

substantially affect the overall existing land use pattern in the study area.

The project does not conflict with City of Bellevue plans, policies, and regulations. The project supports and/or does not preclude planned City of Bellevue capital facility projects.

What measures are proposed to avoid or reduce impacts?

WSDOT proposes to implement a traffic management plan and use construction best management practices (BMPs) such as maintaining local access to businesses, to avoid or minimize the effects of construction on land use patterns. In addition, property needed to construct the project will be acquired in accordance with federal and Washington state relocation laws.

What would happen if we adopt the No Build Alternative?

Under the No Build Alternative, land uses in the project vicinity would not benefit from an improved access and circulation pattern on local streets, nor from improved safety and expanded capacity at the I-405/SR 520 interchange. It is possible that over time, increased traffic volumes on local streets associated with the lack of capacity on I-405 could result in more difficult access to some properties, increased hazards for vehicles and pedestrians, and increased noise. These changes could make property in the project vicinity less desirable for development and/or could result in a need to convert some of the properties to public right-of-way use to increase local street capacity.

SECTION 2 PROJECT DESCRIPTION

What is the intent of the I-405, NE 8th Street to SR 520 Improvement Project?

WSDOT is proposing to construct the I-405, NE 8th Street to SR 520 Improvement Project to improve safety and reduce congestion in the vicinity of the I-405 and SR 520 interchange within the city of Bellevue. The improvements will benefit the public by:

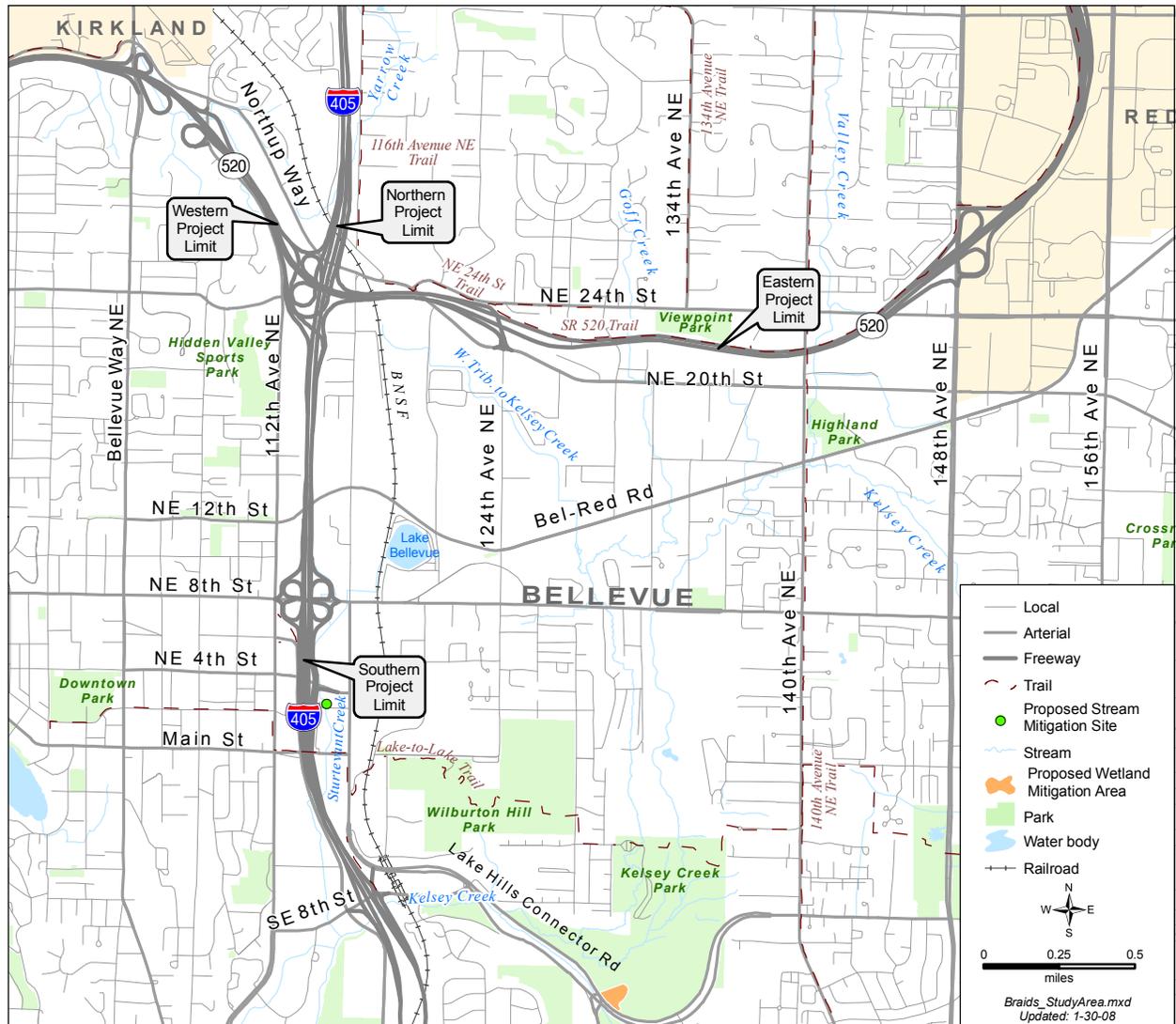
- Reducing congestion for the public and freight vehicles;
- Improving safety;
- Improving access and circulation to and from local streets; and
- Providing opportunities for environmental improvements.

The I-405, NE 8th Street to SR 520 Improvement Project extends approximately 1.5 miles north along I-405, from south of NE 8th Street to the SR 520 interchange, and approximately 1.6 miles east along SR 520, from the I-405 interchange to east of 134th Avenue NE (Exhibit 2-1).

What are the details of the I-405, NE 8th Street to SR 520 Improvement Project?

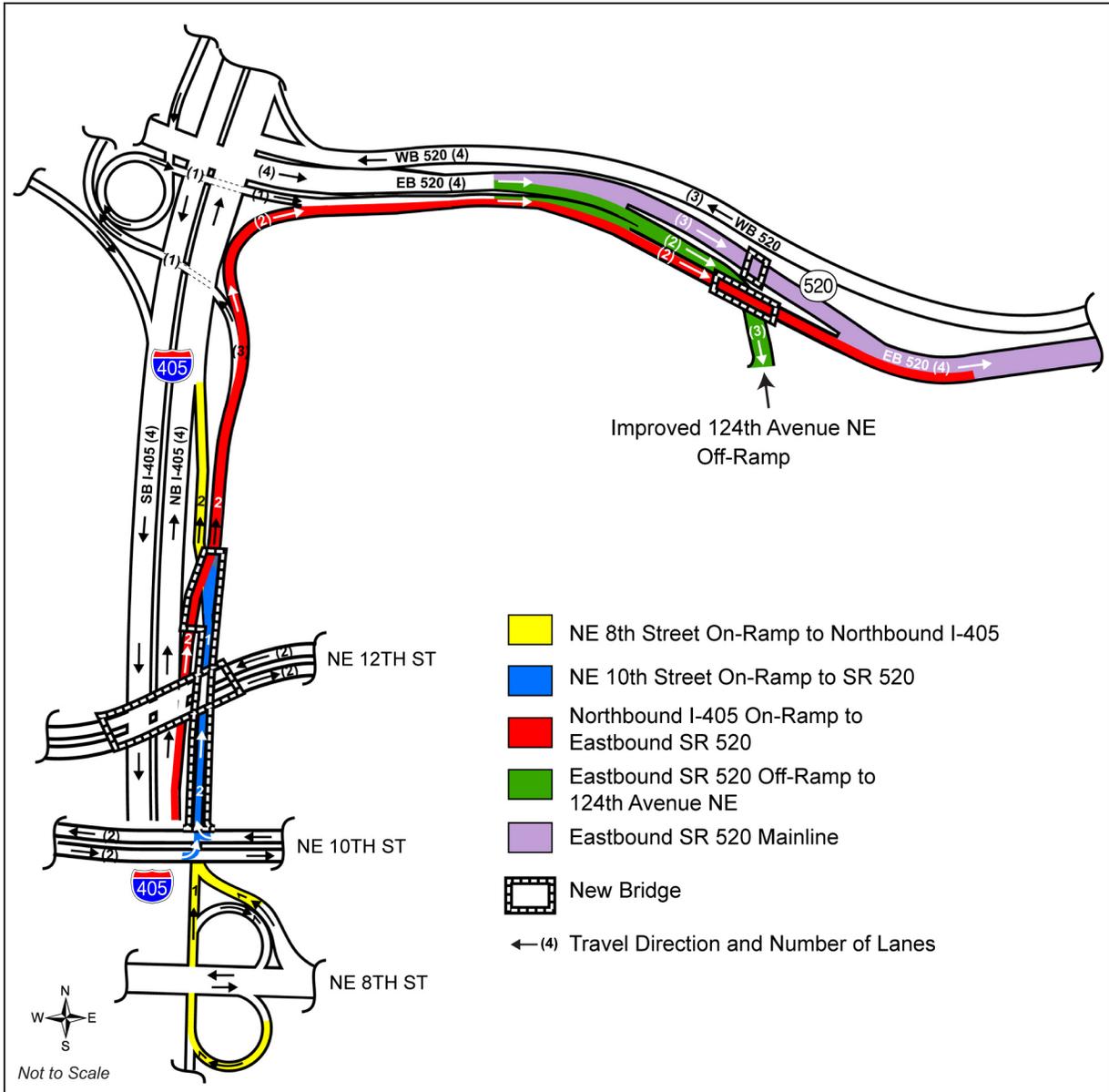
The proposed I-405, NE 8th Street to SR 520 Improvement Project is part of the overall I-405 Corridor Program Master Plan designed to improve safety and reduce congestion along the I-405 corridor. The I-405, NE 8th Street to SR 520 Improvement Project will improve safety and mobility by constructing grade-separated ramps on northbound I-405 to separate the I-405 traffic exiting to SR 520 from traffic entering I-405 at NE 8th Street in downtown Bellevue. On SR 520, a new eastbound collector-distributor lane will also be constructed to separate the on- and off-ramp traffic between I-405 and 124th Avenue NE (Exhibit 2-2). In addition, the ramps from SR 520 to southbound I-405 will be reconfigured to improve traffic flow.

Exhibit 2-1: Project Location and Vicinity



This discipline report analyzes two alternatives, the Build Alternative and the No Build Alternative. The proposed project improvements for the Build Alternative, from south to north on I-405, and west to east on SR 520, are described below. The No Build Alternative is described at the end of this section.

Exhibit 2-2: Proposed Lane Configuration on Northbound I-405 to Eastbound SR 520



Northbound I-405 to Eastbound SR 520 Improvements

- Reconfigure the existing northbound NE 4th Street on-ramp to become an auxiliary lane that exits to SR 520 and northbound I-405 as part of a two-lane exit ramp. See Exhibit 2-3.
- Reconstruct portions of the NE 8th Street on- and off-ramps to and from northbound I-405. The on-ramp will be reconstructed at a lower grade than the I-405 mainline.

What is an auxiliary lane?

An auxiliary lane is a lane added between interchanges—from one on-ramp to the next off-ramp. It is dedicated to traffic entering and leaving a freeway and provides motorists with more time and extra room to accelerate or decelerate and merge when getting on and off the freeway.

What is a collector-distributor system?

Collector-distributor lanes are freeway lanes serving single or multiple interchanges that are physically separated from general freeway lanes. The purpose of collector-distributor lanes is to separate the traffic entering and exiting the freeway from the through traffic.

In the simplest form, all ramps that would normally touch the freeway are instead shifted outwards to the collector distributor lanes. There is still weaving, but it is no longer on the main lanes.

- Rebuild the NE 12th Street bridge crossing over I-405 to accommodate the new ramps.
- Construct a northbound on-ramp to SR 520 from a new NE 10th Street bridge crossing; the bridge crossing will be constructed as part of a separate project prior to constructing the on-ramp.
- Construct grade-separated ramps to divide traffic entering northbound I-405 from NE 8th Street and traffic exiting I-405 to SR 520.
- Construct grade-separated ramps to divide traffic entering eastbound SR 520 from northbound I-405 and traffic exiting eastbound SR 520 to 124th Avenue NE.
- Shift eastbound SR 520 mainline travel lanes toward the median.
- Extend the ramp from northbound I-405 to eastbound SR 520 on a collector-distributor system through the 124th Avenue NE interchange to merge with the existing eastbound SR 520 mainline just east of 134th Avenue NE.
- Reconstruct the 124th Avenue NE interchange off-ramp.
- Relocate an existing noise barrier. The new barrier will be approximately 1,585 feet long and 20 feet high.
- Construct several retaining walls needed to allow for the proposed widening of I-405.

SR 520 to Southbound I-405 Improvements

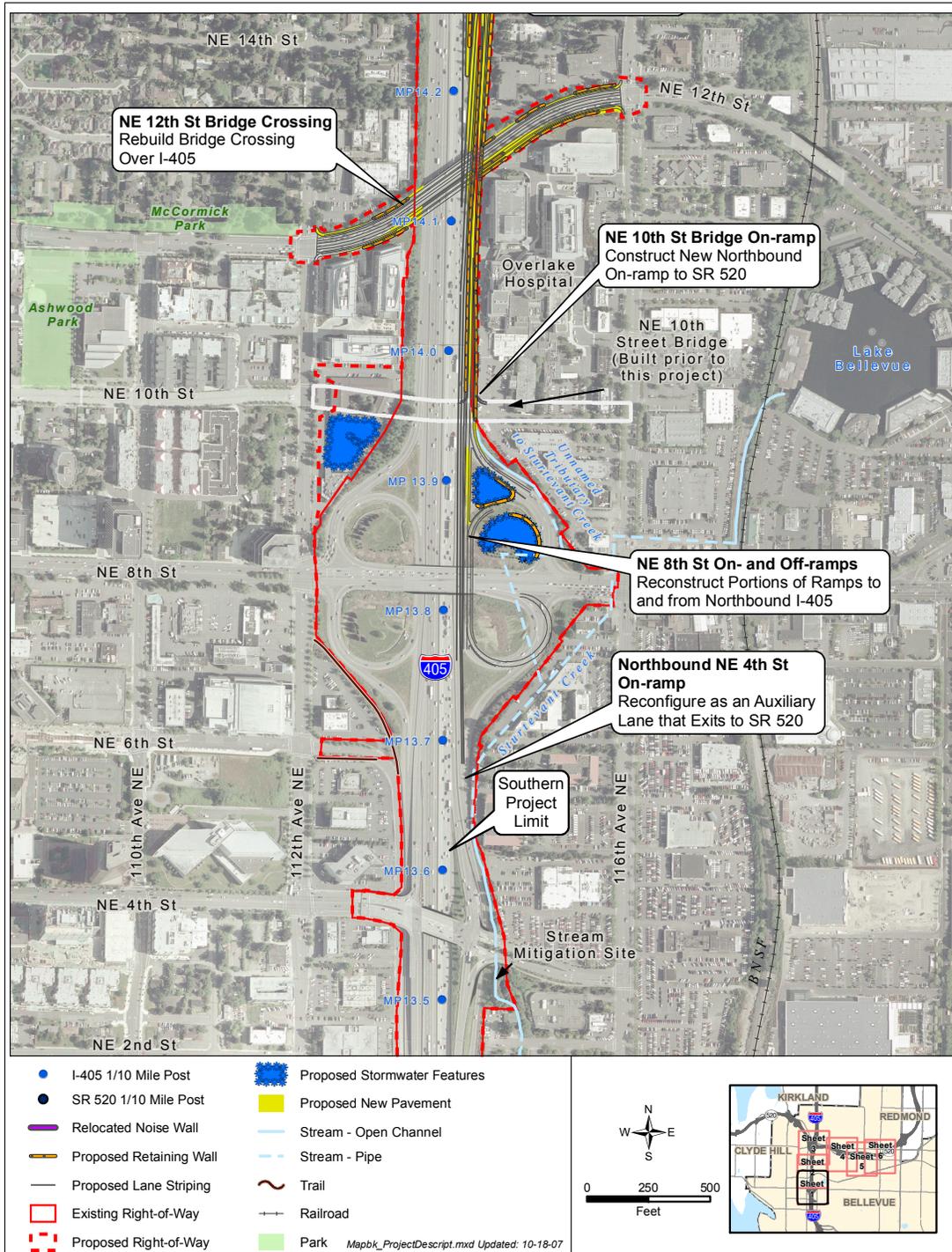
- Reconfigure the ramps from SR 520 to southbound I-405 to improve traffic flow. The westbound SR 520 to southbound I-405 ramp will become a dedicated auxiliary lane, and on-ramp traffic will no longer be required to immediately merge with southbound I-405 mainline traffic. The eastbound SR 520 to southbound I-405 ramp will merge with the dedicated auxiliary lane.

Southbound I-405 to SR 520 Improvements

- Realign the southbound I-405 to eastbound SR 520 loop ramp.
- Realign eastbound SR 520 to match the proposed improvements.

I-405, NE 8TH STREET TO SR 520 IMPROVEMENT PROJECT
 LAND USE PATTERNS, PLANS, AND POLICIES DISCIPLINE REPORT

Exhibit 2-3: Project Features - Sheet 1 of 6



I-405, NE 8TH STREET TO SR 520 IMPROVEMENT PROJECT
 LAND USE PATTERNS, PLANS, AND POLICIES DISCIPLINE REPORT

Exhibit 2-3: Project Features - Sheet 2 of 6

