

Columbia River **CROSSING**

Highway Alternatives

Ron Anderson





General Design Assumptions

- Project limits generally fall within the BIA
 - South matches ODOT expansion at Delta Park
 - North ends at connections with SR 500/39th
- Maintain as much of the existing infrastructure as possible
- Minimize impacts on adjacent properties (neighborhoods and businesses)
- Meet current design criteria where possible
- Maintain access where possible



Design Solutions Should Fix Existing Problems

- Address travel demand and provide lane balance
- Improve system flow and operations
- Provide multi-modal integration (transit and highways must work seamlessly)



Designs Should be Constructible

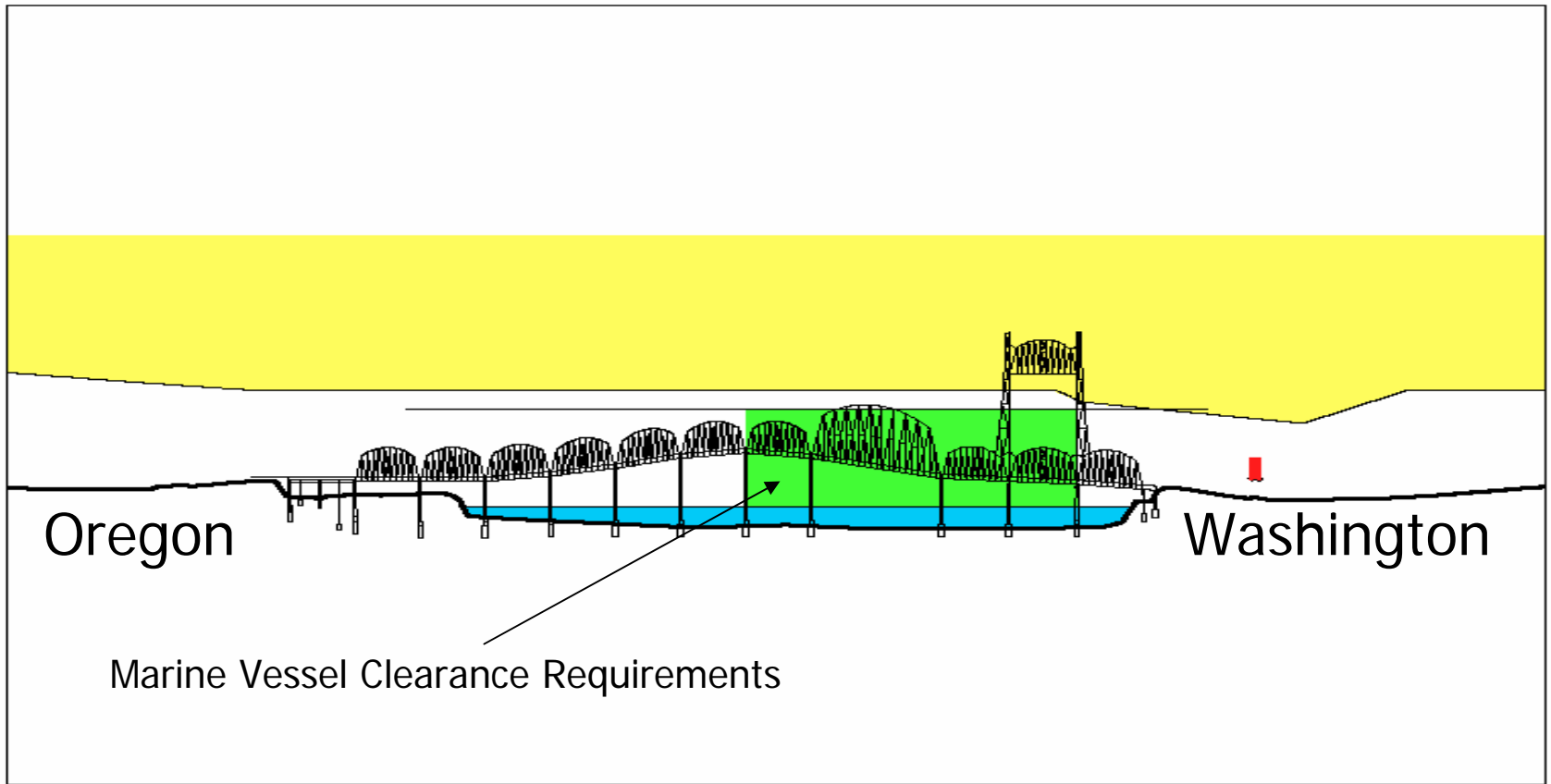
- Improvements should be supported by impacted users and communities
- Solutions must be affordable and fundable
- Improvements should minimize disruptions to traffic during construction



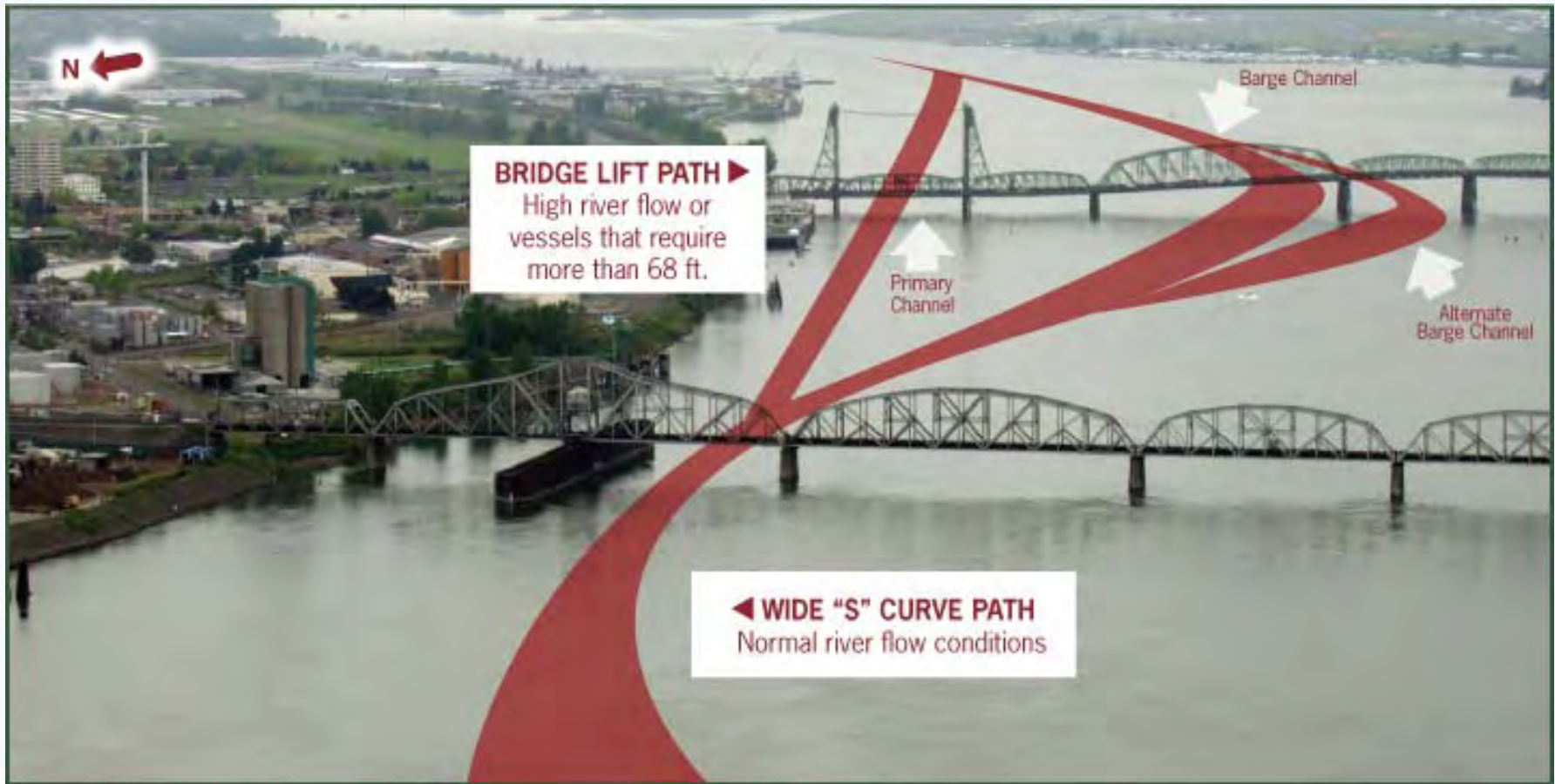
Developing Ten Build Alternatives

- Today you will see pieces of 10 representative “build” alternatives
- Alternatives will be measured against criteria to test how well they perform and what they will cost to build
- Alternatives are conceptual and preliminary – They will undergo continual refinement to improve performance

Air and Marine Navigation Vertical Constraints



Proximity of rail bridge to the I-5 Bridges





River Crossing Ideas Still Advancing



- | | | |
|---|------------|----------|
| • Replacement Bridge | Downstream | Midlevel |
| • Replacement Bridge | Upstream | Midlevel |
| • Supplemental Bridge | Downstream | Midlevel |
| • Arterial Crossing with I-5 Improvements | | |

Downstream Alignment for I-5



Supplemental Bridge Downstream



Upstream Alignment for I-5



Downstream Alignment for Arterial





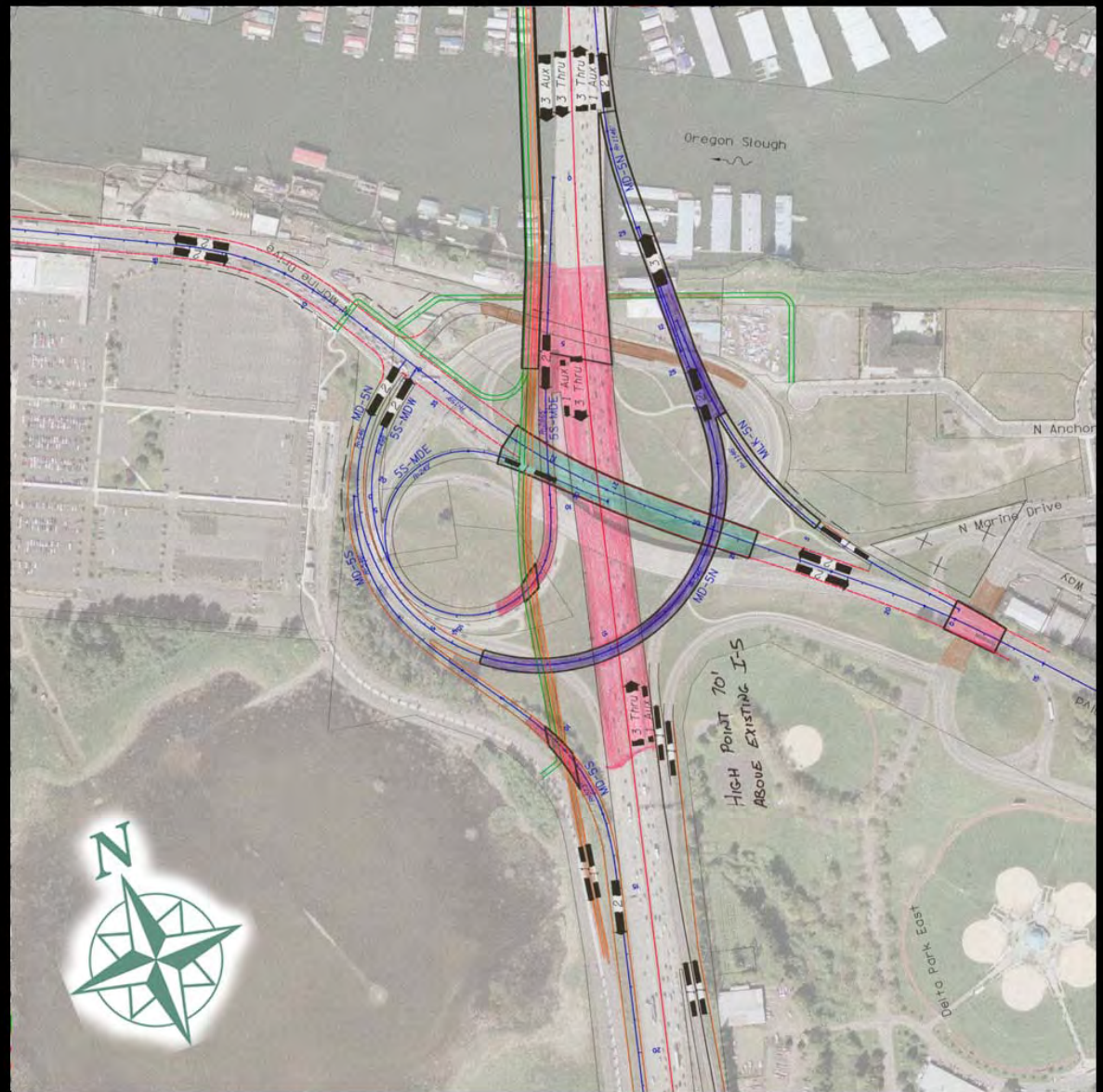
Roadways in Oregon and Washington

- Designs for interchanges influenced by river crossing options
- Interchange designs range from simple to complex
- The following slides depict representative segments of the 10 “build” alternatives

Marine Drive Interchange, Portland

(Alt. 4)

Balanced
Transit/Highway
Improvements
with Light Rail
Transit



Tunnel Level

Ground Level

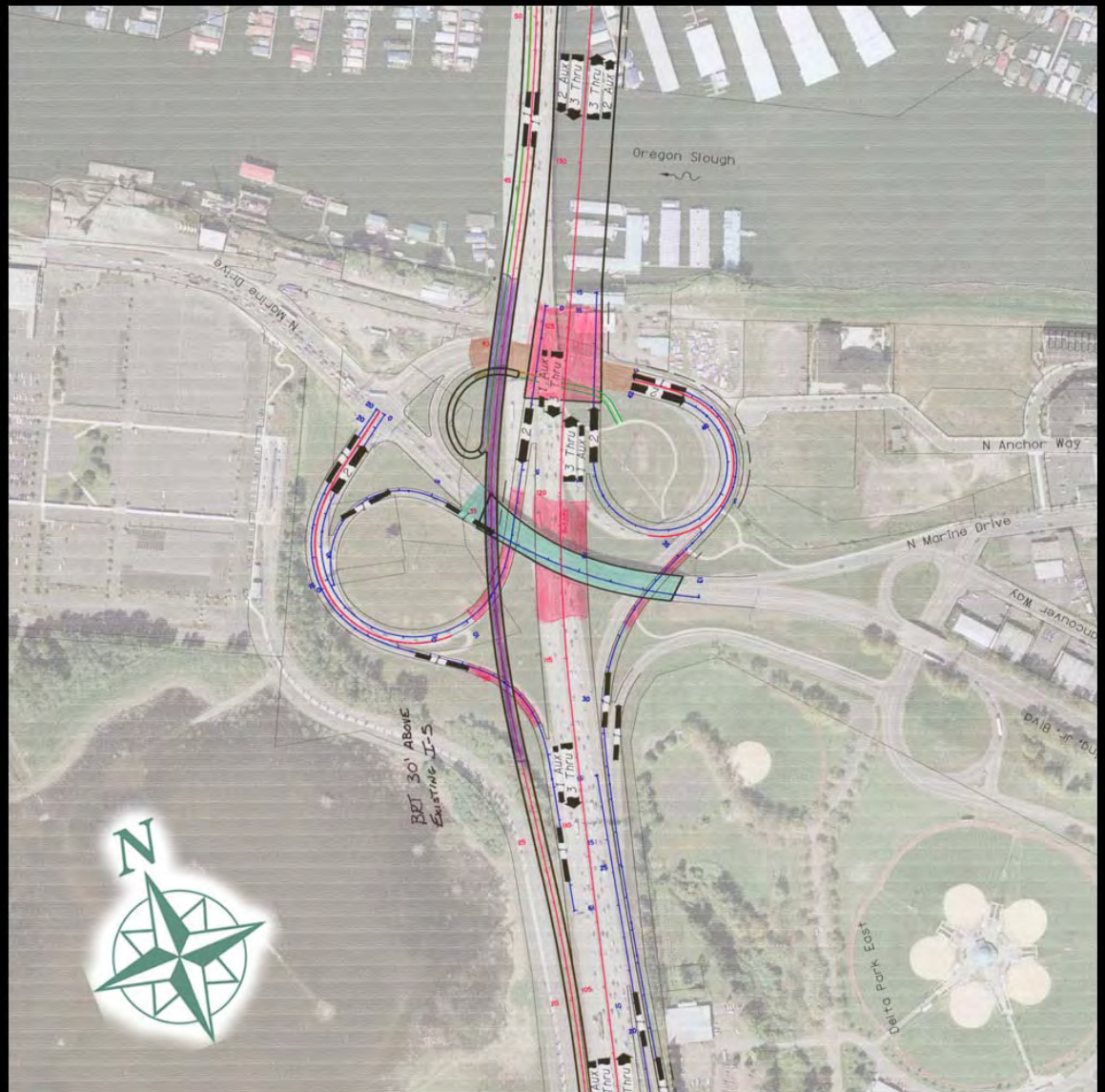
Second Level

Third Level

Marine Drive Interchange, Portland

(Alt 10)

Balanced
Transit/Highway
Improvements
with Bus Rapid
Transit



Tunnel Level

Ground Level

Second Level

Third Level

Hayden Island Interchange, Portland

(Alt. 4)

Balanced
Transit/Highway
Improvements
with Light Rail
Transit



Tunnel Level

Ground Level

Second Level

Third Level

Hayden Island Interchange, Portland

(Alt. 6)

Balanced
Transit/Highway
Improvements
with Bus Rapid
Transit Lite



Tunnel Level

Ground Level

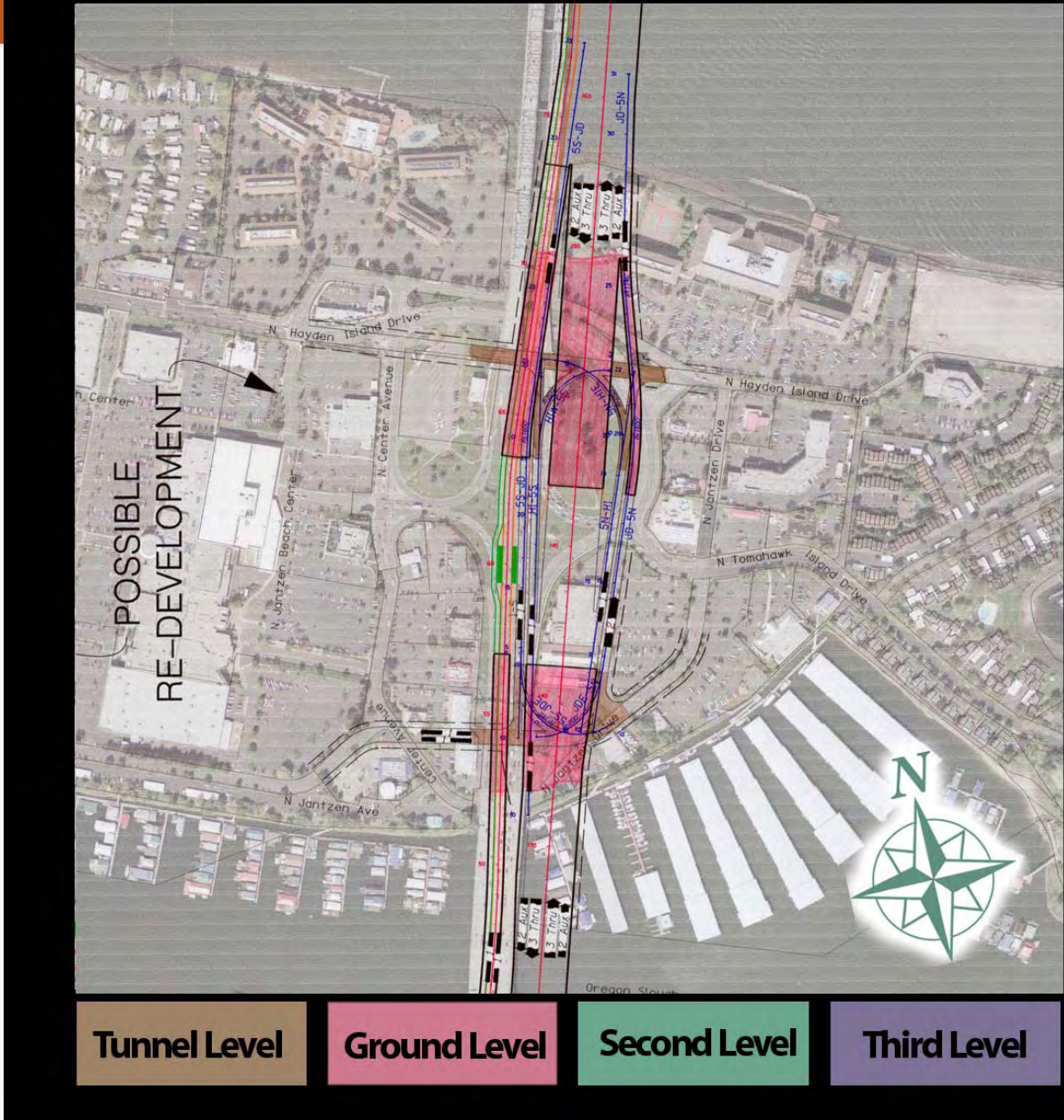
Second Level

Third Level

Hayden Island Interchange, Portland

(Alt. 10)

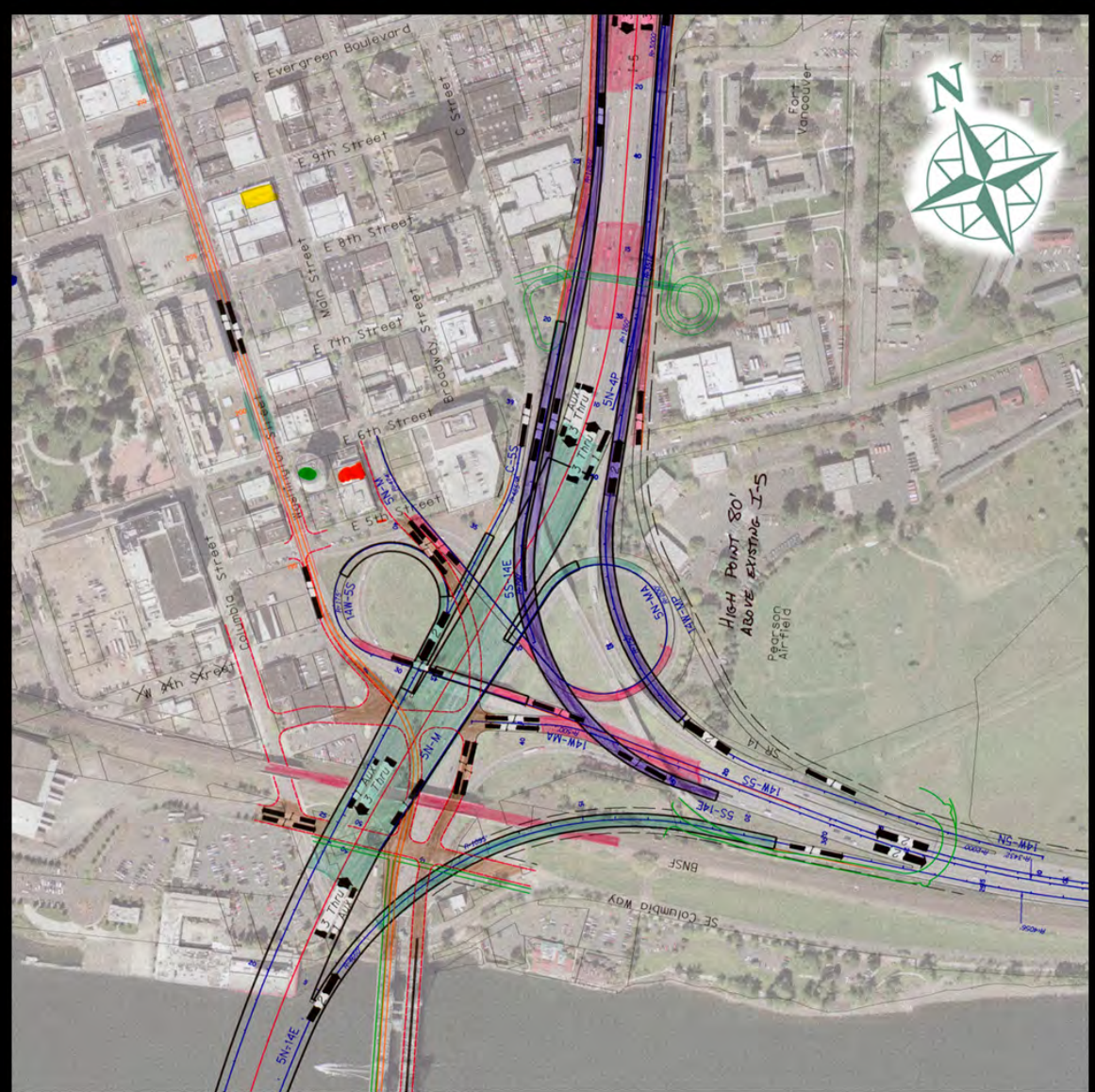
Balanced
Transit/Highway
Improvements
with Bus Rapid
Transit



SR-14 Interchange, Vancouver

(Alt. 4)

Balanced
Transit/Highway
Improvements
with Light Rail
Transit



Tunnel Level

Ground Level

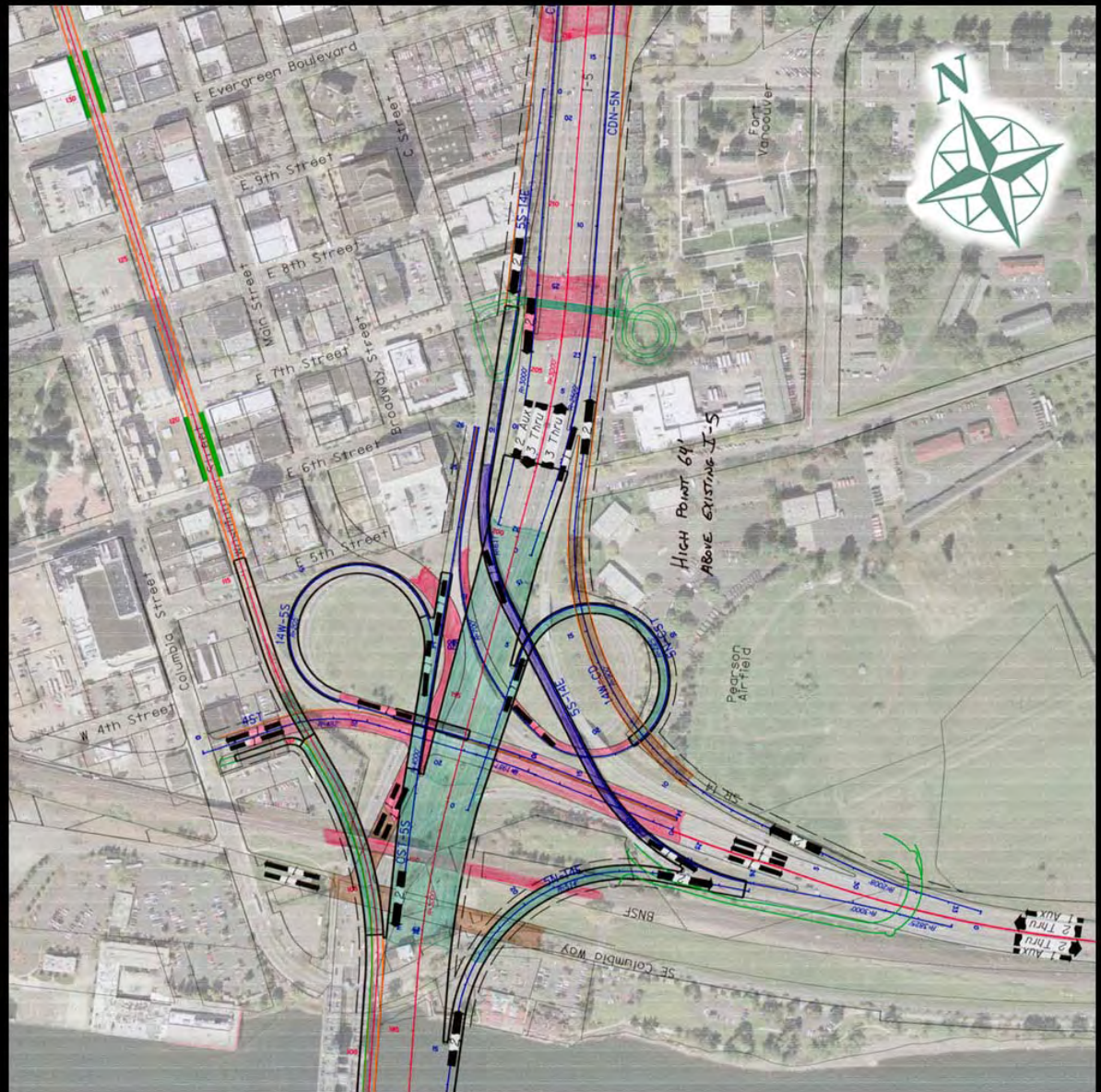
Second Level

Third Level

SR-14 Interchange, Vancouver

(Alt. 10)

Balanced
Transit/Highway
Improvements
with Bus Rapid
Transit



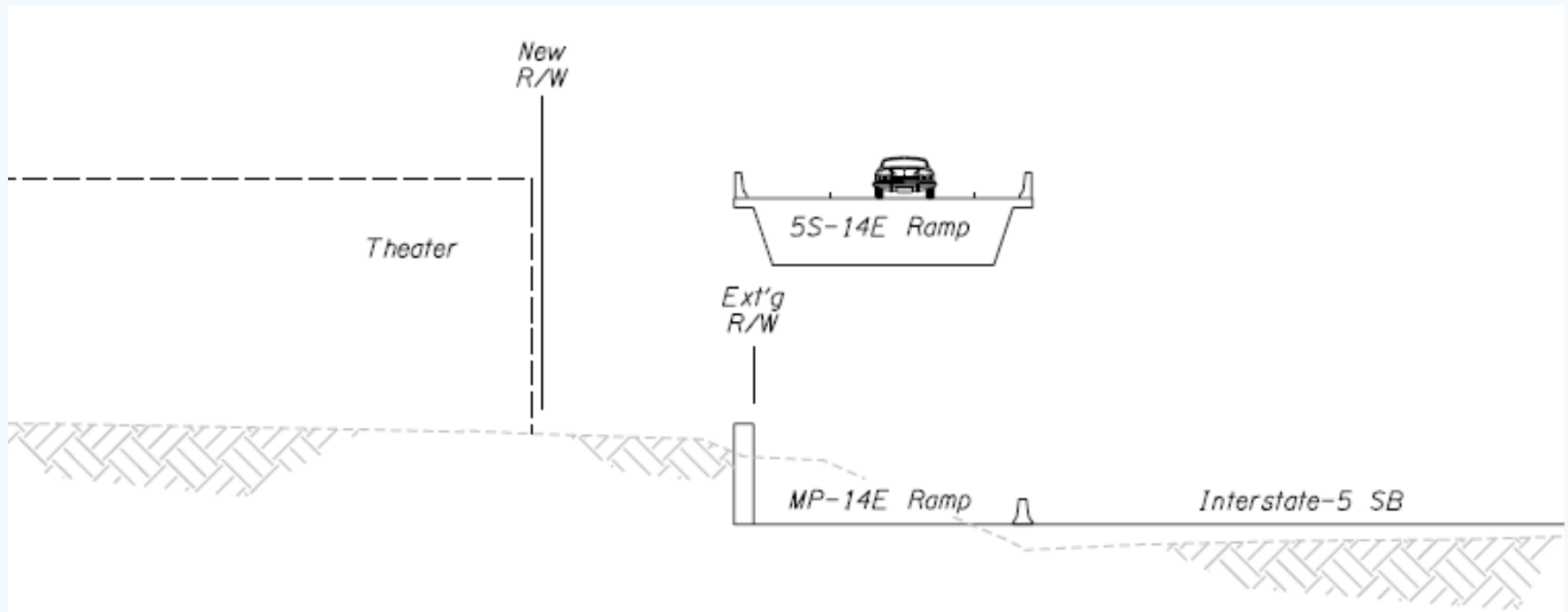
Tunnel Level

Ground Level

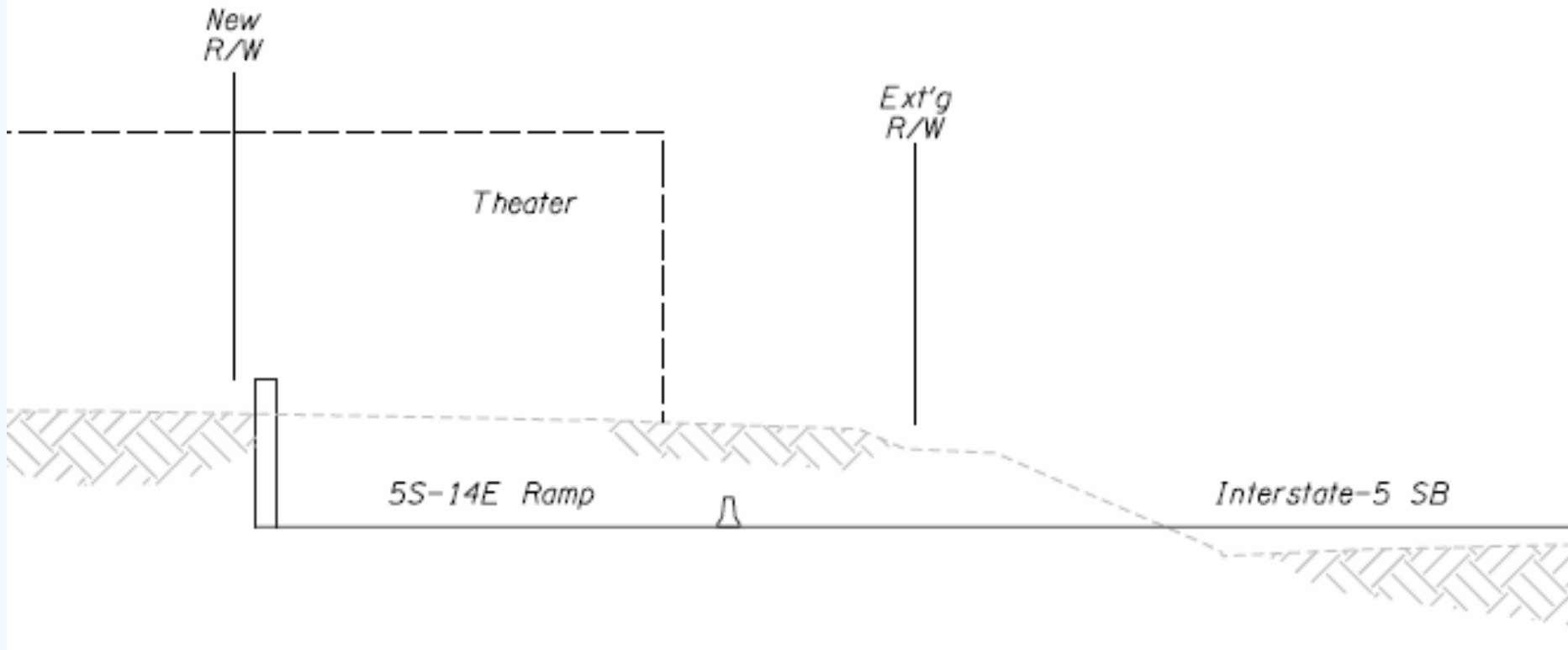
Second Level

Third Level

Downtown Vancouver “pinch point” option



Downtown Vancouver “pinch point” option



Mill Plain Interchange, Vancouver

(Alt. 4)

Balanced
Transit/Highway
Improvements
with Light Rail
Transit



Tunnel Level

Ground Level

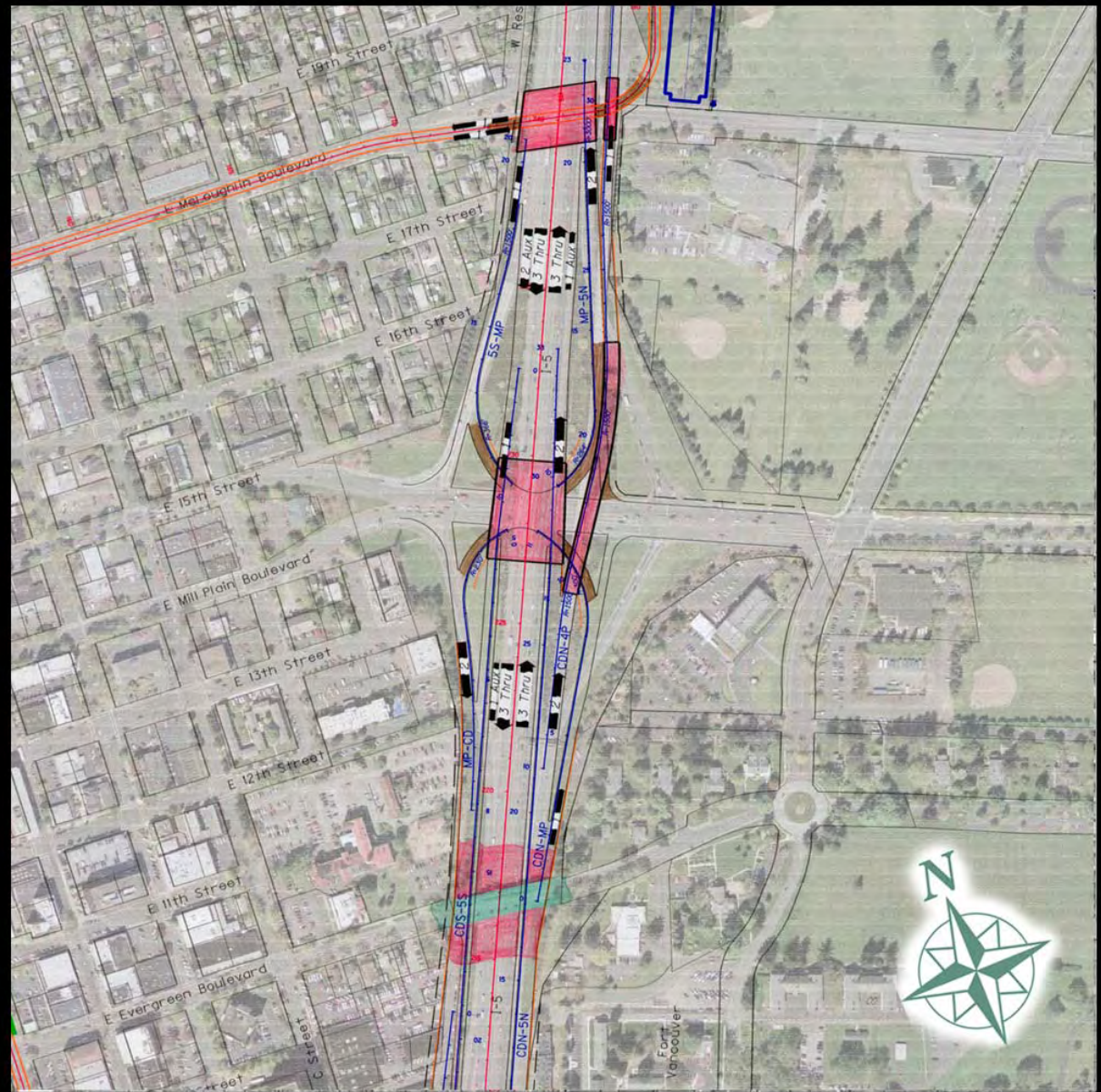
Second Level

Third Level

Mill Plain Interchange, Vancouver

(Alt. 10)

Balanced
Transit/Highway
Improvements
with Bus Rapid
Transit



Tunnel Level

Ground Level

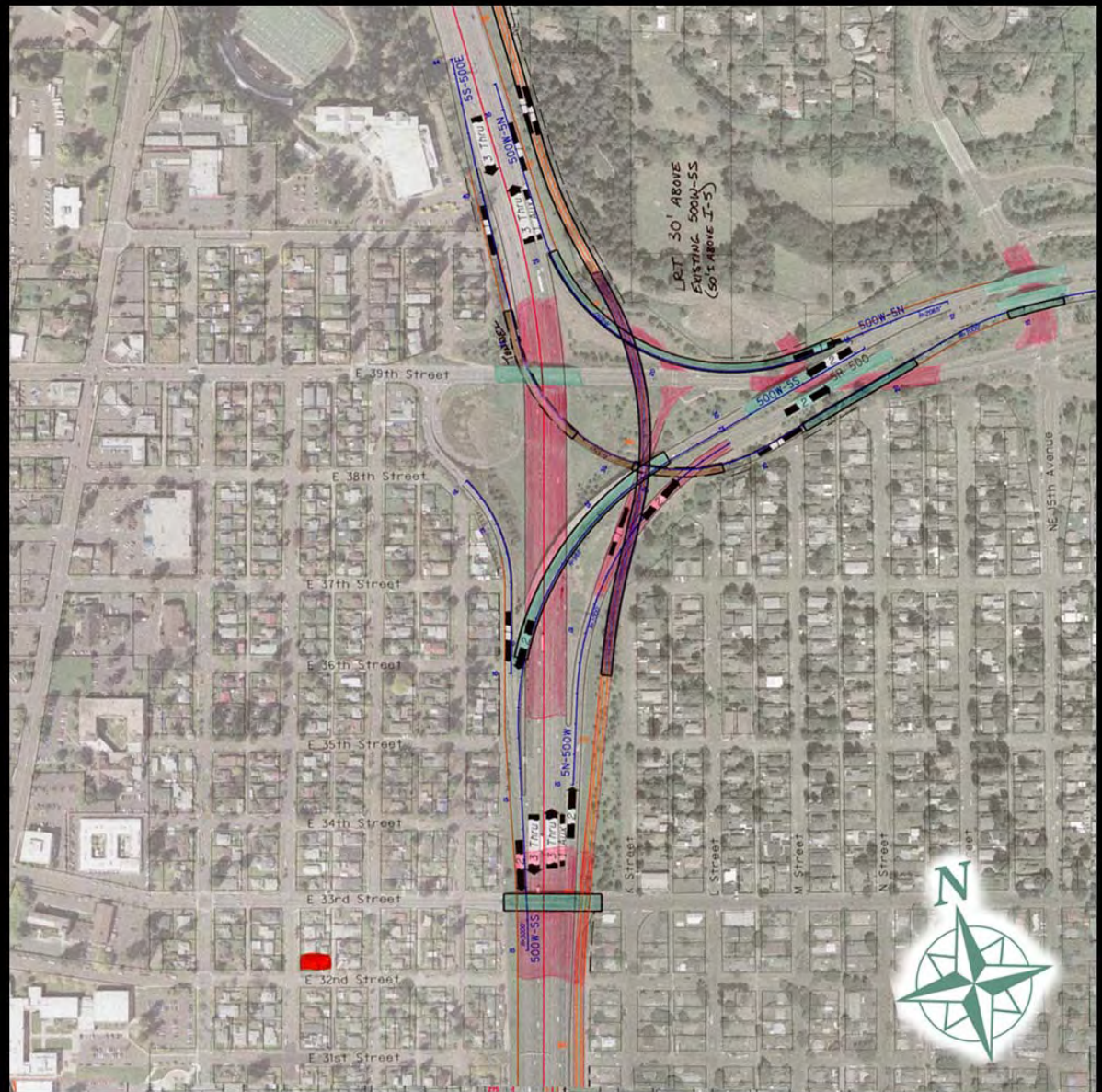
Second Level

Third Level

SR-500 Interchange, Vancouver

(Alt. 4)

Balanced
Transit/Highway
Improvements
with Light Rail
Transit



Tunnel Level

Ground Level

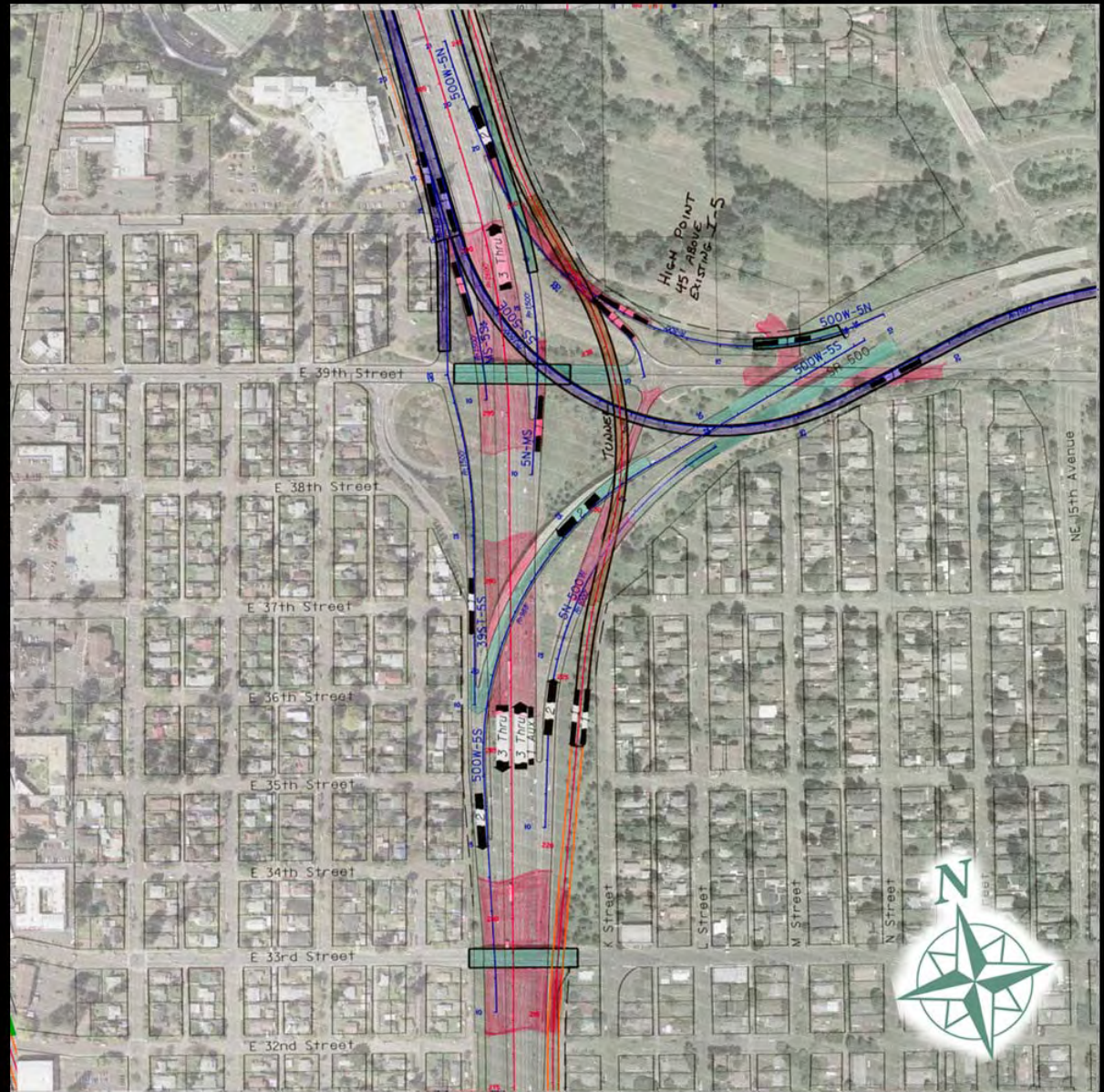
Second Level

Third Level

SR-500 Interchange, Vancouver

(Alt. 10)

Balanced
Transit/Highway
Improvements
with Bus Rapid
Transit



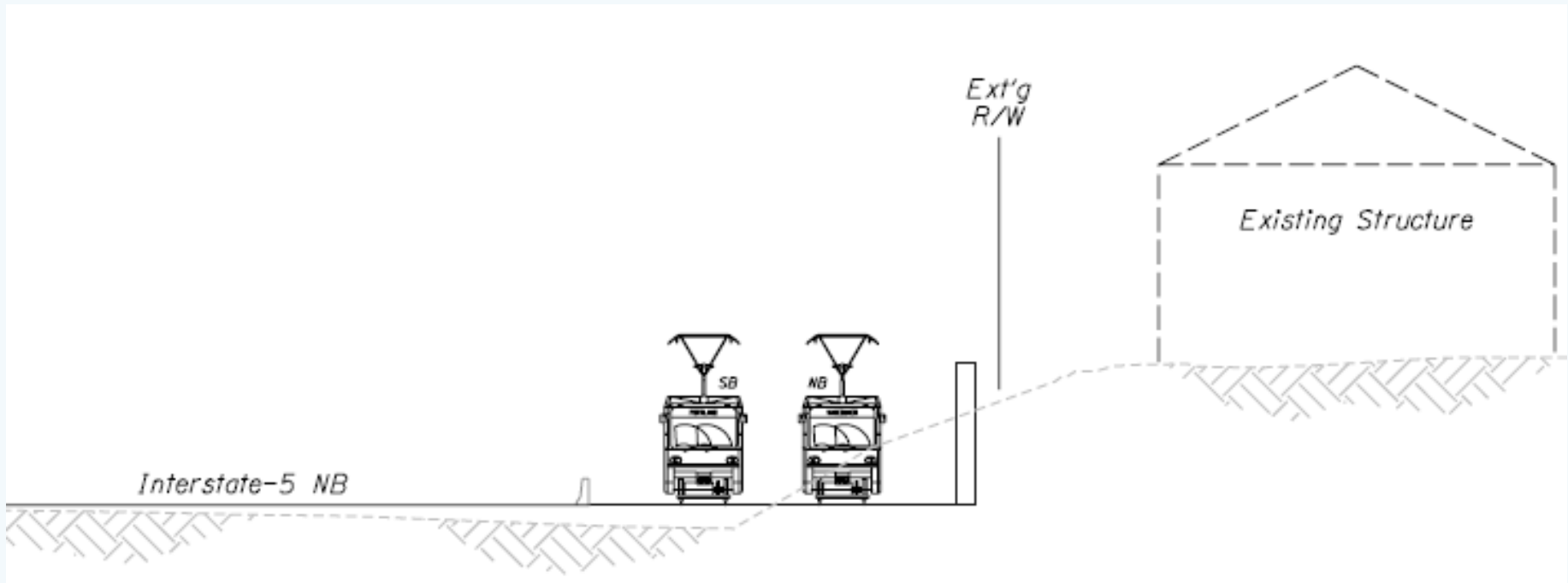
Tunnel Level

Ground Level

Second Level

Third Level

LRT/BRT Alignment Between Fourth Plain and SR-500



Next Steps for Transit and Roadway

- For DEIS Alternatives
 - Decision on River Crossing
 - Decision on Transit Modes