

Camas Transportation Corridors Study

Presented to City of Camas – Planning Commission



The logo for DKS, consisting of the letters "DKS" in a white, bold, sans-serif font centered within a solid black square.



Project Team

- James Carothers, City of Camas
- Steve Wall, City of Camas
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- Julie Sosnovske, PE – Traffic Engineer (DKS)
- Dustin Day – Natural Resources (BergerABAM)

Scope of Study

- 6th Avenue / Everett St. Corridor
 - Provide recommendations to accommodate multi-modal travel within the corridor
 - Provide recommended intersection configurations
 - Identify options for replacing bridge at Lacamas Lake / Round Lake
- Lacamas North Shore Area
 - Identify preferred location for arterial corridor
 - Identify preferred intersection control for corridor
 - Identify potential access points along corridor

6th Avenue / Everett Street (SR 500) Study

- Study area extends from 6th / Norwood Roundabout, through downtown to SR 500, then north to the City Limits.
- Study area broken into six segments of similar nature and mobility issues

6th Avenue / Everett Street (SR 500) Study

- Segment 1- NW 6th Avenue (SR 14 to NE Adams Street)
- Segment 2 – NE 6th Avenue (NE Adams Street to NE Garfield Street)
- Segment 3 – NE Garfield Street (SR 500)/NE 14th Avenue (NE 6th Avenue to NE Everett Street)
- Segment 4 – NE Everett Street (NE 14th Avenue to NE 23rd Avenue)
- Segment 5 – NE Everett Street (NE 23rd Avenue to NW Lake Road)
- Segment 6 – NE Everett Street (NW Lake Road to NE 3rd Street)

6th Ave. / Everett St. – Existing Conditions

- Traffic Data from 2012 Camas TIF Update
- Traffic Data collected at 7 study intersections
- Identified existing multi-modal features
- Utilized collected and TIF data to create Existing Conditions Model

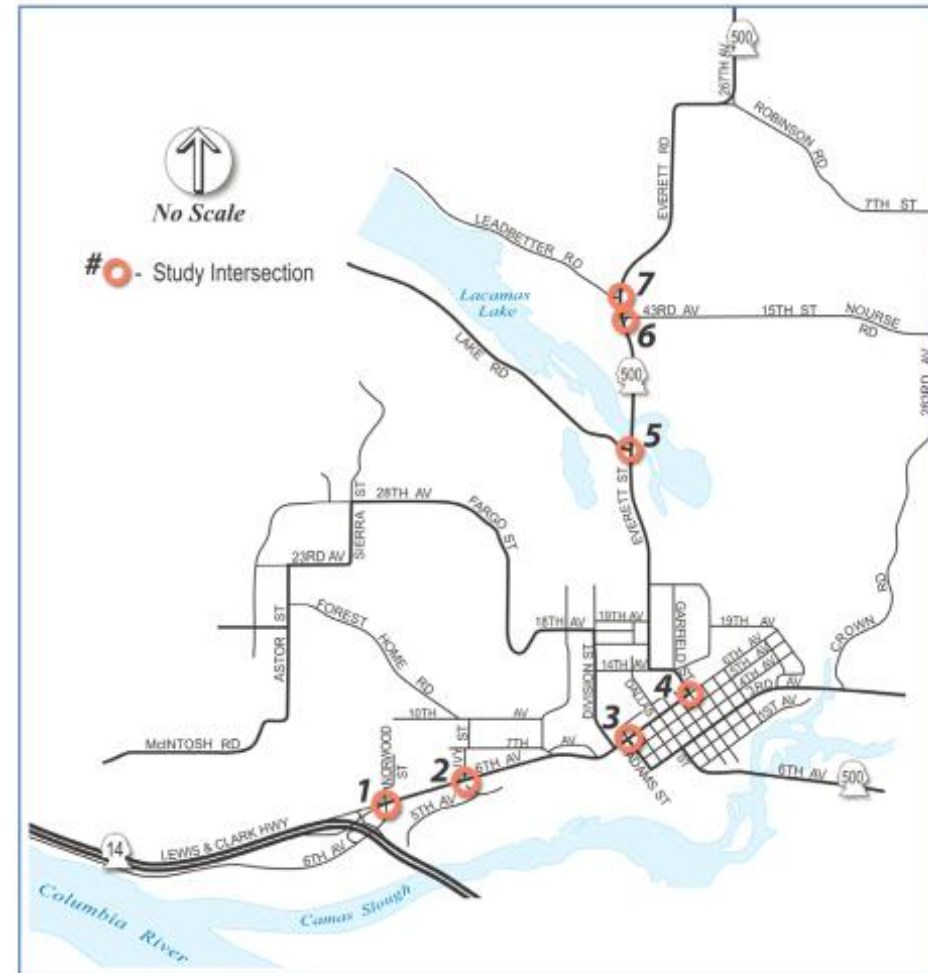


Figure 1: Study Area

Courtesy DKS

6th Ave. / Everett St. – Existing Conditions

- Identified Intersection Operations
 - All intersection operate below capacity except for Everett Street / Lake Road
- Collected 3-year crash history
 - Crash rates below 1.0 Crash / MEV at intersections
 - Crash rates near or above County Avg 138.7/100MV
 - Many accidents related to rear end / excessive speed
- Collected parking data for downtown area
 - Highest usage during the work day
 - Most locations 50% to 80% occupied

6th Ave. / Everett St. – Future Conditions

- Forecasted to Year 2035
- Most study intersections over capacity in current configuration
- Recommendations made for each segment and study intersections to maintain capacity

NW 6th Ave – Norwood to Adams (Part 1)



NW 6th Ave – Norwood to Adams (Part 2)

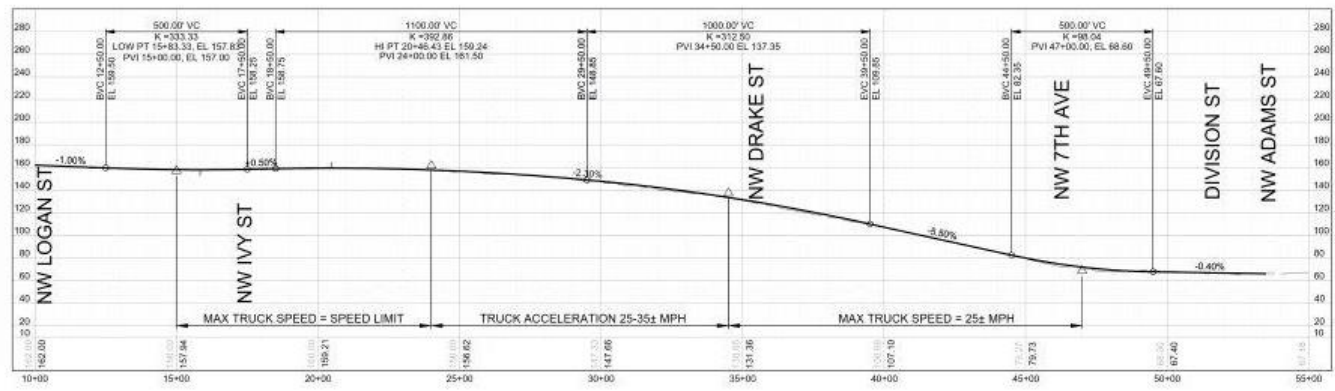


NW 6th Ave – Norwood to Adams

Recommendations

- Add enhanced pedestrian crossings at Ivy St. and Drake St.
- ‘Road Diet’ is feasible for this segment
 - Additional studies may need to review gap availability for side street turn movements
 - Review uphill truck speed coming from downtown

NW 6th Ave – Road Diet – Truck Speeds



NW 6th Ave – Adams to Garfield



NW 6th Ave – Adams to Garfield

Recommendations

- 6th / Adams – Add pedestrian enhancements
 - Future single lane roundabout
- 6th / Dallas – Maintain current stop control
 - Review capacity as development occurs
 - May be impacted if 3rd Street reconfigured
- 6th / Garfield – Maintain current stop control
 - Review need for signal as development occurs
- Add bike lanes along segment
- Keep on-street parking / Add curb extensions at intersections

NE Garfield Street / NE 14th Avenue

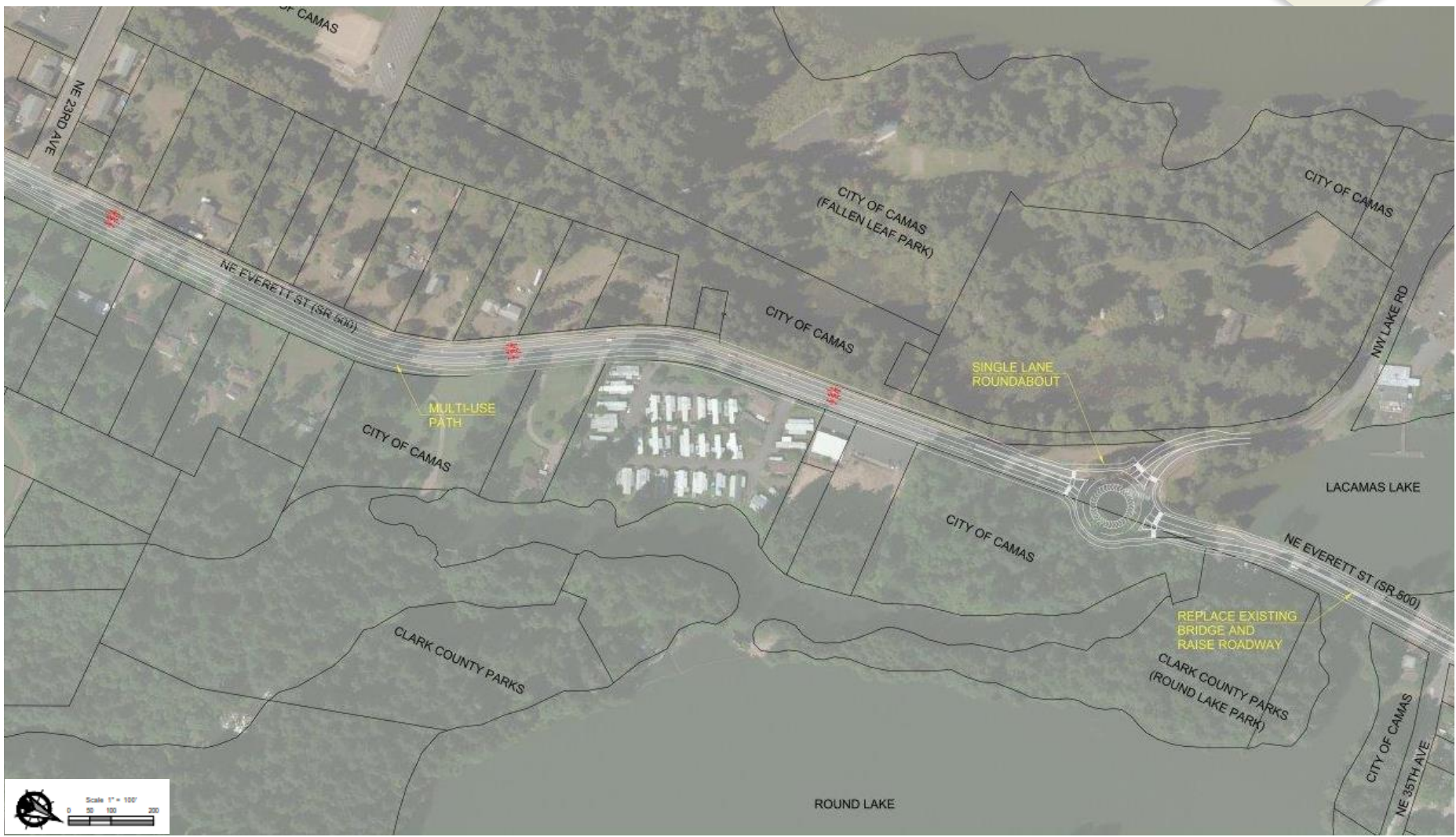


NE Garfield Street / NE 14th Avenue

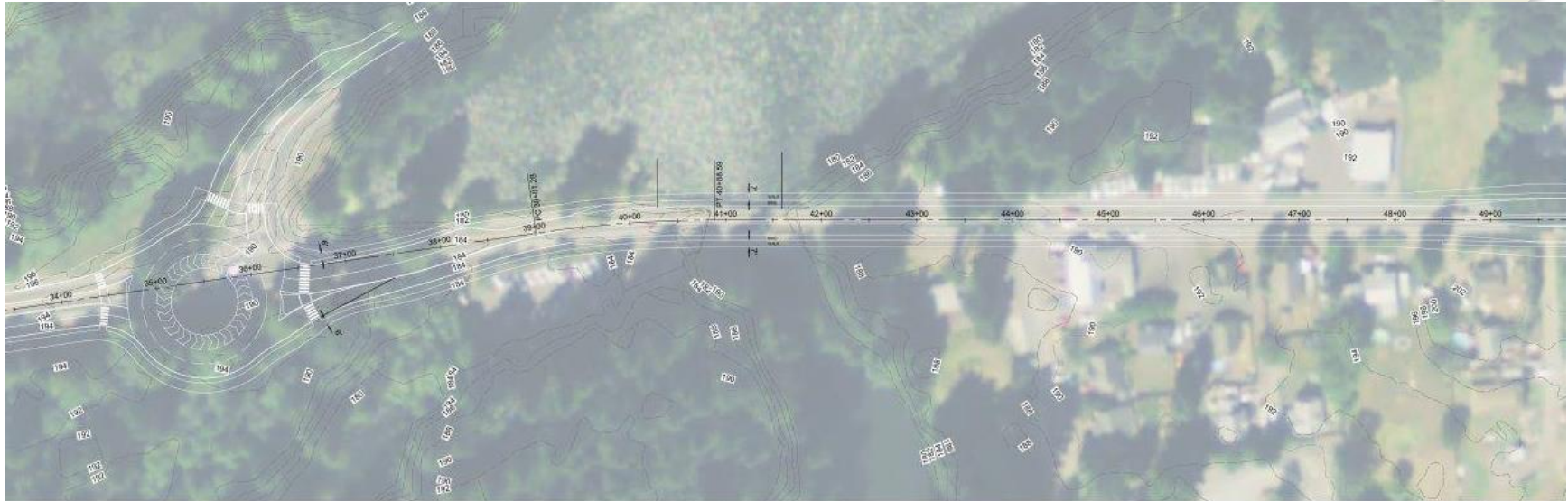
Recommendations

- Maintain Striping performed by WSDOT
- Reconfigure Garfield / Ione Intersection
- Close South and West legs of 14th Street / Everett St. Intersection per TIF Study
- Maintain existing pedestrian crossings
 - Consider Enhanced Crossings as traffic increases

Everett St. - NE 23rd Avenue to Lake Road



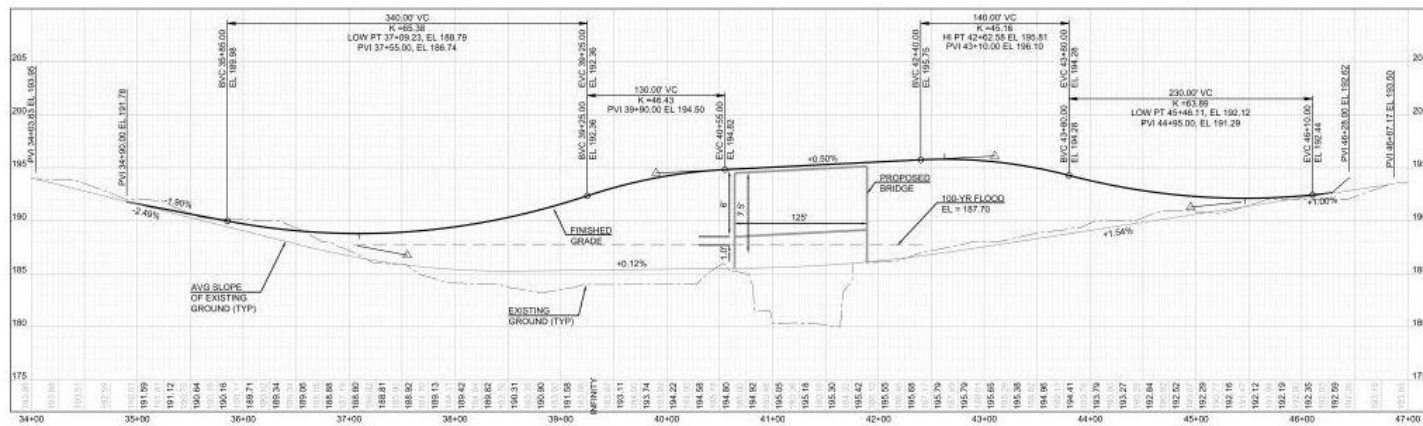
Everett St. – Bridge Replacement



DESIGN SPEED=40MPH Kc=44
 POSTED SPEED=35MPH Ks=64



Scale 1" = 50'
 0 25 50 100 HORIZ.
 0 2.5 5 10 VERT.



FEMA 100-YR FLOOD EL 191.0
 ADJUST TO CITY DATUM -3.3
 AS SHOWN ON PROFILE EL 187.7
 BOTTOM OF BRIDGE EL 188.7

Everett St. - NE 23rd Avenue to Lake Road

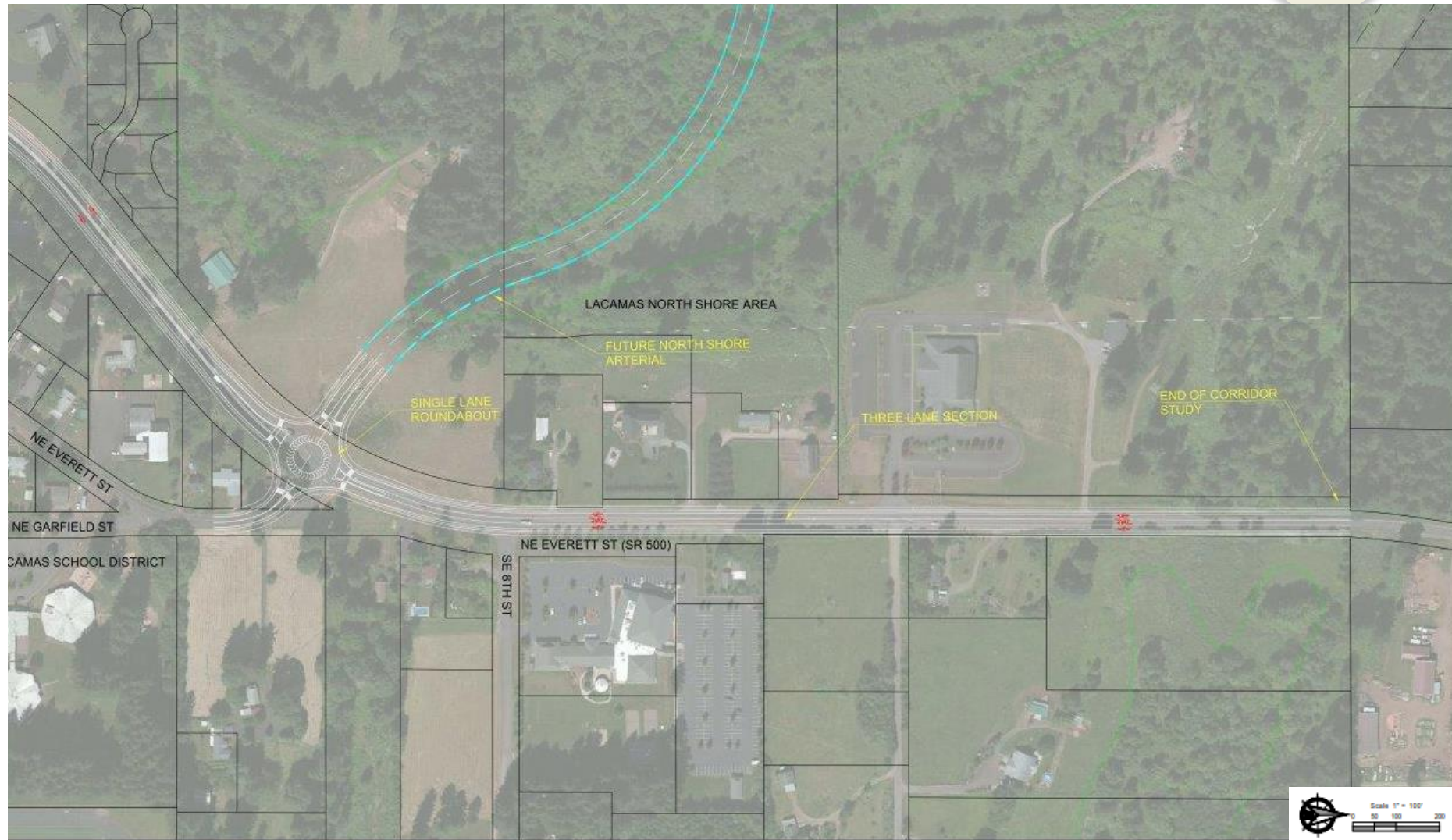
Recommendations

- Ultimate roadway section should include center left turn lane, bike lanes, sidewalks on both sides
- Consider implementing 12' multi-use path on east side to connect to Round Lake Park
- Everett St. / Lake Rd. Intersection will need improvements before 2035
 - Consider Single-Lane Roundabout
 - Volumes balanced on each leg
- Bridge will need to be replaced
 - Raise road grade to avoid overtopping in 100-year flood

NE Everett St. – NW Lake Road to City Limit



NE Everett St. – NW Lake Road to City Limit

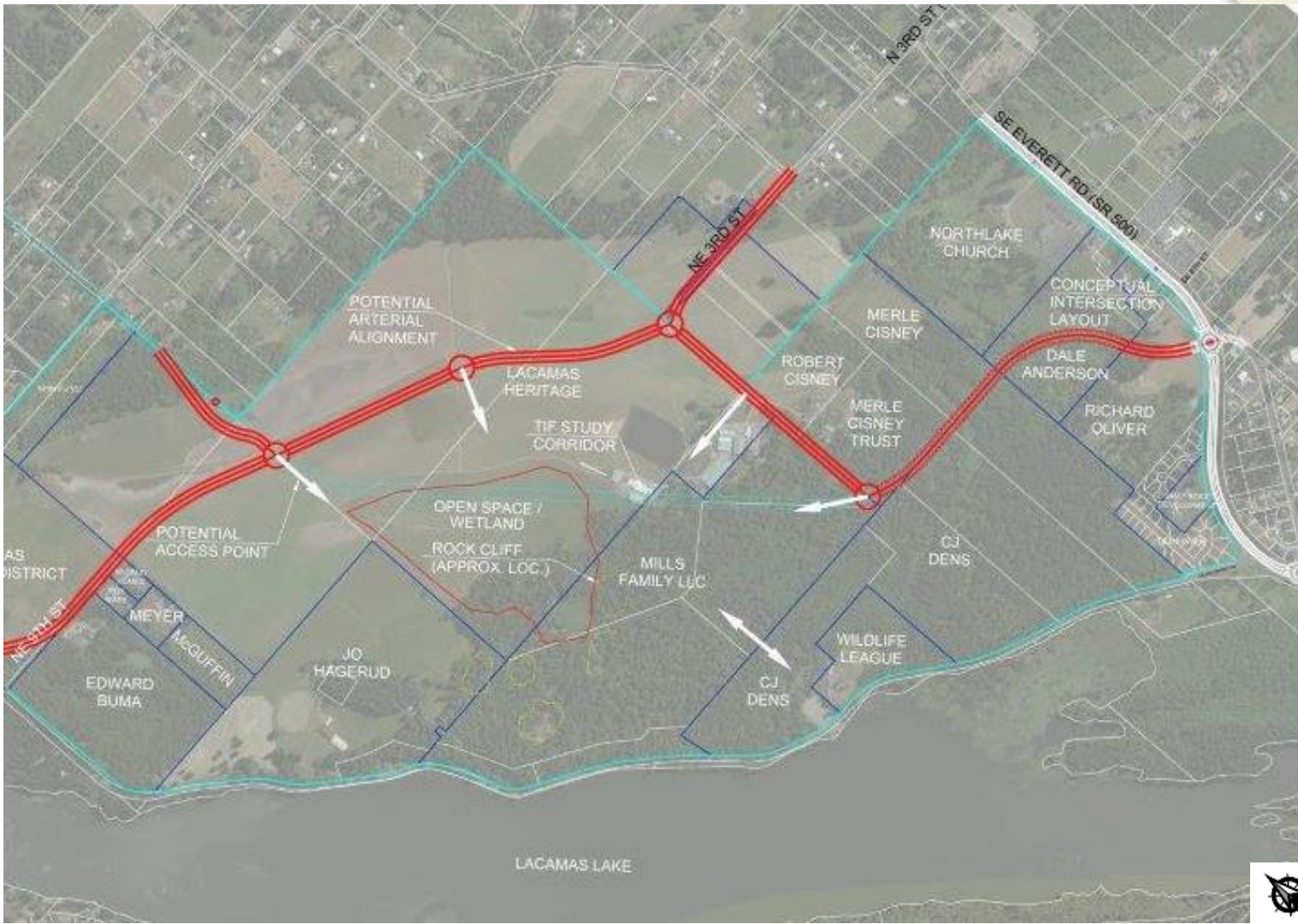


Everett St. - NW Lake Road to City Limit

Recommendations

- Ultimate roadway section should include center left turn lane, bike lanes, sidewalks on both sides
- Consider single-lane roundabouts at these intersections:
 - NE 38th Avenue
 - NE 43rd Avenue
 - Everett Drive / Lacamas North Shore Area access
- Roundabout could allow for continuous median with right-in / right-out only along corridor

Lacamas North Shore Area



Lacamas North Shore – Existing Conditions

- Undeveloped area north of Lacamas Lake
- Utilized 2012 Camas TIF Study
- No new counts – road network not existing
- Studied following intersections
 - NE 232nd Ave / NE 28th ST.
 - Leadbetter Rd / NE Everett St.
 - NE Everett Dr. / NE Everett St.



al/Collector Roadway Network

Lacamas North Shore Area

- All Study Intersections currently operate below capacity
- Improvements will be needed at connections to existing roadway network by build-out
- NW Ingle Road / NE 28th Street
 - SB Right Turn Lane
 - Second EB Left Turn Lane
 - Second NB Receiving Lane on Ingle Road
- NW 242nd Ave / NE 28th St
 - SB Left Turn Lane

Lacamas North Shore Area

- Arterial should have three lane section with center left turn lane, bike lanes, and sidewalks on both sides
- Consider using single lane roundabouts at internal intersections to accommodate a variety of land uses
- Consider limited access (median) between roundabouts
- NE 9th Street / NE 232nd Ave is likely initial connection to the west.

Camas Corridors Study

- Planning Commission Comments

Camas Corridors Study - Next Steps

- Planning Commission Comments
- Present to City Council
- Continue Discussion on Each Section
- Develop Transportation Capital Improvements Projects
 - Consider Schedule, Budget, Development Priorities