Chapter 5 Recommended Corridor Improvements

This chapter identifies the improvement option recommended by the Corridor Working Group (CWG).

1 What is the recommended Improvement Option?

Upon review of the project benefits and costs the CWG has recommended a hybrid of Improvement Options 2 and 3. The only difference between Options 2, Option 3, and the CWG's hybrid is the starting point of proposed widening on SR 169.

Option 2 proposes:
widen SR 169 from four lanes to six lanes
(140th Way SE to I-405);

Option 3 proposes:
widen SR 169 from four lanes to six lanes
(Jones Road / 196th Avenue to I-405);

Hybrid Option proposes:
widen SR 169 from four lanes to six lanes
(152nd Avenue SE to I-405)
152nd Avenue is about halfway between 140th Way SE and Jones Road as shown in Exhibit 5.1 on page 5-5.

Based on the analysis performed for this RDP, the CWG determined that Options 2 and 3 offered greater benefits to the SR 169 corridor than just the improvements proposed with Option 1. However, the CWG looked closely at the additional benefit gained between Options 2 and 3 to see if a hybrid option might offer a more cost effective improvement at this time. After looking at costs, benefits, traffic, and engineering issues between Options 2 and 3, the CWG determined that

widening SR 169 to 152nd Avenue SE offered the best combination of improvements for SR 169. However, the CWG also determined that the need to widen SR 169 up to Jones Road should be reassessed in the future.

2 How do the recommended projects improve SR 169 travel reliability and safety?

This RDP recommends the hybrid option described above containing transportation projects that would:

- Improve safety for drivers, pedestrians, and bicyclists by making targeted improvements throughout the corridor that address key locations with a high number of collisions,
- Increase roadway capacity in strategic locations,
- Improve transit facilities,
- Improve bicycle and pedestrian facilities,
- Improve operating conditions at specific intersections by installing intersection controls (appropriate potential improvements might be one or more of the following: traffic signals, turning lanes, stop signs, or roundabouts).
- Improve operating conditions by employing access management strategies. This may include: regulating driveway spacing, combining driveways, restricting left turns, and installing restrictive medians at appropriate access points. Another technique would be to encourage the development of parallel arterial networks, or grids of alternative streets for local traffic.

3 How do the recommended projects improve transit on SR 169?

The SR 169 RDP recommended improvements contain projects developed from consultation with King County Metro that enhance bus stops and bus route capabilities as future demand for ridership grows. Potential transit improvements are:

- Install bus pullouts,
- Install sidewalks, and
- Install bus shelter footings

4 How much will the improvements cost?

The preliminary project costs were developed for planning purposes only and should be viewed as a starting point when determining a final cost estimate for a proposed project. The preliminary project costs were created to help the corridor study process for the SR 169 Route Development Plan. The preliminary project costs are in 2005 dollars, are planning level and not based on engineering analysis. The estimates provided a generalized total for each segment based upon WSDOT experience with other projects of similar size and type. They do not account for potential environmental mitigation (including right of way), rising material costs or other unforeseen expenditures that may occur during design or construction. These factors may increase the final costs of individual projects.

5 How will the improvements be phased over time?

The proposed improvement projects will be phased over the next 20 years. RDP's recommended proposed improvement projects have been sorted into three categories indicating the CWG's suggested order for phasing in the projects over time. This is not the likely order in which the projects will be developed, but a suggested order. The three categories are immediate-term projects, short-term projects, and long-term projects.

Appendix D

Appendix D contains a list of the proposed improvement projects and identifies which projects are proposed in the immediate, short, and long-term. The list also specifies the type of improvement and possible benefits related to the proposed improvement (such as increased safety or roadway capacity).

Immediate-Term Projects

Projects presented in Chapter 2 in Exhibit 2.22 on page 2-44 are considered immediate-term projects. These projects have either been completed, are underway, or have acquired funding. These projects were assumed in the year 2030 No Build traffic analysis conducted for this RDP.

Short-Term Projects

The CWG defined short-term projects as projects that have not been funded, but are most likely to receive funding and be able to be designed and constructed within the next 6 to 10 years.

Long-Term Projects

Long-term projects are also not funded at this time and the complexity and cost of these projects make implementation likely in an 11 to 20-year timeframe.

Exhibit 5.1

SR 169 Recommended Improvements and Preliminary Project Costs*

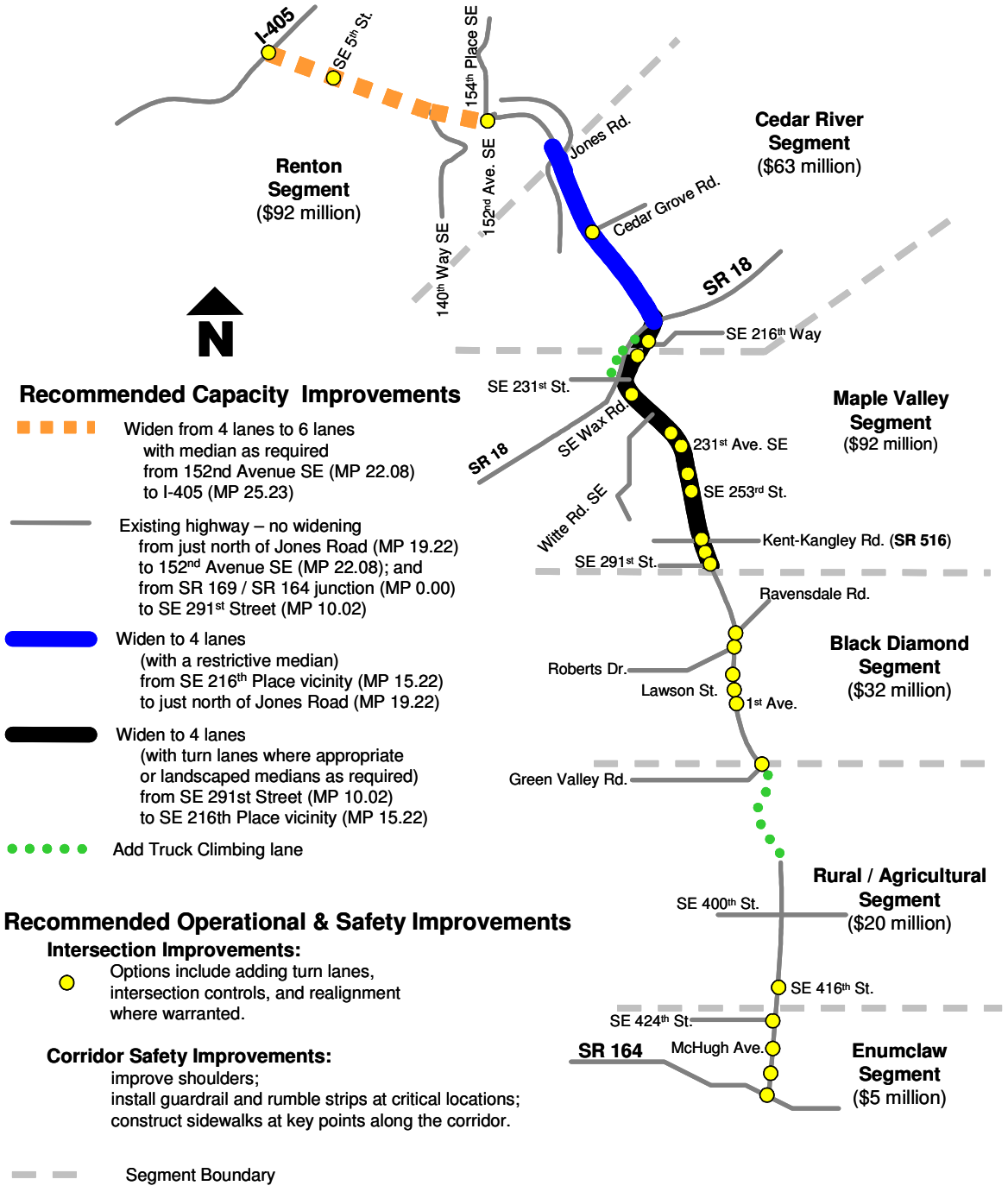

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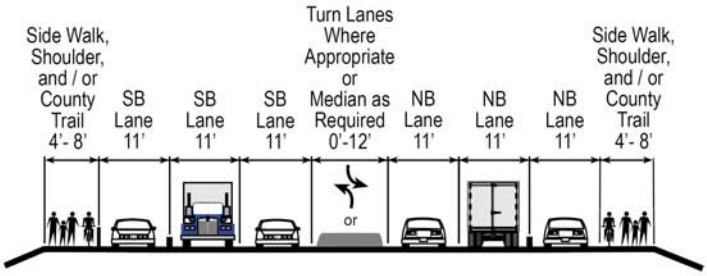
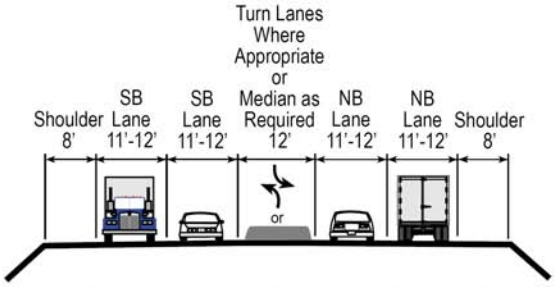
Exhibit 5.2

SR 169 Recommended Cross-Sections



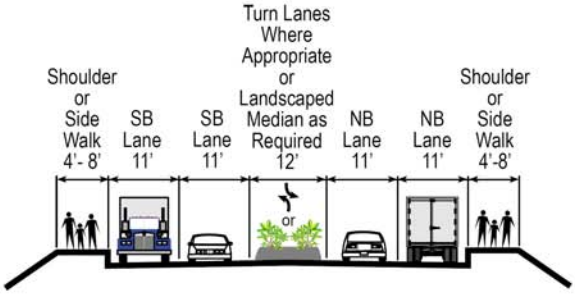
152nd Avenue SE / 154th Place SE to I-405

6 Milepost 22.08 to Milepost 25.26



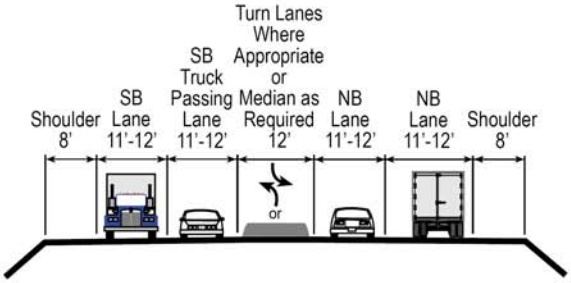
SE 216th Place vicinity to 152nd Avenue SE / 154th Place SE

5 Milepost 15.22 to Milepost 22.08



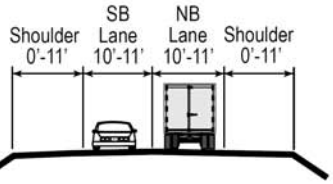
SE 291st Street to SE 231st Street

3 Milepost 10.02 to Milepost 14.17



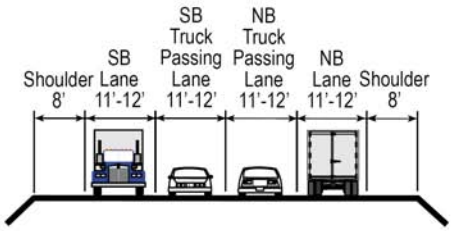
SE 231st Street to SE 216th Place vicinity

4 Milepost 14.17 to Milepost 15.22



SR 169 / SR 164 Junction to North of 383rd Street

1 Milepost 0.00 to Milepost 3.97



North of 383rd Street to Green Valley Road

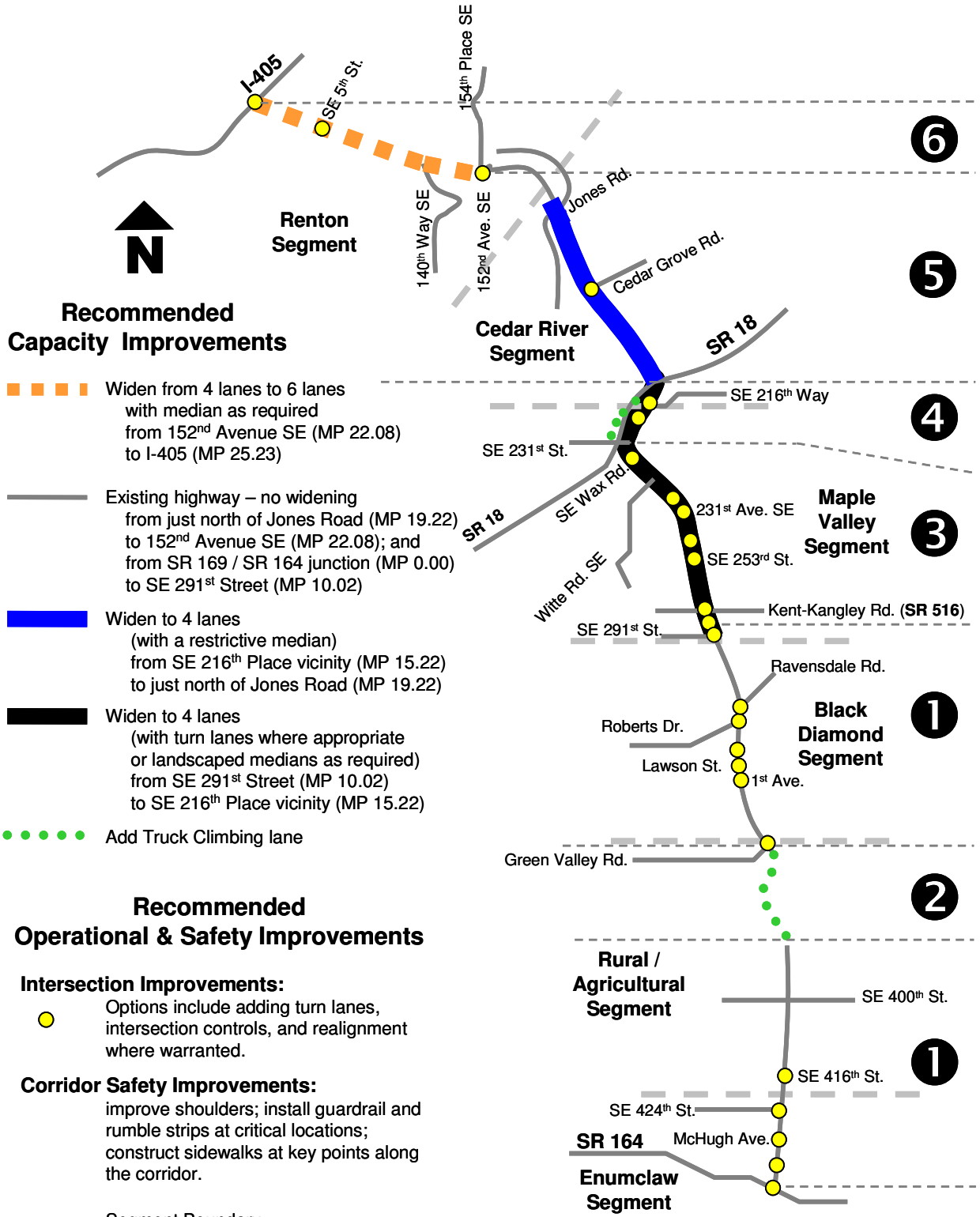
2 Milepost 3.97 to Milepost 6.02

Green Valley Road to SE 291st Street

Milepost 6.02 to Milepost 10.02

Exhibit 5.3

SR 169 Recommended Cross-Section Locations



Recommended Capacity Improvements

- Widen from 4 lanes to 6 lanes with median as required from 152nd Avenue SE (MP 22.08) to I-405 (MP 25.23)
- Existing highway – no widening from just north of Jones Road (MP 19.22) to 152nd Avenue SE (MP 22.08); and from SR 169 / SR 164 junction (MP 0.00) to SE 291st Street (MP 10.02)
- Widen to 4 lanes (with a restrictive median) from SE 216th Place vicinity (MP 15.22) to just north of Jones Road (MP 19.22)
- Widen to 4 lanes (with turn lanes where appropriate or landscaped medians as required) from SE 291st Street (MP 10.02) to SE 216th Place vicinity (MP 15.22)
- Add Truck Climbing lane

Recommended Operational & Safety Improvements

Intersection Improvements:

Options include adding turn lanes, intersection controls, and realignment where warranted.

Corridor Safety Improvements:

improve shoulders; install guardrail and rumble strips at critical locations; construct sidewalks at key points along the corridor.

- Segment Boundary
- Recommended Cross-Section Locations