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Woodland, WA. 98674
www.ci.woodland.wa.us

100 Davidson Avenue
FAX: (360) 225-1201

Fire
(360) 225-7076

Police
(360) 225-6965

300 East Scott Avenue
FAX: (360) 225-7467

Public Works
(360) 225-7999

230 Davidson Avenue
FAX: (360) 225-7336

Building
(360) 225-7299

Clerk-Treasurer
(360) 225-8281

Planning
(360) 225-1048

August 21, 2012

Transportation Improvement Board
Attn: Clint Ritter
PO Box 40901
Olympia, WA 98504-1151

RE: SR 503/ Scott Avenue Intersection UAP Application

Dear Mr. Ritter:

Enclosed is a completed Urban Arterial Program Application for an intersection improvement project located at the intersection of State Route 503 and E. Scott Avenue. The City is requesting \$2,000,000 for a \$2,233,000 improvement project.

The 2008 Woodland Transportation Infrastructure Strategic Plan (TISP) identified improvements at this intersection as part of a larger project along SR 503 that included additional intersections. While improving other intersections is desired, the City feels a larger project is not financially feasible at this time so we have focused on this intersection. Completion of this project would allow the City and State to look at installing median barriers at SR 503 and Goerig to eliminate left turns at that intersection. That would be a low cost solution to the worst safety issue at that intersection.

The 2008 TISP preferred alternative at this intersection was a traffic signal. This application is based on that alternative. Prior to final design, however, a pre-engineering report would be completed that would review the intersection improvement options available and determine the best alternative to complete. The project would remain under the proposed budget regardless of the intersection design selected.

Sincerely,

Bart Stepp, PE
Public Works Director

CC: WSDOT – Ken Hash, Don Wagner
CWCOG – Rosemary Siipola



2012 Urban Funding Application

for Urban Arterial Program (UAP) & Urban Corridor Program (UCP)

Mail your signed application and required attachments to the TIB Office no later than **August 24, 2012**.

The mailing address for the TIB Office: Post Office Box 40901 ❖ Olympia WA 98504-0901

For assistance contact Clint Ritter, TIB Project Engineer, at (360) 586-1151 or via email at ClintR@tib.wa.gov

Agency Name	<u>WOODLAND</u>	Legislative District(s)	<u>20</u>
Arterial Name	<u>State Route 503</u>	Congressional District(s)	<u>3</u>
Project Limits	<u>Intersection with Scott Avenue</u>	<u>Find Legislative or Congressional District</u>	
Length in Miles	<u>0.06 miles</u>		
Federal Route	<u>0503</u>	Functional Class	<u>Urban Minor</u>
Agency Contact	<u>Bart Stepp, Public Works Director</u>	Phone Number	<u>360-225-7999</u>
Email Address	<u>steppb@ci.woodland.wa.us</u>		

APPLICATION ATTACHMENTS

Include the following attachments with **all** applications

- ☒ Excerpt from adopted Six-Year Transportation Improvement Program showing project
- ☒ Detailed vicinity map clearly showing project limits
- ☒ Detailed project cost estimate signed by a professional engineer registered in Washington State
- ☒ Typical roadway section(s)
- ☐ Funding commitment letters from all funding partners Number Attached _____
- ☒ Accident analysis worksheet [Link to Request Accident Data from WSDOT](#)
- ☒ Intersection configuration (if applicable)
- ☒ Excerpt from current agency Comprehensive Plan defining agency CBD & Urban Activity Center(s)
- ☒ Written concurrence from WSDOT if project is on or connects to a state highway
- ☐ Adopted Bicycle Plan if project includes bicycle facilities
- ☐ Development map showing *Permits Issued* and *Permits Pending* areas (if applicable)
- ☐ Annexation agreement (if applicable)
- ☐ Map showing potential annexation area (if applicable)

Include only if project is **Construction Ready**

- ☐ Department of Archaeology & Historic Preservation (DAHP) documentation

PROJECT SCHEDULE

Enter target dates

	Date
Start Design Engineering	<u>Oct 2013</u>
Environmental Documentation Complete & Permits Approved	<u>Jul 2014</u>
Right of Way Acquisition Complete	<u>Sep 2014</u>
PS&E Complete	<u>Nov 2014</u>
Contract Advertisement	<u>Apr 2015</u>
Contract Completion	<u>Oct 2015</u>
Do you plan to close the road during construction?	<u>No</u>

PROJECT FUNDINGEnter Requested Total TIB Funds \$ 2,000,000Max TIB Ratio **90.0%**Is this a construction ready project? NOAre TIB funds distributed proportionally through the project phases? YES

Fill out total costs in G47 to G51. Do not fill in TIB Funds

Enter the Total Project Costs to the nearest dollar in cells F47 to F51

Phase	Total Cost	TIB Funds	Local Funds
Design Engineering	297,000	266,010	30,990
Right of Way	100,000	89,566	10,434
Construction Engineering	150,000	134,348	15,652
Construction Other			
Construction Contract	1,686,000	1,510,076	175,924
TOTAL	2,233,000	2,000,000	233,000

Engineering exceeding 30% of eligible construction costs is not eligible for TIB reimbursement
 (for example, landscaping greater than 5% of eligible construction costs, utility undergrounding, sound walls)

Noneligible Engineering

Other Noneligible Costs

TOTAL ELIGIBLE COST

TIB Matching Ratio

Total TIB Funds/Total Eligible Cost

0

2,233,000

90%

FUNDING PARTNERS

Source	Public or Private	Commitment Letter	Amount
WOODLAND	Public		233,000
TOTAL			233,000
Local funds are correct			

CERTIFICATION

Certification is hereby given that the information provided is accurate and the applicable attachments are complete and included as part of the application package


 Agency Official Signature

August 21, 2012

Date Signed

Bart Stepp, Public Works Director

Printed or Typed Name & Title

PROJECT DESCRIPTION

Describe the existing conditions

The existing intersection of SR 503 and E. Scott Avenue is a T intersection with stop control on the Scott Avenue leg. High traffic volumes make it difficult for vehicles on Scott to turn left onto SR 503. In addition there are some vision issues looking south due to a curve on SR 503 just south of Scott. A 2008 Transportation Infrastructure Strategic Plan (TISP) identified this intersection as currently operating at LOS F for the Scott Avenue approach. There are also have been accident issues with this intersection. The intersection directly south of Scott Avenue which is Goerig Street is operating at LOS E and has a high accident rate as well.

Describe the proposed improvements

The preferred plan in the 2008 TISP was for a realignment between Scott and Goerig along 503 and signals at both intersections for a cost of \$3.8 Million. This cost and the amount of right-of-way needed for that alternative makes that project unfeasible for the City at this time. This project would entail improvements at the intersection of Scott and SR 503 only. A pre-engineering report would look at a roundabout as well as signalization to determine the best alternative. The estimated cost for just improving the SR 503/Goerig intersection is \$2.3 Million and includes sidewalks and bicycle lanes. Once this project is complete the City of Woodland would look at installing a median curb at Goerig and SR 503 to eliminate left turns at that intersection.

Describe the project benefits

Benefits would include an improved Level of Service at the intersection and increased safety for vehicles, pedestrians, and bicyclists. The project would also encourage drivers to reduce their speed along this section of SR 503. Pedestrian and bicycle access would also be improved at this intersection. In 2015 a new high school in the north part of the City will result in increased traffic on Scott Avenue at this intersection from the residential areas to the east going to this school. This change in traffic will increase safety concerns at this intersection if it is not improved.

Are any federal permits required for this project? No

PHYSICAL CONDITION

Does the roadway have any of the following structural failures?

Base <u> No </u>	If yes, briefly describe:
Walls <u> No </u>	If yes, briefly describe:
Culverts <u> No </u>	If yes, briefly describe:
Bridges <u> No </u>	If yes, briefly describe:
Slope Stability <u> No </u>	If yes, briefly describe:

Does the roadway have any of the following significant flaws?

- | | |
|--|--|
| <input checked="" type="checkbox"/> Intersection Control | <input checked="" type="checkbox"/> Radius |
| <input checked="" type="checkbox"/> Sight Distance | <input type="checkbox"/> Channelization |

Does the project relieve any bottlenecks? (if so, describe the bottleneck and the solution below) Yes

During peak hour traffic vehicles can back up on Scott Avenue trying to turn left onto SR 503. This improvement would eliminate that bottleneck.

PROJECT COMPONENTS

PROJECT TYPE Reconstruction & Widening

INTERSECTION IMPROVEMENTS

Enter number of improvements

Add Traffic Signal	<u>1</u>	Add Roundabout	<u>0</u>
Modify Traffic Signal	<u>0</u>	Add Right Turn Pocket	<u>1</u>
Interconnect Signal	<u>0</u>	Add Left Turn Pocket	<u>1</u>
Remove Signal	<u>0</u>		

DESCRIBE DRAINAGE IMPROVEMENTS

Existing drainage consists of roadside ditches and fields where runoff infiltrates into the ground. Drainage improvements would include catch basins, treatment and detention of stormwater, and new stormwater piping improvements.

ARE ANY OVERHEAD UTILITIES BEING MOVED UNDERGROUND?

Yes

DESCRIBE UTILITY WORK

Private utility improvements may include gas main improvements and overhead utilities. Due to the number of poles that would need to be moved utilities may choose to underground rather than relocate their facilities.

DESCRIBE ILLUMINATION, LANDSCAPING & AESTHETIC ELEMENTS

Streetlights would be installed at the intersection to improve night time visibility. Landscaping improvements would include planter strips between the road and sidewalk that are hardscaped and/or xeriscaped so watering is not required and maintenance is minimal.

DESCRIBE OTHER WORK

Sewer and water utilities under this section of road may be improved as part of this project.

ROADWAY GEOMETRICS & FEATURES

Is this an intersection only project?

☐ Yes ☒ No**Fill out the segment and intersection details in rows 115 to 141 and rows 156 to 165**

Significant difference in cross section or ADT constitute a segment. Additional segments can be added on the "Additional Segments" tab. If the project is an intersection only, skip this section

	SEGMENT ONE		SEGMENT TWO	
Segment Termini	SR 503		Scott Avenue	
Length (in feet)	1,000		120	
Average Daily Traffic Volume	12,000		2,000	
	Existing	Proposed	Existing	Proposed
Pavement Width Curb to Curb or Edge to Edge	30 feet	48 feet	30 feet	36 feet
Number of General Purpose Lanes Do not include Transit/HOV or Continuous Lt Turn Lane	2 lanes	2 lanes	2 lanes	2 lanes
Number of HOV/Transit Lanes Do not include Continuous Left Turn Lane				
Continuous Left Turn Lane Width		14 feet		
Is there a median?	No	No	No	No
Shoulder or Parking Width Enter average width (feet) per side	3 feet	0 feet	3 feet	0 feet
Shoulder or Parking Placement	Intermittent	None	Intermittent	None
Shoulder or Parking Surfacing	Surfaced	Surfaced	Surfaced	Surfaced
Parking Type	None	None	None	None
Percentage of the segment that has on street parking (e.g. parking one side is 50%)	0%	0%	0%	0%
Curb Placement	None	Both Sides	None	Both Sides
Bicycle Lane Type	No Bicycle Facilities	Bike Lane	No Bicycle Facilities	Bike Lane
Bicycle Lane Width	0 feet	5 feet	0 feet	5 feet
Pedestrian Buffer Width between Curb and Sidewalk	0 feet	5 feet	0 feet	5 feet
Sidewalk Placement	None	Both Sides	One Side	Both Sides

Segment Termini	SEGMENT ONE (cont'd)		SEGMENT TWO (cont'd)	
	SR 503		Scott Avenue	
	Existing	Proposed	Existing	Proposed
Sidewalk Width ¹	0 feet	6 feet	4 feet	6 feet
Is there any street lighting present?	Yes	Yes	No	Yes
How many driveways are present?	4	3	0	0
How many fixed objects are present?	4	0	2	0
What is the average distance (in feet) from the curb to the fixed objects?	5 feet	5 feet	5 feet	5 feet
¹ Sidewalk with curb separation on both sides is required by TIB policy Minimum width is five feet with no obstructions Please attach justification if the sidewalk does not meet these standards				

Accident Information

(Information automatically generated from Accident Analysis worksheet)

Multiple-vehicle driveway crashes	Fatal and Injury	0	0
	Property damage only	0	0
Multiple-vehicle nondriveway crashes	Fatal and Injury	0	0
	Property damage only	1	0
Single vehicle crashes	Fatal and Injury	5	0
	Property damage only	1	0
Pedestrian or Bicycle related crashes	Pedestrian	0	0
	Bicycle	0	0

Additional segments can be entered on tab 4 "Additional Segments".

INTERSECTION GEOMETRICS & FEATURES

Enter the existing and proposed geometrics for each intersection

	INTERSECTION ONE		INTERSECTION TWO	
Intersection location	SR 503 and E. Scott Avenue			
Major Approach Average Daily Volume	12,000			
Minor Approach Average Daily Traffic Volume	2,000			
	Existing	Proposed	Existing	Proposed
Intersection Control	Stop controlled minor approaches	Signalized		
Intersection type	3-Leg	3-Leg		
Is there any intersection lighting present?	Yes	Yes		
Is there a dedicated left turn lane	No	Yes		
Is there a dedicated right turn lane	No	Yes		
Is there protected only left turn phasing?	No	Yes		

Accident Information

(Information automatically generated from Accident Analysis worksheet)

Multiple-vehicle crashes	Fatal and Injury	2	0
	Property damage only	3	0
Single vehicle crashes	Fatal and Injury	0	0
	Property damage only	0	0
Pedestrian or Bicycle related crashes	Pedestrian	0	0
	Bicycle	0	0

Additional intersections can be entered on tab 5 "Additional Intersections".

SAFETYAnnual Benefit from Urban Accident Analysis Worksheet \$101,001**PROJECT DEFICIENCIES**

Select Deficiency Type from the dropdown menu. Describe the existing deficiency within the project limits
Describe the corrective measure(s) that eliminates or mitigates the deficiency.

DEFICIENCY 1 ALIGNMENT

Describe: Scott Avenue meets with SR 503 at outside of approximately 90 degree curve. South of the tee SR 503 curves again. This causes vision triangle issues with vehicles on Scott Avenue trying to turn left onto SR 503.

Corrective Measure(s) Project would provide some straightening of the SR 503 curves. Signalization and/or roundabout would eliminate vision issues for vehicles turning left.

DEFICIENCY 2 DRAINAGE

Describe: Current stormwater runoff just empties onto adjacent properties where it is infiltrated. Area north of SR 503 is considered part of the floodway and is separated from the river.

Corrective Measure(s) Improvements would collect runoff, treat it, detain it to meet stormwater standards, and provide discharge within right-of-way or into the river.

DEFICIENCY 3 ACCESS CONTROL/PARKING

Describe: A business has a large existing access point right at the intersection with Scott and SR 503. There are also some secondary access points to adjacent parcels.

Corrective Measure(s) Move access point for business south away from intersection along their existing parcel. A couple secondary access points would be eliminated as part of the intersection improvements.

DEFICIENCY 4 ILLUMINATION

Describe: There is currently only one older overhead light at the intersection. This provides insufficient illumination through the entire intersection.

Corrective Measure(s) Install additional lighting through the intersection and along Scott Ave. and SR 503. Lighting would be LED and would project downward with no upward glare.

DEFICIENCY 5 OBSTRUCTIONS

Describe: Existing utility poles are located just off the edge of pavement within the clear zone. Single vehicle crashes have occurred with poles.

Corrective Measure(s) Installing curbs and relocating utility poles will reduce likelihood of vehicles hitting poles and improve safety through the intersection.

MOBILITY

Select Truck Route Classification from dropdown list

T-3 ~ 300 Thousand to 4 Million Tons Annually**NETWORK DEVELOPMENT**

Select the appropriate option from the following list

☐ Completes Corridor

Enter termini of corridor being completed

*Project must meet **ALL** of the following criteria to qualify as **COMPLETES CORRIDOR****⇨Project is last stage of corridor between logical limits**⇨Corridor is a minimum of 2 miles in length**⇨The entire corridor is constructed to urban standards*☐ Completes Gap Along Federal Route

Existing route must meet urban standards

☐ Extends Improvements Along Federal Route

Existing route must meet urban standards

☒ Project does **not** complete or extend improvements and is **not** a new route**FREIGHT FACILITY ACCESS**

Select Freight Facility Access provided by project

No Freight Facility Access Improvements

Mark ALL freight-carrying modes accessing the facility

☐ Airplane ☐ Rail ☐ Ship ☐ Truck

Enter Trucks per Day _____

CENTRAL BUSINESS DISTRICT/URBAN ACTIVITY CENTER ACCESS

Select CBD/Urban Activity Center Access provided by project

No CBD/Activity Center Access Improvements

Briefly describe the CBD/Activity Center access improvement

SUSTAINABILITY☒ Agency has Adopted Greenhouse Gas Emissions PolicyEnter Policy Number Res. 614 Adoption Date August 20, 2012**MODAL MEASURES**

Select modal measures within the project limits

- ☐ Completes gap in HOV system Enter Gap Location _____
- ☐ Adds HOV lanes in each direction
- ☐ Adds Queue Jump or Transit Only Lane Enter Location(s) _____

Peak Hour Transit Buses

Enter Number _____

Bicycle FacilitySelect option that applies Project ADDS bicycle lane or path**ENERGY MEASURES**

Select energy measures within the project limits

- ☒ Replace or install Low Energy Lighting
- ☐ Add Solar-powered Signage

Describe the measures below

New overhead lights will be LED low energy lighting.

ENVIRONMENTAL MEASURES

Select environmental measures within the project limits

- ☒ Incorporates Hardscaping or Climate-appropriate Plantings

Describe the measures below

All landscaping will be hardscaping or xeriscaping appropriate so that supplemental watering will not be required.

- ☒ Incorporates Low Impact Drainage Practices

Describe the measures below

Infiltration and/or rain gardens will be used to treat and discharge some or all of the stormwater runoff for the project.

RECYCLING MEASURES

Select recycling measures within the project limits

- ☐ On-site Grinding & Re-use of Pavement
- ☒ Use of Base Treatment to avoid overexcavation
- ☐ Project uses Stockpiled Recycle Materials

Describe the measures below

Base treatment has been required on another recent project in town due to soil conditions. The use of base treatment will be dependent on soil conditions at site.

OTHER MEASURES

- ☐ Incorporates other sustainability measures

Describe the measures below

GROWTH & DEVELOPMENT

Fill out this section if your project supports a specific development or economic growth activity

Describe the development that this project supports.

This project is to address existing safety and congestion issues. There is no specific development tied to this project.

Please provide the following information regarding the development this project supports

Number of dwelling units _____

Total development acreage _____

Commercial building square footage _____

Number of jobs created _____

If there has been **private investment** in public infrastructure, choose the description that best describes the status of this investment _____

Choose the description that best describes where the **development is located**. _____

Choose the description that best describes the **proximity** of the project to the development. _____

Choose the description that best describes the status of the **development agreement**. _____

Choose the description that best describes the status of the **permits** for the development. _____

Choose the description that best describes the status of the **zoning** for the development. _____

Choose the description that best describes how this project affects the **comprehensive plan**. _____

Choose the description that best describes the status of the public infrastructure tied to this development?

Water In place

Sewer In place

Power In place

Supports Annexation Agreement

Select from the options below

- ☐ Project required by Annexation Agreement
- ☐ Joint city/county application for project within Potential Annexation Area
- ☐ Project lies within Potential Annexation Area

GROWTH MANAGEMENT INFORMATION

Complete the questions below to address Land Use Implications as directed by Revised Code of Washington (RCW) 47.26.282.

Describe how the project supports or revitalizes existing urban development in the downtown

The project is not located near the downtown area.

Describe how the project includes or encourages infill/densification of residential or commercial development consistent with your local comprehensive plan?

The City of Woodland east of this intersection is entirely zoned residential and includes a large number of vacant lots in subdivisions created before 2008. This project will improve the vehicle, pedestrian, and bicycle connections between the residential area to the east and City's commercial area to the south and west of this intersection, promoting infill of the vacant residential lots.

Describe how the project promotes the use of transit and other multimodal transportation

There are currently no sidewalks or bicycle lanes along SR 503 through this intersection. By adding sidewalks and bicycle lanes to this intersection, this project will be a catalyst for improving sidewalk and bicycle connections west and east of the intersection which would improve connectivity of the residential areas to the commercial areas of the City.

Indicate the project's multimodal transportation components

Mark ALL existing or planned components

☒ Sidewalk ☒ Bicycle Lanes ☐ HOV Lanes ☐ Access to Transit Center or Passenger Terminal

☐ Other - Explain in space below

Transportation Improvement Board (TIB)
Growth Management Information

Funding Program	Urban Arterial Program (UAP) & Urban Corridor Program (UCP)
Agency Name	WOODLAND
Project Name	State Route 503 ~ Intersection with Scott Avenue
Project Intent	Benefits would include an improved Level of Service at the intersection and increased safety for vehicles, pedestrians, and bicyclists. The project would also encourage drivers to reduce their speed along this section of SR 503. Pedestrian and bicycle access would also be improved at this intersection. In 2015 a new high school in the north part of the City will result in increased traffic on Scott Avenue at this intersection from the residential areas to the east going to this school. This change in traffic will increase safety concerns at this intersection if it is not improved.

Describe how the project supports or revitalizes existing urban development in the downtown

The project is not located near the downtown area.

Describe how the project promotes the use of transit and other multimodal transportation

The project adds the following multimodal components:

Indicate the project's multimodal transportation components

Sidewalk Bicycle Lanes

Other Multimodal Components:

Urban Accident Analysis

for Urban Arterial Program (UAP) & Urban Corridor Program (UCP)

Agency **WOODLAND**

Project Name State Route 503 - Intersection with Scott Avenue

INSTRUCTIONS

- Fill out the roadway geometrics and features (segments and intersections) information on application first
- Use Accident Data from the three most current years
- **Fill out one line per accident**
- Enter the Location by selecting the appropriate intersection or segment where the accident occurred
- Enter if it is a Property Damage Only (PDO) Accidents or the number of Injuries and Fatalities for each Accident.
- Enter the number of Vehicles involved
- Enter the Primary Countermeasure to eliminate or mitigate the accident

	Total Number	Factor	Accident Cost
PDO Accidents	5	\$5,064	\$25,320
Injuries	7	\$284,956	\$1,994,691
Fatalities		\$3,366,388	
TOTAL	12		\$2,020,011

Annual Benefit
\$101,001

Data entered 14 Aug 2012

Enter Accident Location (Choose from intersections and segments identified in application)	Select Accident Type	Is this a PDO accident? 0=no, 1=yes	Enter Number of Injuries	Enter Number of Fatalities	Number of Vehicles involved	Enter Primary Countermeasure
Segment 1:SR 503	Vehicle non-driveway	0	1	0	1	Remove obstruction, reduce speed.
Segment 1:SR 503	Vehicle non-driveway	1	0	0	5	Improved intersection control to prevent rear ends.
Intersection 1:SR 503 and E. Scott Avenue	Intersection	0	2	0	2	Improve intersection control to reduce turning conflicts.
Intersection 1:SR 503 and E. Scott Avenue	Intersection	1	0	0	2	Widen road and straighten to prevent sideswipes.
Intersection 1:SR 503 and E. Scott Avenue	Intersection	1	0	0	2	Widen road and straighten to prevent sideswipes.
Intersection 1:SR 503 and E. Scott Avenue	Intersection	1	0	0	2	Improve intersection control to reduce turning conflicts.
Segment 1:SR 503	Vehicle non-driveway	1	0	0	1	Remove obstruction and straighten road.
Segment 1:SR 503	Vehicle non-driveway	0	1	0	1	Remove obstruction and straighten road.
Segment 1:SR 503	Vehicle non-driveway	0	3	0	1	Remove obstruction, improve lighting, straighten road.

Intersection Configuration Worksheet

Use this worksheet only if you are submitting an **intersection only project**.








Also fill out the "Intersection Features and Geometrics" section on the application tab.

Current Configuration

Enter the current configuration of the intersection

Intersection control type Stop controlled minor approaches

Enter the number of lanes of each type for each leg of the intersection?








	Left	Left-Through	Left-Through-Right	Through	Through-Right	Right	Left-Right	
	 ONLY			 ONLY		 ONLY	 ONLY	Is the right turn only lane a free right turn? (traffic does not stop at intersection)
South Bound	0	0	0	0	1	0	0	
West Bound	0	0	0	0	0	0	0	
North Bound	0	1	0	0	0	0	0	
East Bound	0	0	0	0	0	0	1	

Proposed Configuration

Enter the proposed configuration of the intersection after construction

Intersection control type Signalized

Enter the number of lanes of each type for each leg of the intersection?

	Left	Left-Through	Left-Through-Right	Through	Through-Right	Right	Left-Right	
	 ONLY			 ONLY		 ONLY	 ONLY	Is the right turn only lane a free right turn? (traffic does not stop at intersection)
South Bound	0	0	0	1	0	1	0	No
West Bound	0	0	0	0	0	0	0	
North Bound	1	0	0	1	0	0	0	
East Bound	0	0	0	0	0	0	1	

Volumes

Traffic Volume Type Turning Movements

Enter ONLY turning volumes for each direction

	Left	Through	Right
South Bound	0	446	59
West Bound	0	0	0
North Bound	5	737	0
East Bound	134	0	6

OR

Approach

- PM PEAK HOUR MOVEMENTS



Six Year Transportation Improvement Program From 2013 to 2018

Agency: Woodland
County: Cowlitz
MPORITPO: SWW RTPO

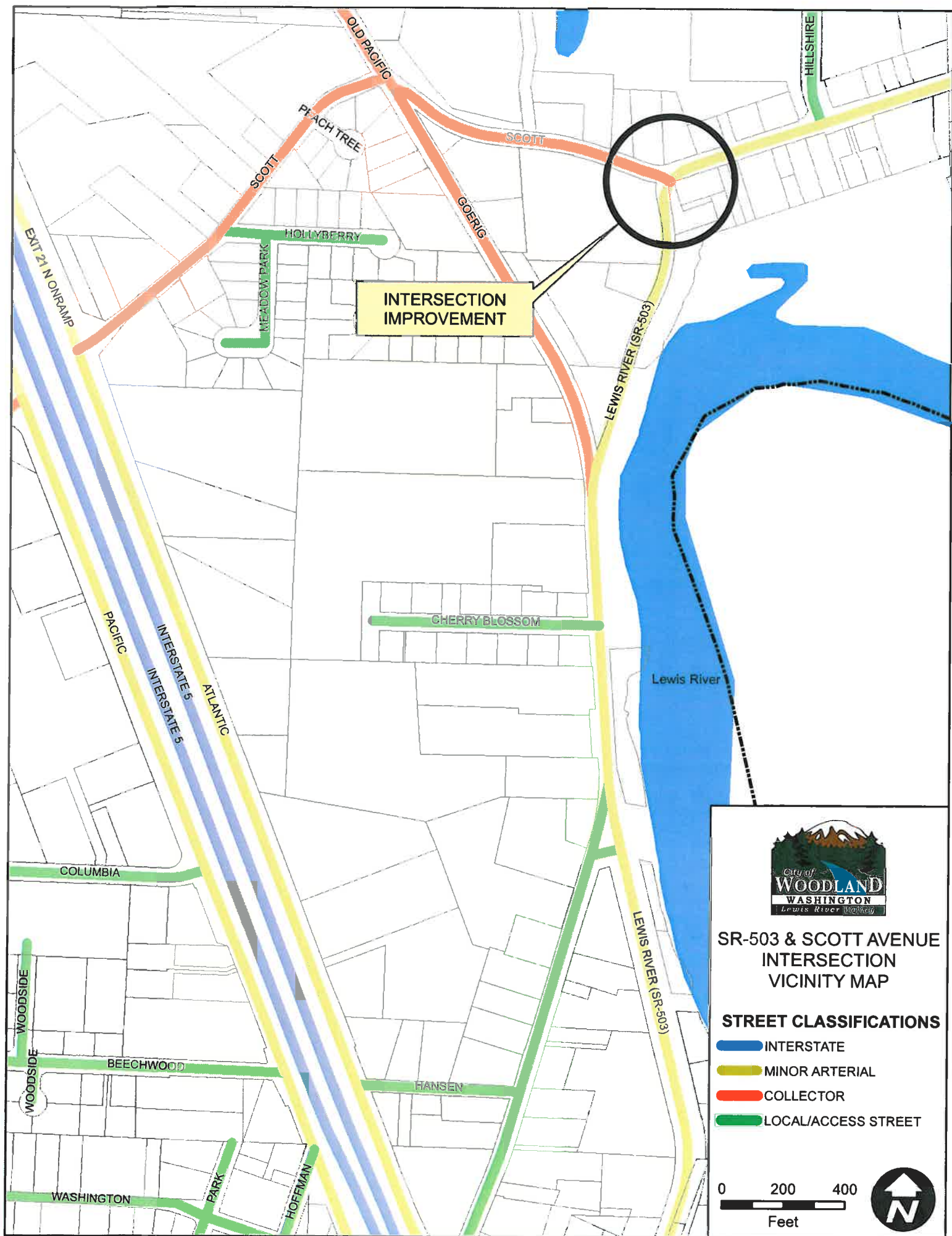
Y Inside N Outside

Functional Class	Priority Number	A. PIN/Project No. C. Project Title D. Road Name or Number E. Begin & End Terminals F. Project Description	B. STIP ID G. Structure ID	Hearing	Adopted	Amendment	Resolution No.	Improvement Type	Utility Codes	Total Length	Environmental Type	RW Required
06	4	East Scott Avenue and SR-503 Intersection Improvements East Scott & SR-503 Intersections to Improvements to Intersections at East Scott/Old Pacific, East Scott/SR-503, and Georg/SR-503	WA-03857	08/04/12	08/04/12		612	04	CGOPT W		EA	Yes

Funding	Status	Phase	Phase Start Year (YYYY)	Federal Fund Code	Federal Funds	State Fund Code	State Funds	Local Funds	Total Funds
P	PE	2014			0		0	1,220,000	1,220,000
P	RW	2015			0		0	645,000	645,000
P	CN	2016			0		0	4,335,000	4,335,000
		Totals			0		0	6,200,000	6,200,000

Expenditure Schedule	Phase	1st	2nd	3rd	4th	5th & 6th
PE	0	1,220,000	0	0	0	0
RW	0	0	0	645,000	0	0
CN	0	0	0	0	4,335,000	0
Totals	0	1,220,000	0	645,000	4,335,000	0

↑
COSTS ARE FOR 3
INTERSECTIONS. TIB
APPLICATION IS FOR
JUST 2 OF THE 3
INTERSECTIONS.
Page 4



SR 503 and Scott Avenue Intersection Improvement Cost Estimate

Date Created: 8/9/2012

Project consists of improving the Scott Avenue and SR 503 Intersection with traffic signal or roundabout.

Prepared for: City of Woodland

Prepared by: Bart Stepp, PE

Item No.	SR 503/Scott Avenue Intersection Work Description	Est. Quantity	Units	Unit Price	Total Price
1	Mobilization	1	LS	9%	\$ 86,760.00
2	Traffic Control	1	LS	8%	\$ 77,120.00
3	Temporary Stormwater and Erosion Control	1	LS	5%	\$ 48,200.00
4	Roadway Excavation Including Haul	1700	CY	\$20.00	\$ 34,000.00
5	Crushed Surfacing Base Course	1200	CY	\$40.00	\$ 48,000.00
6	HMA Class ½", PG 64-22	1400	Ton	\$90.00	\$ 126,000.00
7	Cement Concrete Traffic Curb and Gutter	2400	LF	\$20.00	\$ 48,000.00
8	Cement Concrete Sidewalk	1600	SY	\$45.00	\$ 72,000.00
9	E Scott Avenue/Lewis River Road Signal	1	LS	\$400,000.00	\$ 400,000.00
10	Landscaping	1	LS	\$10,000.00	\$ 10,000.00
11	Storm Sewer Pipe	2,400	LF	\$50.00	\$ 120,000.00
12	Storm Inlets	10	EA	\$2,000.00	\$ 20,000.00
13	Stormwater Treatment	1	LS	\$50,000.00	\$ 50,000.00
14	Utility Relocation	1	LS	\$25,000.00	\$ 25,000.00
15	Bicycle Lane Markings	1	LS	\$5,000.00	\$ 5,000.00
16	Signal Crosswalk Markings	1	LS	\$5,000.00	\$ 5,000.00
17	Striping	1	LS	\$1,000.00	\$ 1,000.00
18	ROW	1	LS	\$100,000.00	\$ 100,000.00
Estimated Construction Cost Subtotal					\$ 1,276,080.00
Sales Tax @ 7.7%					\$ 98,258.16
Contingencies @ 30% of combined total					30% \$ 412,301.45
Construction Total					\$ 1,786,639.61
Preliminary and Construction Engineering Total					25% \$ 446,659.90
Project Total:					\$ 2,233,299.51

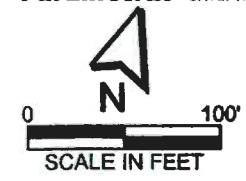
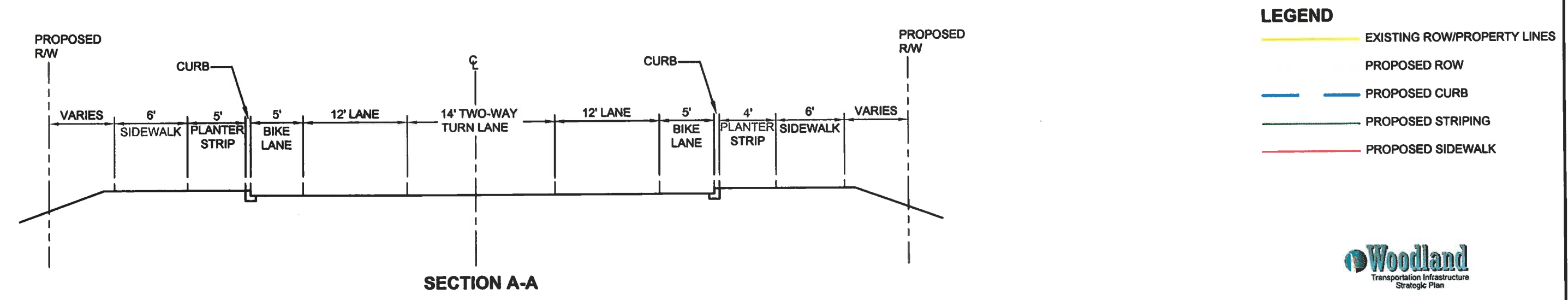
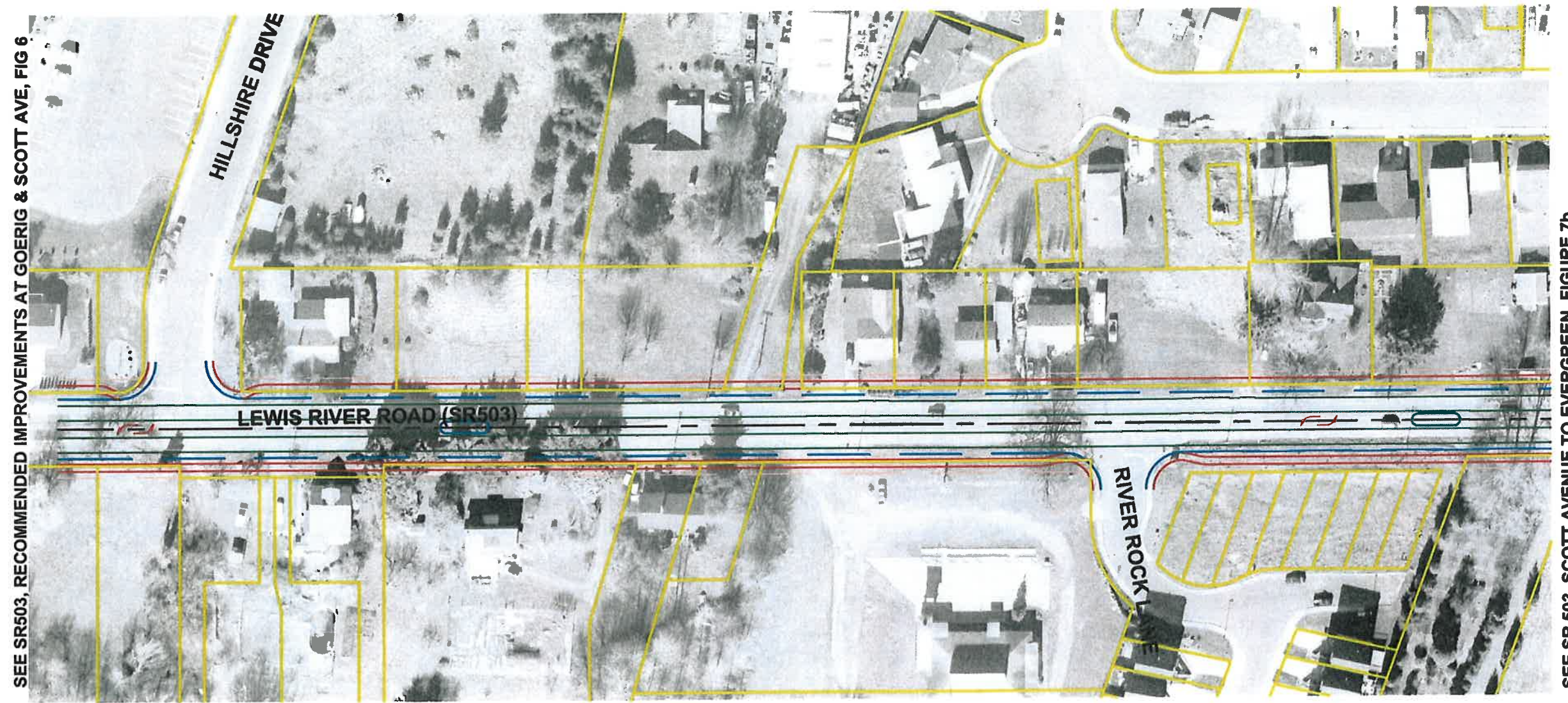
Notes:

- 1) Estimated quantities are 65% of the quantities in the 2008 TISP for SR 503 Option 3B. This is the estimated reduction in quantities based on the project limits as shown in the application drawing.
- 2) The City is in the process of exchanging property for additional ROW at the SR 503/Scott Avenue Intersection. That exchange and the reduction of the project limits reduces the ROW costs to \$100,000.

Bart Stepp

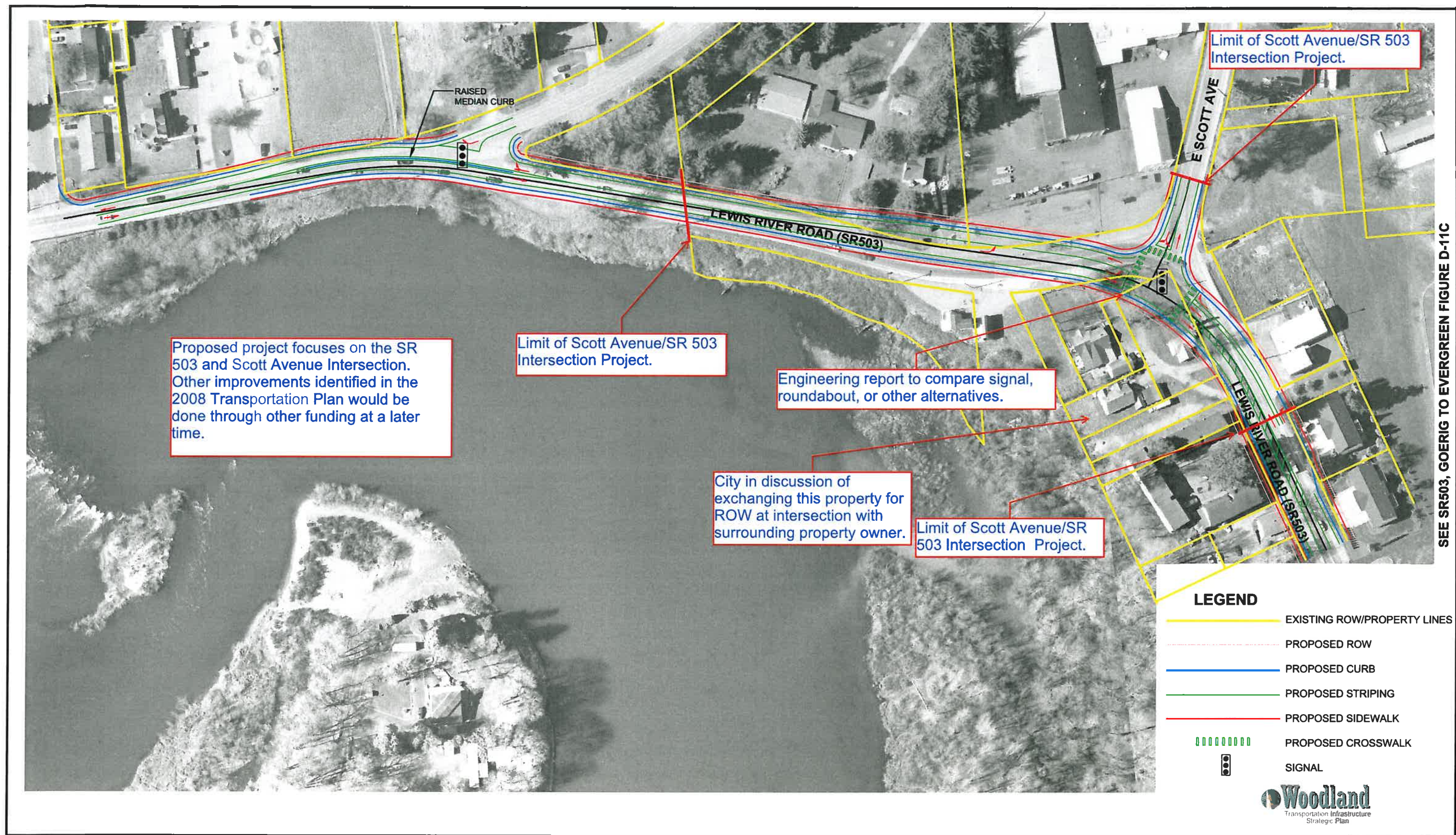
Bart Stepp, PE
Woodland Public Works Director

8/9/2012
Date

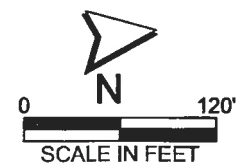


SECTION A-A REPRESENTS TYPICAL ROAD SECTION THROUGH SR 503/SCOTT AVENUE IMPROVEMENT

Figure 7a
SR 503, SCOTT AVENUE TO EVERGREEN
RECOMMENDED IMPROVEMENT



Parametrix DATE: Jun 26, 2008 FILE: PO2388006F-55



SR 503/Scott Avenue Intersection Improvement Project for 2014 TIB Urban Arterial Program Application.

Figure D-11B
SR503, GOERIG TO EVERGREEN,
KEY INTERSECTIONS
OPTION 3B

IV. URBAN GROWTH AREA

The planning area includes the lands to which Woodland may feasibly provide future urban services and those surrounding areas that directly impact conditions within the city limits. The Urban Growth Area Boundary designates this area. Because the city straddles two counties, it has developed urban growth areas with Clark and Cowlitz counties. The Urban Growth Area Boundary is represented on most maps in the Land Use Element.

The Urban Growth Boundary was selected in order to ensure that urban services would be available to all new development. The location of the boundary was based on environmental constraints, the concentrations of existing development, the existing infrastructure and services, past urban designations and the location of designated agricultural resource lands. New development requiring urban services will be located in the Urban Growth Area. Central sewer and water, stormwater facilities, utilities, telecommunication lines, and local roads will be extended to development in these areas and be built to city standards.

The basic principles of urban growth management are not new. They are really nothing more than sound planning and management concepts. Urban growth management attempts to contain scattered growth patterns that are more costly in terms of per unit cost of sewer, water, drainage, transportation, police and fire protection, and other services. In a nutshell, this is the general theme of urban growth management: to make the most effective and efficient use of existing public services investments before making major new growth-related commitments in outlying rural areas. The objective is not to discourage or limit growth, but rather to minimize the cost of growth, both in terms of dollars and associated environmental impacts.

Besides minimizing public service and facility costs, a number of other benefits can accrue from a concerted urban growth management program: 1) in order to bring about the most effective and efficient use of existing investments, development of formal mechanisms to coordinate land use and capital facility decisions among the city, county, and special districts is a necessary corollary; 2) an adopted program showing the city's expansion and service area adds certainty, to the benefit of local officials, citizens, and development interests; 3) the city gains some control over its own destiny, gaining a formal voice in what the county approves in the unincorporated portion of the urban area adjacent to city limits; 4) with urban-level growth directed to the city and its expansion area, the city's tax base and position as a social, economic, and cultural center is enhanced; and 5) agricultural and forest lands surrounding the city can be conserved, energy saved and the city's existing character maintained. Other objectives that can be carried out under an intergovernmental UGM program include; 6) agreement on a set of land development and capital facility standards for common use by all urban area jurisdictions -- thus minimizing confusion as to required setbacks, lot size, etc. -- and 7) development of a system of charges to fund capital facility expansion.

- Urban Growth Area - Clark County. The city and Clark County coordinated their activities in developing an annexation policy, in identifying the Urban Growth Area Boundary, and in development of interim management policies for the area within the

Urban Growth Area Boundary but outside of the current city limits. This process was conducted according to the countywide planning policies.

- Urban Growth Area - Cowlitz County. The city has had an urban growth agreement with Cowlitz County since 1981. At that time, Clark County also participated in the drafting of an agreement but never implemented it. The agreement between Cowlitz County and Woodland is voluntary, as Cowlitz County is a non-GMA county.

The 1981 growth management program was updated in 2002 when Cowlitz County and the City of Woodland adopted the *Woodland Urban Growth Management Program*. The City and Cowlitz County both adopted the Program as an element of their respective Comprehensive Plans. The City adopted the Program under Resolution No. 458.

The Woodland Urban Growth Management Program was implemented to reflect the concepts of urban growth management and its policies and procedures. Also incorporated are land use classifications within and adjacent to the Woodland Urban Growth Area and Boundary that are consistent between the three jurisdictions.

V. LAND USE MAP

The Land Use Map classifies all land in the City of Woodland (Figure 1-4). The map must be used in conjunction with the goals, objectives, and policies of the plan. It is a symbolic representation of some of the goals, policies, and findings, and defines the areas to which the goals, objectives, and policies speak. The official Land Use Map on which amendments and updates will be shown will be on display at city hall. Specific descriptions of each classification are given below to show the intent of the Land Use Map.

Woodland Planning Area

The Woodland Planning Area is the area within the city's urban growth boundary.

Low Density Residential

The Low Density Residential classification designates areas intended primarily for single-family dwellings with scattered two-family dwellings among the single-family dwellings. Home occupations may be acceptable. The recommended density is up to six dwelling units per gross acre of land. Typical developed conditions result in densities of around four units per acre once streets, right-of-way and other areas are taken into account.

High Density Residential

This classification provides primarily for multifamily dwellings of three or more units, although single-family and two-family dwellings are not discouraged. Manufactured housing parks -- designed according to firm standards for screening, buffering, parking, recreational areas,

distance between units, and other matters may be appropriate when deemed compatible with adjacent property by the City Council. Some home occupations may be acceptable such as professional offices. The recommended residential density is up to 35 dwelling units per gross acre.

Commercial

This plan has one commercial classification but the zoning ordinance will have two commercial districts and one overlay zone. The zoning districts are described below.

The Downtown Commercial District is that area west of the Interstate 5 freeway and at or near the historic downtown area. It is oriented towards smaller retail stores; service, financial, insurance, real estate, and professional outlets and offices; municipal and private shared parking garages and lots; pedestrian mall and plazas; performing arts and other entertainment and cultural facilities and activities; transportation terminals; mixed use projects; upper story apartment housing; and pedestrian walkways linking key facilities. Discouraged uses are those that are land consumptive such as warehouses, automobile sales lots, and individual business parking lots that diminish the area's compactness and convenience as an integrated shopping goods and services area. Also discouraged are uses that are strictly automobile-access oriented, such as drive-in restaurants and gas stations, as opposed to pedestrian oriented.

The Highway Commercial District is mostly oriented to automobile access and convenience. It is intended to accommodate automobile oriented and land-consumptive commercial needs. A wide range of commercial uses and activities are encouraged.

The Neighborhood Commercial Overlay Zone is for outlets providing convenience goods and services to residential neighborhoods, as opposed to commercial establishments that serve area-wide shoppers and tourists. These areas provide goods and services sought routinely and regularly, generally more on the basis of convenient location than price. Encouraged uses are small groceries and mini-marts with gas pumps, beauty and barbershops.

Light Industrial

The Light Industrial classification designates areas for light manufacturing and fabrication; warehousing and storage; wholesale distribution; product processing and packaging; construction and contracting operations; heavy equipment and truck sales, service, and repair; feed and seed stores; building material wholesale and retail sales; laboratory and research operations; veterinary offices and clinics requiring outside animal runs; and offices and institutions serving industrial workers. The overall intent is to provide for light industrial activity free from potentially incompatible activity, services and supplies needed by industry and its workers, and heavy commercial or land consumptive activity.

Heavy Industrial

This classification classifies areas currently used or suitable for heavy industry because of good vehicular access, rail access, or proximity to existing heavy industry. Uses generally should be limited to manufacturing and fabrication, warehousing and storage, wholesale distribution, product processing and packaging, and shipping.

Floodway/Open Space

The Land Use Plan Map shows a Floodway designation. The land designated such is in the Lewis River floodway as shown in the Federal Emergency Management Agency, National Flood Insurance Program, *City of Woodland Flood Boundary and Floodway Map* (Community-panel number 5300350001, revised September 4, 1985). Floodways are extremely hazardous areas due to the velocity of floodwaters that carry debris, potential projectiles, and erosion potential. In order to qualify for the National Flood Insurance Program, the city adopted a Flood Damage Prevention ordinance (Chapter 14.40 WMC). This ordinance prohibits new residential structures and limits other construction to those that will not result in any increase in flood levels during the occurrence of the base flood discharge. In 1999, the City created the Floodway Use District, a zoning district that severely limits the type of land uses that can locate in the floodway.

Due to the physical restrictions to building in the floodway, land uses with low impact on the floodway are encouraged. These include recreation uses such as parks, play fields, archery ranges, golf courses, boat ramps, fishing areas and open space.

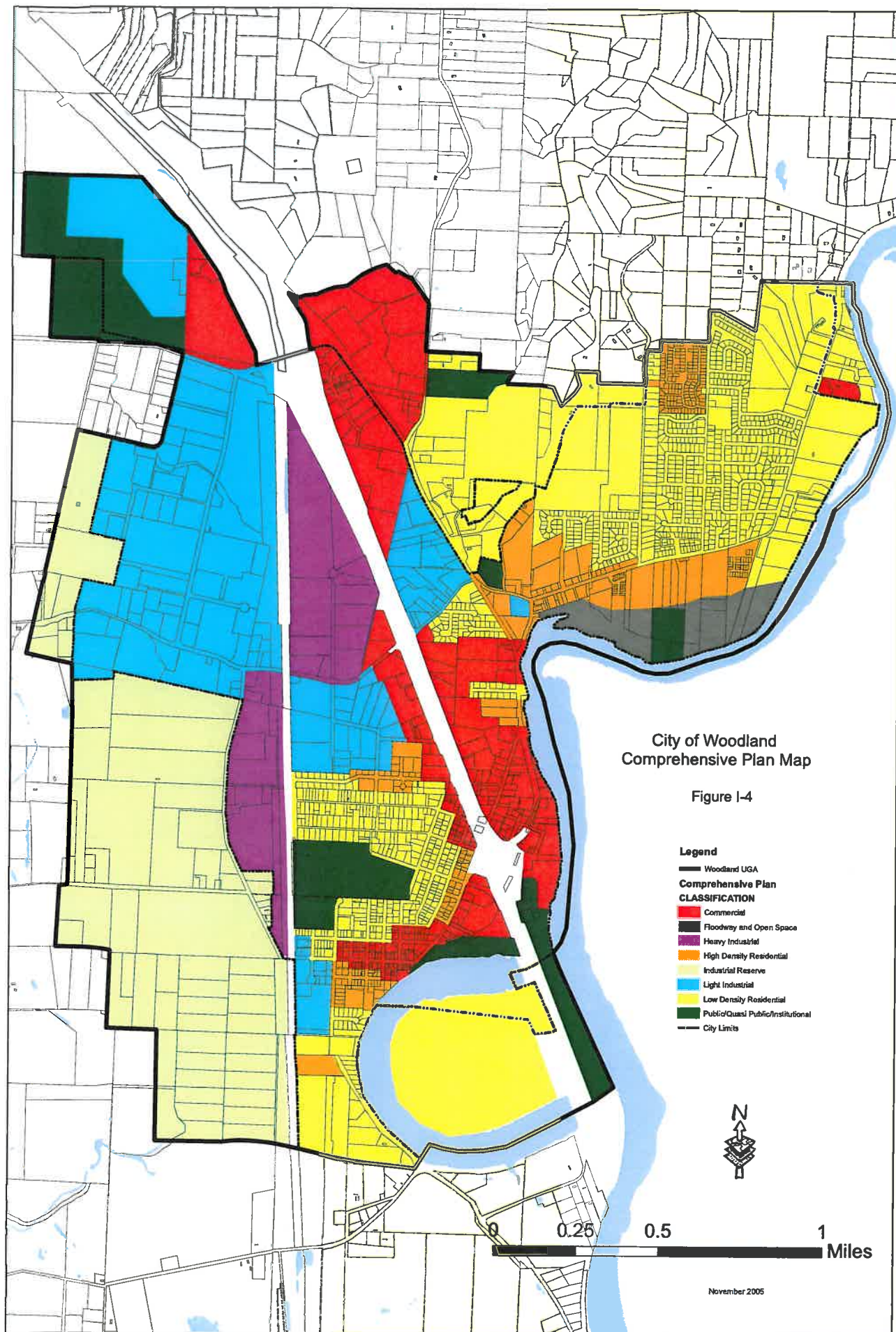
Public/Quasi-Public/Institutional

This classification notes most major facilities and tracts that are in public or quasi-public ownership or are operated for a purpose benefiting the public. It includes public parks, public schools, governmental buildings, major utility stations, and cemeteries. Church properties are not differentiated although they are usually considered a public/quasi-public use.

In 2004, the City created the Public/Quasi-Public/Institutional (PQPI) District. This zoning district was designed to recognize the uniqueness of these types of uses and to provide development standards for public, quasi-public, and institutional land uses. Before, the creation of the PQPI most of these uses were placed in the Low Density Residential District or other district where the standards often not a good fit for the use.

Industrial Reserve

This classification is intended to encourage continued agricultural and related uses until a light industrial need is demonstrated. The category is a "holding pattern" intended to discourage encroachment by non-industrial uses. Should development for an industrial purpose be proposed, it must be consistent with the goals, objectives and policies of this plan and urban growth program document.





**Washington State
Department of Transportation**
Paula J. Hammond, P.E.
Secretary of Transportation

Southwest Region
11018 Northeast 51st Circle/P.O. Box 1709
Vancouver, WA 98668-1709
360-905-2000/Fax 360-905-2222
TTY: 1-800-833-6388
www.wsdot.wa.gov

August 15, 2012

Grover Laseke
Mayor, City of Woodland
PO Box 9
Woodland, WA 98674

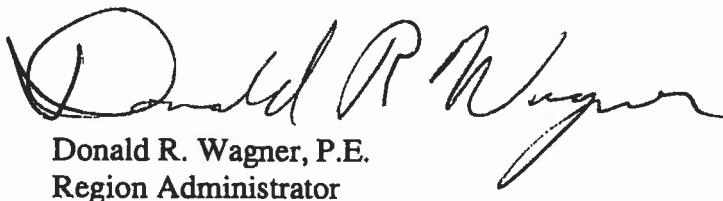
Dear Mr. Laseke:

I understand that the City is applying for a TIB grant to improve the intersection of Scott Avenue and SR 503. We have reviewed the scope of your improvement project and understand that it will affect SR 503.

At this time we can conditionally support the intersection improvement in concept. We will need to work closely with your staff to ensure that the improvements proposed meet all current standards and practices. Please keep my staff informed as this project advances through the funding, design and construction processes.

WSDOT supports the city in their efforts to improve safety and reduce congestion within their community.

Yours very truly,



Donald R. Wagner, P.E.
Region Administrator

DRW:ds

Reported collisions that occurred on State Route 503 (mp 53.51 to 53.97) from E Scott Ave to the Southern most intersection with N Goerig Rd.....01/01/08 - 09/30/11

*As of 1/1/2009 citizen reports are no longer being captured (Report # begins with "C")

SR	SRMP	*REPORT NUMBER	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	#FAT	#VEH	#PEDS	#PEDAL	JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITIONS	LIGHTING CONDITIONS
503	53.51	E009457	10/31/08	12:01 PM	Possible Injury	1	0	1			Not at Intersection and Not Related	Raining	Wet	Daylight
503	53.52	E012167	12/17/08	2:10 PM	No Injury	0	0	5			Not at Intersection and Not Related	Snowing	Snow/Slush	Daylight
503	53.53	E020189	05/22/09	2:40 PM	Evident Injury	2	0	2			At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight
503	53.53	2505533	03/07/08	11:21 AM	No Injury	0	0	2			At Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight
503	53.53	E070995	10/09/10	2:37 PM	No Injury	0	0	2			At Intersection and Related	Raining	Wet	Daylight
503	53.53	E015106	02/13/09	6:47 PM	No Injury	0	0	2			At Intersection and Related	Overcast	Dry	Dark-No Street Lights
503	53.55	E036303	12/15/09	3:47 PM	Unknown	0	0	1			Not at Intersection and Not Related	Raining	Wet	Daylight
503	53.55	2505882	05/25/08	9:49 AM	Possible Injury	1	0	1			Not at Intersection and Not Related	Raining	Wet	Daylight
503	53.56	2505913	02/28/09	10:12 PM	Evident Injury	3	0	1			Not at Intersection and Not Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On
503	53.73	2505899	10/03/08	8:11 AM	Serious Injury	2	0	2			At Intersection and Related	Raining	Wet	Daylight
503	53.73	E124738	09/09/11	9:30 AM	No Injury	0	0	2			At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight
503	53.73	E031922	11/01/09	3:05 PM	Evident Injury	3	0	1			At Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight
503	53.73	E023555	07/21/09	1:03 PM	Possible Injury	3	0	2			At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight
503	53.74	E099774	04/09/11	8:22 AM	No Injury	0	0	2			Driveway Related but Not at Driveway	Overcast	Dry	Daylight
503	53.77	E050683	04/30/10	11:31 AM	Serious Injury	1	0	2			At Driveway	Overcast	Dry	Daylight
503	53.85	E014707	02/04/09	4:25 PM	Possible Injury	1	0	3			Driveway Related but Not at Driveway	Clear or Partly Cloudy	Dry	Daylight
503	53.87	2505541	07/08/08	1:21 PM	Possible Injury	4	0	2			At Driveway	Clear or Partly Cloudy	Dry	Daylight
503	53.88	E089774	01/31/11	8:52 AM	Possible Injury	2	0	2			Driveway Related but Not at Driveway	Overcast	Dry	Daylight
503	53.95	E045568	03/13/10	2:44 PM	Possible Injury	1	0	2			At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight
503	53.95	2506145	02/12/08	6:50 PM	Possible Injury	1	0	1	1		At Intersection and Related	Raining	Wet	Dark-No Street Lights
503	53.95	E104337	05/09/11	2:25 PM	No Injury	0	0	3			At Intersection and Not Related	Overcast	Dry	Daylight
503	53.95	E125459	09/15/11	4:43 AM	No Injury	0	0	2			At Intersection and Not Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On
503	53.95	E116833	07/24/11	6:33 PM	Evident Injury	7	0	3			At Intersection and Not Related	Clear or Partly Cloudy	Dry	Daylight
503	53.95	E114409	07/11/11	9:17 AM	No Injury	0	0	2			At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight
503	53.96	E025166	08/10/09	12:40 PM	No Injury	0	0	3			Intersection Related but Not at Intersection	Blowing Sand or Dirt or Snow	Dry	Daylight
503	53.97	E042196	02/09/10	3:40 PM	No Injury	0	0	2			Driveway Related but Not at Driveway	Clear or Partly Cloudy	Dry	Daylight
503	53.97	2506148	02/27/08	10:30 AM	No Injury	0	0	2			Intersection Related but Not at Intersection	Clear or Partly Cloudy	Dry	Daylight

SR 503 LRDP

Existing PM Peak Hour
1: N Goerig St & Lewis River Rd (SR 503)

514 333 2425

1. N Goerip St & Lewis River Rd (SR 503)									
Approach	EBL	EBR	NBL	NBT	SBT	SEB			
Lane Configurations									
Sign Control	Stop			Free	Free				
Grade	0%			0%	0%				
Volume (veh/h)	70	10	10	745	510	70			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93			
Hourly flow rate (vph)	75	11	11	801	548	75			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	None								
Median storage (veh)									
Upstream signal (ft)									
pX, platoon unblocked									
VC, conflicting volume	1409	586	824						
VC1, stage 1 conf vol									
VC2, stage 2 conf vol									
VCu, unblocked vol	1409	586	824						
IC, single (s)	6.4	6.2	4.1						
IC, 2 stage (s)									
IF (s)	3.5	3.3	2.2						
gpo queue free %	50	98	99						
ICM capacity (veh/h)	150	506	957						
Direction, Lane #	EB 1	NB 1	SB 1						
Volume Total	86	812	624						
Volume Left	75	11	0						
Volume Right	11	0	75						
SH	164	957	1700						
Volume to Capacity	0.52	0.01	0.37						
Queue Length 95th (ft)	65	1	0						
Control Delay (s)	48.9	0.3	0.0						
Lane LOS	E	A	A						
Approach Delay (s)	48.9	0.3	6.0						
Approach LOS	E								
Intersection Summary									
Average Delay				2.9					
Intersection Capacity Utilization				58.4%			ICU Level of Service		
Analysis Period (min)				15			B		

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The Transco Group

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SR 503 LRDP

Existing PM Peak Hour
2: E Scott Ave & Lewis River Rd (SR 503)

Movement	EBL	EBR	NBL	NBT	SBL	SBR
Lane Configurations	<div> <div>Left</div> <div>Through-Right</div> <div>Left</div> <div>Through-Right</div> <div>Left</div> <div>Through-Right</div> </div>					
Sign Control	<div> <div>Stop</div> <div>Free</div> <div>Stop</div> <div>Free</div> <div>Stop</div> <div>Free</div> </div>					
Grade	0%					
Volume (veh/h)	125	5	5	685	415	55
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	134	5	5	737	448	59
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
VC, conflicting volume						
VC1, stage 1 conf vol	1223	476	505			
VC2, stage 2 conf vol	1223	476	505			
VCu, unblocked vol	6.4	6.2	4.1			
IC, single (s)						
IC, 2 stage (s)						
IF (s)	3.5	3.3	2.2			
p0 queue free %	32	99	99			
p0 capacity (veh/h)	197	589	1059			
Direction Lane #	EBL	NBL	SBL			
Volume Total	140	742	505			
Volume Left	134	5	0			
Volume Right	5	0	59			
SSH	202	1059	1700			
Volume to Capacity	0.69	0.01	0.30			
Queue Length 95th (ft)	108	0	0			
Control Delay (s)	55.2	0.1	0.0			
lane LOS	F	A				
Approach Delay (s)	55.2	0.1	0.0			
Approach LOS	F					
Intersection Summary						
Average Delay	5.6					
Intersection Capacity Utilization	53.9%					
Analysis Period (min)	15					
	A					

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The Transpo Group

7/23/2007