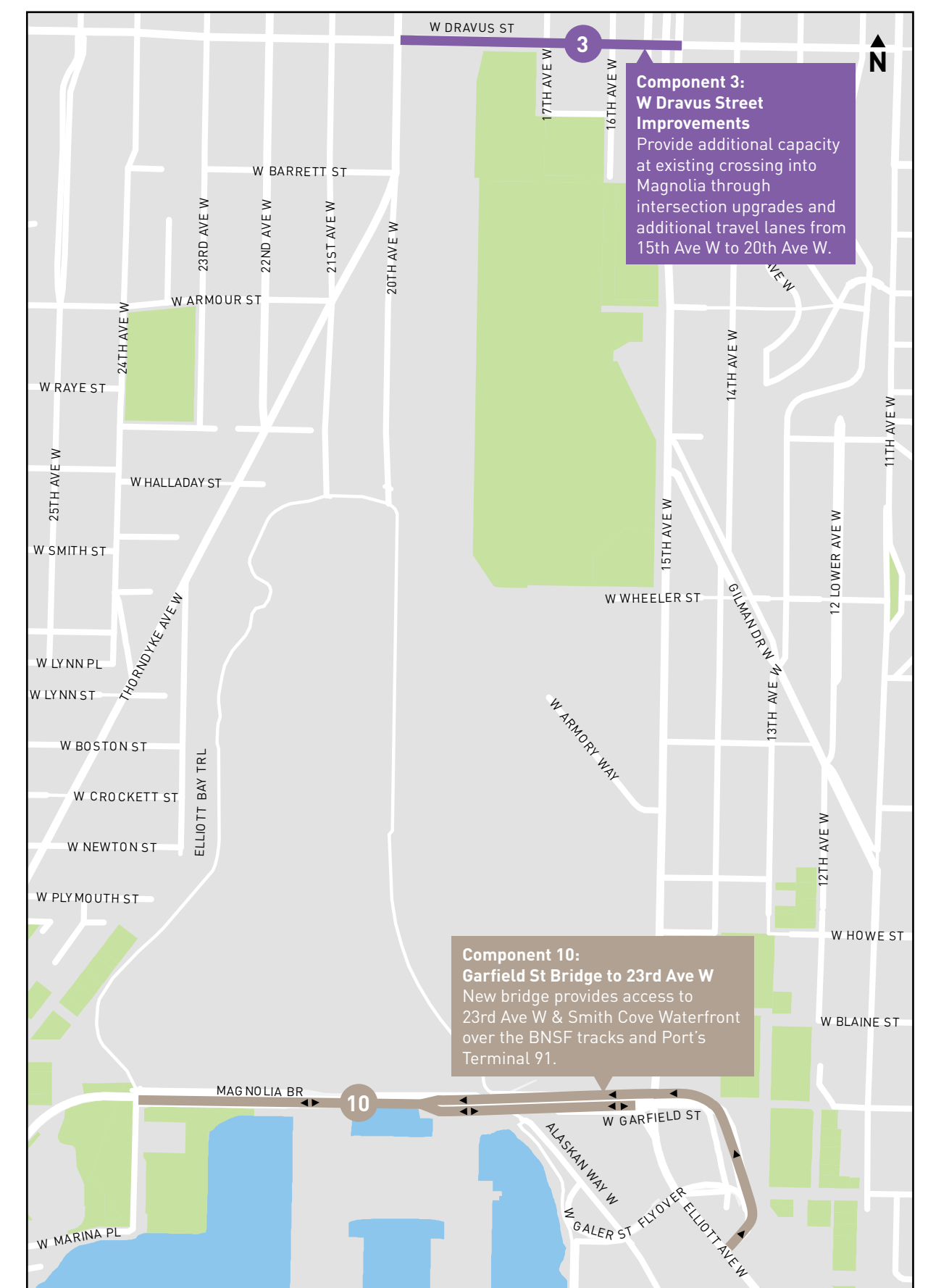
**Alternative I - Armory Bridge, etc.**



**Alternative II - Dravus, etc.**



**Alternative III - Dravus & Garfield Bridge**



Please rank the alternatives as most important or least important using your red or green dots. Use green for the most important alternative and red for the least important.

**Alternative I - Armory Bridge, etc.**

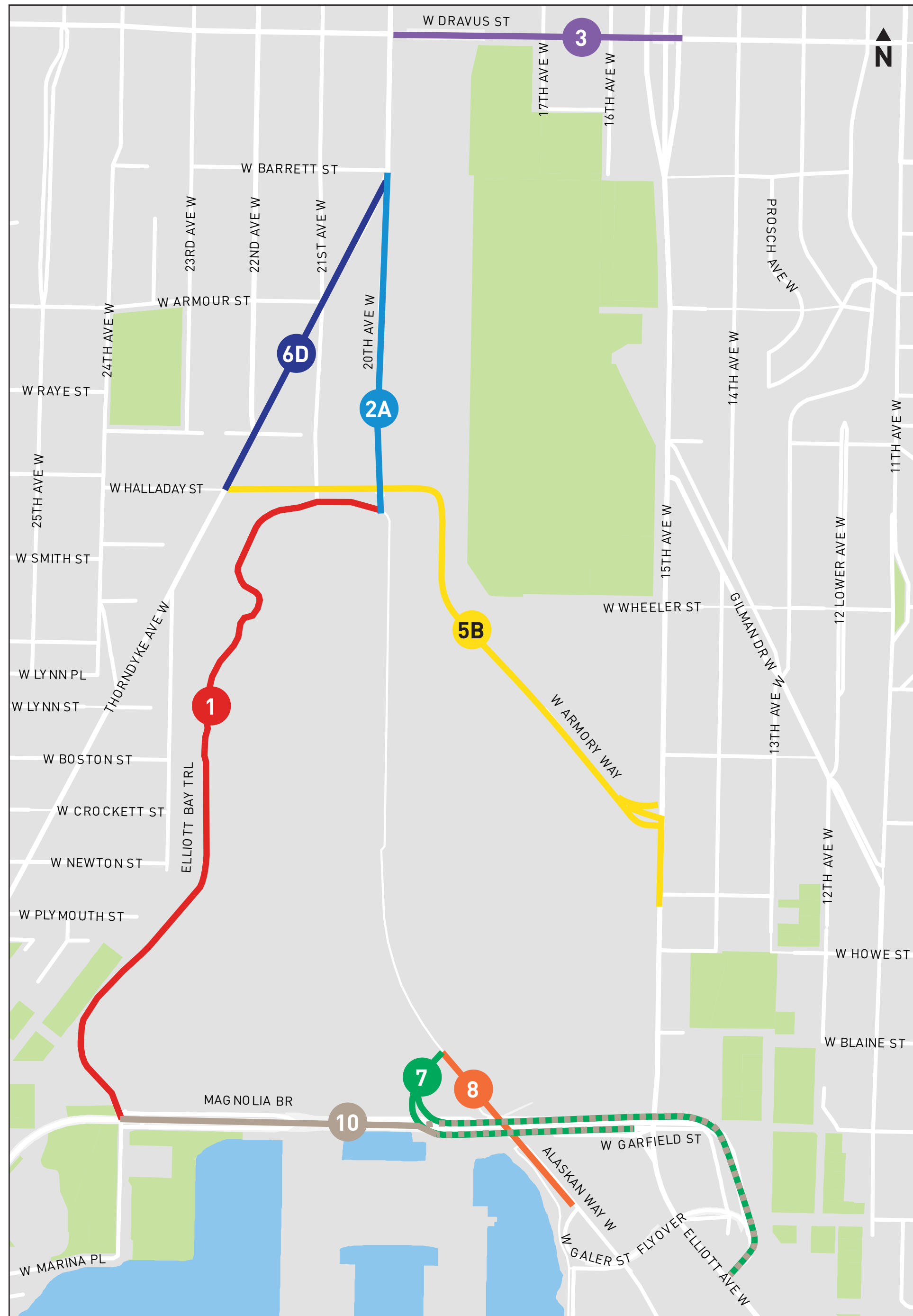
**Alternative II - Dravus, etc.**

**Alternative III - Dravus & Garfield Bridge**

# MAGNOLIA BRIDGE PLANNING STUDY

## Remaining Components Ranking

Please rank the components as most important or least important using your red or green dots. Use green for the most important component and red for the least important.



<p><b>Component 1</b></p>	<p><b>Component 2A</b></p>	<p><b>Component 3</b></p>	<p><b>Component 5A</b></p>
<p><b>Component 5B</b></p>	<p><b>Component 7</b></p>	<p><b>Component 8</b></p>	<p><b>Component 10</b></p>