CITY OF WASHOUGAL
CITY COUNCIL REGULAR MEETING
Monday, February 24, 2025
7:00 PM

MEETING INFORMATION

Please click the link below to join the webinar:
https://us02web.zoom.us/j/ 88468257968

I. INVOCATION - Ross Merritt

II. CALL TO ORDER

III. PLEDGE OF ALLEGIANCE

IV. ROLL CALL

V. AMENDMENTS TO THE AGENDA

VI. PROCLAMATIONS: Red Cross Month and Youth Art Month

VII. PUBLIC COMMENTS

VIII. CONSENT AGENDA

The following items will be passed by a single motion to approve all listed actions and resolutions. There will be no discussion on these items unless requested by Council. If discussion is requested, the item will be moved from the Consent Agenda and considered separately - after the motion has been made and passed to approve the remaining items.

A. Workshop Minutes of February 10, 2025

B. Council Minutes of February 10, 2025

C. Payroll Claims of February 14, 2025, Totaling $385,024.50

D. Accounts Payable of February 6-13, 2025 and Credit Refunds - Totaling $1,958,227.26

IX. NEW BUSINESS

A. Hold a Public Hearing/Ordinance: Pendleton Development Agreement
Agenda Bill #05-2025

B. Resolution: Biosolids Handling Facilities Ecology Loan Acceptance
Agenda Bill #06-2025

C. Council Discussion: Interstate Bridge Replacement Project

X. REPORTS AND COMMUNICATIONS

A. CITY MANAGER

B. MAYOR

C. CITY COUNCIL

XI. EXECUTIVE SESSION - Property Acquisition - RCW 42.30.110(1)(b) - no action to follow

XII. ADJOURNMENT

UPCOMING MEETINGS: Monday, March 10, 2024, Workshop at 5:00 pm and Council at 7:00 pm

BUSINESS OF THE CITY COUNCIL

City of Washougal, Washington

FOR AGENDA OF:
2/24/2025

SUBJECT:

MEETING INFORMATION

Please click the link below to join the webinar:
https://us02web.zoom.us/j/ 88468257968

DEPT. OF ORIGIN:
Administration

REVIEWED AT:

TO BE RETURNED TO COUNCIL:
No

EXPENDITURE REQUIRED: **BUDGETED:** **APPROPRIATION REQUIRED:**

SUMMARY STATEMENT

RECOMMENDED ACTION

BUSINESS OF THE CITY COUNCIL

City of Washougal, Washington

FOR AGENDA OF:
2/24/2025

SUBJECT:
Workshop Minutes of February 10, 2025

DEPT. OF ORIGIN:
Administration

REVIEWED AT:

TO BE RETURNED TO COUNCIL:
No

ATTACHMENTS:

- **2.10.2025 Workshop Minutes.pdf**

EXPENDITURE REQUIRED: **BUDGETED:** **APPROPRIATION REQUIRED:**

SUMMARY STATEMENT

RECOMMENDED ACTION

CITY OF WASHOUGAL
CITY COUNCIL WORKSHOP MEETING
MINUTES
Monday, February 10, 2025
5:00 PM

DRAFT

MEETING INFORMATION
Please click the link below to join the webinar:
https://us02web.zoom.us/j/ 87693546647

I. CALL TO ORDER

Mayor Pro Tem David Fritz called the meeting to order at 5:00 pm.

II. ROLL CALL

Present: Mayor David Stuebe and Councilmembers Michelle Wagner, David Fritz, Molly Coston, Julie Russell, Ernie Suggs, Tia Robertson and Student Representative Emily Bishop

Staff:
David Scott, City Manager
Joe Walsh, Community Services and Strategy Director
Daniel Layer, Finance Director/City Clerk
Mitch Kneipp, Community Development Director
Rose Jewell, Community Engagement Manager
Amanda Goulding, Assistant City Clerk & Accounting Specialist

III. CORRESPONDENCE

IV. PUBLIC COMMENTS

Connie Jo Freeman asked the council to adopt a resolution opposing the CTRAN light rail project and that Councilmember Coston vote the will of the people. As a former city councilmember, she shared her knowledge of CTRAN and RTC's history with the I-5 project.

David Shoemaker asked the council to develop a list to weigh the project considering the contracting process and cost.

Joetta Keller asked the council to write a resolution opposing the CTRAN light rail project.

Glen Ray encouraged the council to oppose light rail in the area due to the cost, increase taxes, and crime associated with mass transit. He opposed a partnership with Tri-Met.

Janice Daloia asked the council to oppose light rail due to the high cost and limited accessibility by most. She opposed a partnership with Tri-Met.

Rick Vermeers spoke in opposition to bringing light rail over the river. Federally funded projects are paid for by the taxpayers and asked council vote the will of the people.

Margaret Tweet reminded the council of the previous county wide votes when light rail was

voted down. Now there are talks to move forward and bypass the vote of the people. She shared concerns with cost and weather-related service deficiency. IBR crossing numbers were shared and are on the decline.

Douglas Tweet opposed the IBR proposal to extend light rail across the bridge citing that ridership has fallen over the last 20 years.

Liz Cline spoke in opposition to light rail and asked the council to follow Camas and adopt a resolution opposing the project.

V. NEW BUSINESS

A. City Manager's Office: C-Tran Update

David Scott introduced Scott Patterson who presented the following:

- Revision MLPA Condition
  - Strike current A 2 Language
  - Proposed language for A 2
- IBR SDEIS/FEIS Update
  - Draft supplemental environmental impact statement
  - DEIS
- FTA Capital Investment Grant(CIG) Process overview
  - IBR hopes to secure $billion
  - Impact of new administration is potentially significant
  - Three phases outlined - multi step process
  - New and small start Project Evaluation and rating under MAP-21
  - Individual criteria rating
  - Local Financial Commitment and rating
  - Interstate Bridge Replacement (IBR)
- Operation and Maintenance Cost Framework
  - Boundary - limits service Expo to Evergreen
  - Geographical split
  - Cost shared SDEIS for TriMet and C-TRAN and WA State
  - Sales Tax Funding Overview history
  - Revenue recovery
  - Voter approval to be sought for .2% sales tax
  - Light Rail Transit Operation and Maintenance Existing Options
- Discussion items: number of lanes, benefits of an auxiliary lanes, data being used, pedestrian lane, light rail (alternative mode), FTE Grant funding, relationship with Tri-Met, vote of the people, and board composition.
- CTRAN Board timeline
- Service and taxing boundary
- RCWs for sales tax
- Recommended Next Steps
- IBR representatives explained the funding options

B. Community Development: Comprehensive Plan Update - Draft Land Use Alternatives Discussion

Mitch Kneipp and Jessica Herceg, Dowl Consultant, presented the following:

- The Kysar Property has been removed from the expansion area
- Land Use considerations
  - Planning for 2045 - residents, housing unit, and jobs
- Alternative 1 - Project House and Job Yield
  - 1622 New Jobs

    - 5998 New Housing Units
- Alternative 2 - Project House and Job Yield
    - 2007 New Jobs
    - 6484 New Housing Units
- Land Use Capacity Assumptions
    - Commercial/Town Center Zones
    - Residential Zones
    - Industrial Zones
    - Existing Land Use Plan
- Upcoming Open House in the community center

VI. REPORTS AND COMMUNICATIONS

A. CITY MANAGER

Deferred

B. MAYOR

Deferred

C. CITY COUNCIL

Deferred

VII. ADJOURNMENT

Meeting ended at 6:52

_____

Mayor

_____

City Clerk

BUSINESS OF THE CITY COUNCIL

City of Washougal, Washington

FOR AGENDA OF:
2/24/2025

SUBJECT:
Council Minutes of February 10, 2025

DEPT. OF ORIGIN:
Administration

REVIEWED AT:

TO BE RETURNED TO COUNCIL:
No

ATTACHMENTS:

- **2.10.2025 Council Minutes.pdf**

EXPENDITURE REQUIRED: **BUDGETED:** **APPROPRIATION REQUIRED:**

SUMMARY STATEMENT

RECOMMENDED ACTION

CITY OF WASHOUGAL
CITY COUNCIL REGULAR MEETING
MINUTES
Monday, February 10, 2025
7:00 PM

DRAFT

MEETING INFORMATION

Please click the link below to join the webinar:
https://us02web.zoom.us/j/ 82060958759

VIDEO I. INVOCATION - Virginia Seymour

II. CALL TO ORDER

Mayor Pro Tem David Fritz called the meeting to order at 7:02 pm.

III. PLEDGE OF ALLEGIANCE

IV. ROLL CALL

Present: Mayor David Stuebe and Councilmembers Michelle Wagner, David Fritz, Molly Coston, Ernie Suggs, and Tia Robertson and Student Representative Emily Bishop
Absent: Julie Russell

Staff:
David Scott, City Manager
Joe Walsh, Community Services and Strategy Director
Robert Zeinemann, City Attorney
Daniel Layer, Finance Director/City Clerk
Zane Freschette, Police Chief
Rose Jewell, Community Engagement Manager
Amanda Goulding, Assistant City Clerk & Accounting Specialist

Motion: Excuse Councilmember Russell.
Ernie Suggs/Molly Coston Motion Passed.

V. AMENDMENTS TO THE AGENDA

Councilmember Suggs added a speed bumps discussion to be discussed under council comments.

VIDEO VI. PROCLAMATIONS - Career and Technology Education (CTE) Month

Councilmember Robertson and Mayor Pro Tem David Fritz read the proclamation in its entirety.

Margaret Rice received the proclamation on behalf of the Washougal School District.

VIDEO VII. PUBLIC COMMENTS

Lauren Colas referenced Camas City Council's passing by a unanimous vote a resolution to oppose light rail. The residents in Clark County voted to oppose light rail three times in the

past. She proposed improved I-5 and additional new bridge instead. She encouraged Washougal to adopt a resolution similar to Camas'.

Margaret Tweet spoke in opposition to C-TRAN light rail and recounted the discussions to date. She drew attention to the reduction in CTRAN ridership and cost of the project.

Douglas Tweet spoke in opposition to light rail noting the cost.

Susan Courtney thanked council for listening to the voters. She shared concerns with the predicted earthquakes and condition of the bridges along with the costs; suggesting a third bridge.

VIII. CONSENT AGENDA

The following items will be passed by a single motion to approve all listed actions and resolutions. There will be no discussion on these items unless requested by Council. If discussion is requested, the item will be moved from the Consent Agenda and considered separately - after the motion has been made and passed to approve the remaining items.

Unanimous consent to approve the consent agenda. Suggs No objections.

A. Payroll Claims of January 31 2025, Totaling $636,322.70

B. Accounts Payable January 23-30, 2025, Totaling $2,590,969.44

C. Workshop Minutes of January 27, 2025

D. Council Minutes of January 27, 2025

E. Authorize the City Manager to Sign: 2025-2026 Collective Bargaining Agreement with Local 307-W of the Washington State Council of County and City Employees (WSCCCE) and the American Federation of State, County and Municipal Employees (AFSCME), AFL-CIO

AGENDA BILL #03-2025

IX. NEW BUSINESS

A. Resolution: Amending Chapter 2.A of the Personnel Policies Manual to revise the Non-Represented Employees' 2025 & 2026 Salary Schedules, Longevity Pay, Sick Leave, and Benefits

AGENDA BILL #04-2025

David Scott presented the staff report and recommended action. Through the consent agenda the council authorize the City Manager to sign the 307W Collective Bargaining Agreement .
Motion: Pass the resolution in the usual manner.
Ernie Suggs/Molly Coston Motion Passed.

X. REPORTS AND COMMUNICATIONS

A. CITY MANAGER

David Scott reported on the Washington DC trip with David Fritz and Joe Walsh noting the subjects of the advocacy. Priority projects include PFAS, EOC, and Library. He spoke on the FY 2025, the railway crossing elimination grant, water quality, wastewater treatment, bio solids, and basic infrastructure.

B. MAYOR

Mayor David Stuebe reported on the Mayors dinner, CRESA meeting, and thanked council and staff for their hard work, and commented on the resolution for staff compensation.

C. CITY COUNCIL

Councilmember Wagner brought forward for discussion a resolution on CTRAN light rail.

David Scott suggested that council discuss this at the next workshop. Council concurred.

Councilmember Robertson spoke about the fire fighters visit to Olympia and online only CPR/AED training.

Councilmember Suggs gave an update on the Port and C/W Chamber. He asked that speed bumps be on an upcoming workshop agenda. He shared feedback from residents noting people like living in Washougal.

Councilmember Fritz reflected on the DC Trip.

Councilmember Coston suggested that a CTRAN resolution be focused on policy. There is an upcoming CTRAN Board meeting, agendas are available. Here upcoming activities include: Creative Arts District, Public Works Committee, Wellbeing Committee, and Riverside Church service.

Councilmember Wagner announced the upcoming Creative Arts District, Public Works Committee, GMA Comp Plan CAC, Community Development Committee, and Parks Board Meetings.

Student Rep Bishop recognized the girls scout troop present at the meeting. She commented on the CTE program, upcoming play and sporting events, and her Gold Award support night.

XI. ADJOURNMENT

Meeting adjourned at 8:02.

_____

Mayor

_____

City Clerk

BUSINESS OF THE CITY COUNCIL

City of Washougal, Washington

FOR AGENDA OF:
2/24/2025

SUBJECT:
Payroll Claims of February 14, 2025, Totaling $385,024.50

DEPT. OF ORIGIN:
Finance

REVIEWED AT:

TO BE RETURNED TO COUNCIL:
No

ATTACHMENTS:

- **PAYROLL CLAIMS VOUCHER 02.14.25.pdf**

EXPENDITURE REQUIRED: **BUDGETED:** **APPROPRIATION REQUIRED:**

SUMMARY STATEMENT

RECOMMENDED ACTION

CITY OF WASHOUGAL

PAYROLL CLAIMS VOUCHER APPROVAL

I HEREBY CERTIFY THAT THE SERVICES CHARGED ON THE VOUCHERS ATTACHED HAVE BEEN FURNISHED TO THE BEST OF MY KNOWLEDGE. I FURTHER CERTIFY THE CLAIMS BELOW TO BE VALID AND CORRECT.

FINANCE _____

WE THE UNDERSIGNED COUNCIL MEMBERS OF WASHOUGAL, WASHINGTON DO HEREBY CERTIFY THAT THE EMPLOYEE CHECKS 10705 and EMPLOYEE VOUCHERS 33599-33676 ARE APPROVED FOR PAYMENT IN THE AMOUNT OF $385,024.50 ON THE 14TH DAY OF FEBRUARY.

FINANCE COMMITTEE_____

FINANCE COMMITTEE_____

FINANCE COMMITTEE_____

BUSINESS OF THE CITY COUNCIL

City of Washougal, Washington

FOR AGENDA OF:
2/24/2025

SUBJECT:
Accounts Payable of February 6-13, 2025 and Credit Refunds - Totaling $1,958,227.26

DEPT. OF ORIGIN:
Finance

REVIEWED AT:

TO BE RETURNED TO COUNCIL:
No

ATTACHMENTS:

- **AP_CK_RUN_02.13.25_90370-90421.pdf**
- **AP_CK_RUN_02.06.25_90317-90355.pdf**
- **February 2025 Credit Refunds.pdf**

EXPENDITURE REQUIRED: **BUDGETED:** **APPROPRIATION REQUIRED:**

SUMMARY STATEMENT

RECOMMENDED ACTION

Washougal, WA

Check Register

Packet: APPKT01988 - KHAP021325

By Check Number

Vendor Number	Vendor Name	Payment Date	Payment Type	Discount Amount	Payment Amount	Number
Bank Code: AP-Accounts Payable						
4260	AC Schommer & Sons Inc.	02/18/2025	Regular	0.00	72,481.76	90370
2563	APPLIED CONCEPTS INC	02/18/2025	Regular	0.00	325.50	90371
83	BI-MART CORPORATION	02/18/2025	Regular	0.00	529.80	90372
1767	BLAIRCO INC.	02/18/2025	Regular	0.00	8,528.38	90373
231	CAMAS POWER EQUIPMENT	02/18/2025	Regular	0.00	206.64	90374
4290	Check Point Concrete LLC	02/18/2025	Regular	0.00	1,057.88	90375
397	CITIBANK, N.A.	02/18/2025	Regular	0.00	2,872.33	90376
125	CLARK COUNTY TREASURER	02/18/2025	Regular	0.00	31,043.83	90377
809	CLARK PUBLIC UTILITIES	02/18/2025	Regular	0.00	40,101.58	90378
	Void	02/18/2025	Regular	0.00	0.00	90379
3284	CORE & MAIN LP	02/18/2025	Regular	0.00	5,337.58	90380
143	DAY WIRELESS SYSTEMS, INC	02/18/2025	Regular	0.00	989.52	90381
619	DS SERVICES OF AMERICA, INC.	02/18/2025	Regular	0.00	137.69	90382
4317	EASL INC.	02/18/2025	Regular	0.00	10,000.00	90383
3713	Graphic Information System	02/18/2025	Regular	0.00	103.15	90384
405	IMPERIAL CLEANERS	02/18/2025	Regular	0.00	53.17	90385
921	INTERNATIONAL ASSOC OF CHIEFS (	02/18/2025	Regular	0.00	85.00	90386
418	J2 BLUE PRINT SUPPLY COMPANY	02/18/2025	Regular	0.00	104.21	90387
2092	JEFFREY D. BARRAR, PS	02/18/2025	Regular	0.00	1,875.00	90388
3737	Jubitz Corporation	02/18/2025	Regular	0.00	1,707.10	90389
1024	KENNEDY/JENKS CONSULTANTS, IN(	02/18/2025	Regular	0.00	69,894.35	90390
2019	KENYON DISEND, PLLC	02/18/2025	Regular	0.00	5,687.00	90391
	Void	02/18/2025	Regular	0.00	0.00	90392
454	L.N. CURTIS & SONS	02/18/2025	Regular	0.00	464.69	90393
1795	LANGUAGE LINE SERVICES	02/18/2025	Regular	0.00	8.43	90394
4119	Monument Policy Group, LLC	02/18/2025	Regular	0.00	6,250.00	90395
494	NORTH CENTRAL LABORATORIES	02/18/2025	Regular	0.00	754.15	90396
4292	Northside Ford Truck Sales INC	02/18/2025	Regular	0.00	7,117.98	90397
515	ODP BUSINESS SOLUTIONS, LLC	02/18/2025	Regular	0.00	748.83	90398
513	OFFICE OF THE STATE TREASURER	02/18/2025	Regular	0.00	3,850.68	90399
765	ONE CALL CONCEPTS, INC.	02/18/2025	Regular	0.00	126.36	90400
1684	OREILLY AUTO PARTS	02/18/2025	Regular	0.00	665.34	90401
261	PACIFIC COAST HARDWARE	02/18/2025	Regular	0.00	280.97	90402
4231	Pomp's Tire Service Inc.	02/18/2025	Regular	0.00	843.59	90403
4194	Procom LLC	02/18/2025	Regular	0.00	72.00	90404
4234	Quinn Company	02/18/2025	Regular	0.00	1,383.84	90405
799	ROBERT D GARWOOD	02/18/2025	Regular	0.00	1,068.00	90406
3188	SHI INTERNATIONAL CORP	02/18/2025	Regular	0.00	46,637.10	90407
643	SNAP ON INCORPORATED	02/18/2025	Regular	0.00	76.89	90408
3782	Solutions Yes, LLC	02/18/2025	Regular	0.00	654.65	90409
1086	SPECIALTY PROGRAM GROUP LLC	02/18/2025	Regular	0.00	260.00	90410
4212	Stellar J Corporation	02/18/2025	Regular	0.00	225,452.15	90411
200	TRAFFIC SAFETY SUPPLY CO	02/18/2025	Regular	0.00	97.98	90412
2383	TRANSUNION RISK AND ALTERNATI\	02/18/2025	Regular	0.00	194.22	90413
690	USA BLUEBOOK	02/18/2025	Regular	0.00	366.72	90414
821	VWR INTERNATIONAL	02/18/2025	Regular	0.00	1,305.20	90415
931	WA ASSOC OF SHERIFFS & POLICE C	02/18/2025	Regular	0.00	2,000.00	90416
208	WALLIS ENGINEERING	02/18/2025	Regular	0.00	224.00	90417
826	WASHINGTON STATE PATROL	02/18/2025	Regular	0.00	189.00	90418
785	WASHOUGAL LUMBER CO.	02/18/2025	Regular	0.00	114.74	90419
4181	Washougal Songcraft Festival	02/18/2025	Regular	0.00	3,200.00	90420

Vendor Number	Vendor Name	Payment Date	Payment Type	Discount Amount	Payment Amount	Number
147	YATES MARSHALL, PLLC	02/18/2025	Regular	0.00	5,002.75	90421

Bank Code AP Summary

Payment Type	Payable Count	Payment Count	Discount	Payment
Regular Checks	67	50	0.00	562,531.73
Manual Checks	0	0	0.00	0.00
Voided Checks	0	2	0.00	0.00
Bank Drafts	0	0	0.00	0.00
EFT's	0	0	0.00	0.00
	67	**52**	**0.00**	**562,531.73**

Fund Summary

Fund	Name	Period	Amount
999	POOLED CASH - OPERATING	2/2025	562,531.73
			562,531.73

Washougal, WA

Check Register

Packet: APPKT01983 - KHAP020625

By Check Number

Vendor Number	Vendor Name	Payment Date	Payment Type	Discount Amount	Payment Amount	Number
Bank Code: AP-Accounts Payable						
4327	ASSOCIATION OF WASHINGTON CIT	02/06/2025	Regular	0.00	26,178.09	90317
	Void	02/06/2025	Regular	0.00	0.00	90318
1767	BLAIRCO INC.	02/06/2025	Regular	0.00	1,048.34	90319
241	CHUCKS AUTO BODY LLC	02/06/2025	Regular	0.00	322.25	90320
1578	CITY OF WASHOUGAL	02/06/2025	Regular	0.00	7,305.87	90321
125	CLARK COUNTY TREASURER	02/06/2025	Regular	0.00	1,318.88	90322
809	CLARK PUBLIC UTILITIES	02/06/2025	Regular	0.00	8,000.68	90323
262	CODE PUBLISHING COMPANY	02/06/2025	Regular	0.00	1,095.83	90324
2299	COLUMBIA RIVER ECONOMIC DEVEI	02/06/2025	Regular	0.00	6,050.00	90325
1274	COLUMBIA WEST ENGINEERING INC	02/06/2025	Regular	0.00	5,632.50	90326
281	CORRECT EQUIPMENT	02/06/2025	Regular	0.00	1,868.37	90327
3991	Cowlitz-Wahkiakum Council of Gove	02/06/2025	Regular	0.00	314.00	90328
4121	David Fritz	02/06/2025	Regular	0.00	23.80	90329
3713	Graphic Information System	02/06/2025	Regular	0.00	264.44	90330
379	GUNDERSON TIRE CENTERS	02/06/2025	Regular	0.00	2,875.55	90331
1306	HENDERSON TURF & WEAR INC	02/06/2025	Regular	0.00	994.52	90332
4199	HOUSING AUTHORITY OF THE CITY (	02/06/2025	Regular	0.00	3,451.50	90333
2940	JACK PETERSON ATTORNEY AT LAW	02/06/2025	Regular	0.00	4,500.00	90334
3737	Jubitz Corporation	02/06/2025	Regular	0.00	3,447.60	90335
2986	KCD LLC	02/06/2025	Regular	0.00	5,080.00	90336
166	METRO LANDSCAPE SUPPLIES INC	02/06/2025	Regular	0.00	37.98	90337
3652	Mobley Engineering LLC	02/06/2025	Regular	0.00	550.00	90338
4119	Monument Policy Group, LLC	02/06/2025	Regular	0.00	6,250.00	90339
3695	MSDSOnline Inc.	02/06/2025	Regular	0.00	3,970.73	90340
4292	Northside Ford Truck Sales INC	02/06/2025	Regular	0.00	904.17	90341
4031	Pacific Power Group LLC	02/06/2025	Regular	0.00	3,437.64	90342
4231	Pomp's Tire Service Inc.	02/06/2025	Regular	0.00	1,443.08	90343
1583	POTTER WEBSTER COMPANY	02/06/2025	Regular	0.00	606.97	90344
799	ROBERT D GARWOOD	02/06/2025	Regular	0.00	1,048.00	90345
4073	Robertson Fick Engineering PC	02/06/2025	Regular	0.00	19,989.18	90346
3961	SOLID WASTE SYSTEMS, INC.	02/06/2025	Regular	0.00	2,235.00	90347
3782	Solutions Yes, LLC	02/06/2025	Regular	0.00	98.36	90348
962	SOUTHWEST CLEAN AIR AGENCY	02/06/2025	Regular	0.00	3,388.00	90349
4212	Stellar J Corporation	02/06/2025	Regular	0.00	1,248,862.67	90350
207	WA STATE DEPT OF LICENSING	02/06/2025	Regular	0.00	118.25	90351
308	WASHINGTON STATE DEPT OF ECOL	02/06/2025	Regular	0.00	449.00	90352
2198	WAXIE SANITARY SUPPLY	02/06/2025	Regular	0.00	2,857.15	90353
3823	Western Equipment Distributors Inc	02/06/2025	Regular	0.00	17,204.76	90354
2525	WIND RIVER PUBLISHING	02/06/2025	Regular	0.00	261.00	90355

Bank Code AP Summary

Payment Type	Payable Count	Payment Count	Discount	Payment
Regular Checks	56	38	0.00	1,393,484.16
Manual Checks	0	0	0.00	0.00
Voided Checks	0	1	0.00	0.00
Bank Drafts	0	0	0.00	0.00
EFT's	0	0	0.00	0.00
	56	**39**	**0.00**	**1,393,484.16**

Fund Summary

Fund	Name	Period	Amount
999	POOLED CASH - OPERATING	2/2025	1,393,484.16
			1,393,484.16

CITY OF WASHOUGAL

CLAIMS VOUCHER APPROVAL

I HEREBY CERTIFY THAT THE GOODS AND OR SERVICES CHARGED ON THE VOUCHERS ATTACHED HAVE BEEN FURNISHED TO THE BEST OF MY KNOWLEDGE. I FURTHER CERTIFY THE CLAIMS BELOW TO BE VALID AND CORRECT.

FINANCE _____

WE THE UNDERSIGNED COUNCIL MEMBERS OF WASHOUGAL, WASHINGTON DO HEREBY CERTIFY THAT
CK NUMBERS 90356-90368
ARE APPROVED FOR PAYMENT IN THE AMOUNT OF $2211.37 on February 12, 2025.

FINANCE COMMITTEE_____

FINANCE COMMITTEE_____

FINANCE COMMITTEE_____

Agenda Bill #05-2025

BUSINESS OF THE CITY COUNCIL

City of Washougal, Washington

FOR AGENDA OF:
2/24/2025

SUBJECT:
Public Hearing: Pendleton Development Agreement

DEPT. OF ORIGIN:
Community Development

REVIEWED AT:
CD Council Committee: April 25, 2024
City Council Workshop: January 13, 2025

TO BE RETURNED TO COUNCIL:
No

ATTACHMENTS:

- **Ordinance - Pendleton DA (Draft)**
- **DRAFT - Pendleton DA (02-24-25)**
- **01-17-2025 - Email comment from ECLL**
- **01-21-2025 - Email comment from Deanna Bossman**
- **01-22-2025 - Email comment from Leslie Angelo**
- **01-23-2025 - Email comment from Dave Pinkernell**
- **01-29-2025 - Comment letter from Cherie Kearney and Steve Clark**
- **01-29-2025 - Email comment from Bryan Shull**
- **02-04-2025 - Comment letter from David and Carolyn Simms**
- **02-06-2025 - Email comment from Dors & Erin Ward**
- **02-20-2025 - WSDOT SEPA Comments**
- **02-20-2025 - Email WDFW SEPA Comments**

EXPENDITURE REQUIRED:	BUDGETED:	APPROPRIATION REQUIRED:
$0	$0	$0

SUMMARY STATEMENT

Pendleton is seeking a Development Agreement as authorized under Washington law. The Development Agreement includes a proposed Mixed-Use Master Plan with a site area of

approximately 63-acres. The proposed uses are existing light industrial, new office and commercial, new multi-family residential, and recreational. The existing Pendleton Woolen Mill is a light industrial use that will remain in place. Approximately 780 multi-family units are possible under the conceptual Master Plan. The potential commercial uses consist of approximately 175,000 s.f. of neighborhood retail, with an additional 190,000 s.f. of office. The recreational use will provide connector trails integrated with onsite open space, as well as other amenities according to projected housing populations.

Public Notice:

Public notice for the development agreement was published in the paper and mailed to property owners within 500-feet on January 7, 2025. The site was posted, and property owners were re-noticed noting the set hearing date on January 21, 2025. Hearing notice was published on February 14, 2025.

Public Comments:

Eight comments to the public notice were received, all of which are attached to this agenda bill. Comments were received from the following:

- East County Little
- Deanna Bossman
- Leslie Angelo
- Dave Pinkernell
- Cherie Kearney & Steve Clark
- Bryan Shull
- David & Carolyn Simms
- Dors & Erin Ward

SEPA Checklist:

A State Environmental Policy Act (SEPA) Mitigated Determination of Non-Significance (MDNS) was issued on February 6, 2025 and the comment period closed on February 20, 2025. SEPA comments were received from the Washington State Department of Transportation (WSDOT) and the Washington State Department of Fish & Wildlife (WDFW). These comments are also attached to the agenda bill.

RECOMMENDED ACTION

1. Hold a public hearing to take public testimony.
2. Pass, Post, and Publish the ordinance in the usual manner.

ORDINANCE NO. _____

An **ORDINANCE** regarding a Development Agreement between the City of Washougal and Pendleton Woolen Mills; that provides for an agreement between the parties approving the Master Plan and vesting the future development to the current development regulations for the duration of the Development Agreement.

WHEREAS, at the City Council workshop on January 13, 2025, the Council set a public hearing for February 24, 2025, to consider adoption of the proposed development agreement between Pendleton Woolen Mills and the City of Washougal; and

WHEREAS, the agreement would apply to approximately 63-acres consisting of parcels 074000-000, 071387-000, 071569-000, 073960-000, 071397-000, 074720-000, 071281-004, 071281-132, and 071350-000 located within the NE ¼ of Section 18, and the NW ¼ of Section 17, all within Township 1 North, Range 4 East of the Willamette Meridian (the Property); and

WHEREAS, Pendleton Woolen Mills owns said Property and have requested the development agreement to facilitate the development and implementation of their Master Plan; and

WHEREAS, the parties desire to work together to permit and develop the Property; and

WHEREAS, Pendleton Woolen Mills has paid a development agreement fee; and

WHEREAS, pursuant to RCW 36.70B.170(1), the parties are authorized to enter into a development agreement that sets forth provisions that apply to and govern the development and use of the Property; and

WHEREAS, the City Council finds that approving the development agreement is in the public interest, and it benefits public health, safety, and welfare by providing for housing, long-term economic benefits, public trails and park amenities to the City, and

WHEREAS, a Mitigated Determination of Non-Significance (MDNS) was issued on February 6, 2025, as required by WMC Title 16; and

WHEREAS, further environmental review not addressed within the MDNS may be required at the time of application for Site Plan Review as required under WMC 18.88; and

WHEREAS, a public hearing was held, as required by law, on February 24, 2025.

NOW, THEREFORE, BE ORDAINED by the City Council of the City of Washougal, Washington, as follows:

Section I

That the City Council of the City of Washougal in accordance with RCW 36.70B.200 hereby authorizes the Mayor to execute on behalf of the City the development agreement in the form attached hereto as Exhibit “A” between the City and Pendleton Woolen Mills.

A copy of said development agreement is attached hereto, marked as Exhibit "A" and by this reference incorporated herein.

Section II

Severability. If any clause, sentence, paragraph, section, or part of this ordinance or the application thereof to any person or circumstance shall be adjudged by any court of competent jurisdiction to be invalid, such order or judgment shall be confined in its operation to the controversy in which it was rendered and shall not effect or invalidate the remainder or any parts thereof to any person or circumstances and to this end, the provisions of each clause, sentence, paragraph, section or part of this law are hereby declared to be severable.

Section III

This ordinance shall take effect five (5) days after passage, posting and publication according to law.

PASSED by the Council of the City of Washougal at regular meeting on this 24th day of February 2025.

City of Washougal, Washington

By: _____
David Stuebe, Mayor

ATTEST:

_____
Daniel Layer, Finance Director / City Clerk

APPROVED AS TO FORM:

_____
Robert Zeinemann, City Attorney

After recording, return to:

John Bishop
Pendleton Woolen Mills, Inc.
220 NW Broadway
PO Box 3030
Portland, OR 97208-3030

Space Above for Recording Information Only

DEVELOPMENT AGREEMENT

This Development Agreement (the "Agreement") is made and entered into by and between the City of Washougal, a Washington municipal corporation (hereinafter referred to as the "City"), and Pendleton Woolen Mills, Inc., an Oregon corporation, licensed to do business in the State of Washington (hereinafter referred to as "Owner").

RECITALS

WHEREAS, Owner owns or controls certain real property which is located within the City's municipal boundary, and which is more fully described in the attached Exhibit "A" (hereinafter referred to as the "Property"); and,

WHEREAS, the City and the Owner recognize this Property will develop over a period of years and wish to provide predictability about the development standards that will apply to the Property over the course of its full development in order to: increase efficient use of urban services; provide compatibility amongst the various phases of the Property's development; and to allow for substantial environmental review to occur prior to any development, recognizing that Washington State's Environmental Policy Act discourages piecemeal review; and,

WHEREAS, the City is a Washington municipal corporation with land use planning and permitting authority over all land within its corporate limits; and,

WHEREAS, the Washington State Legislature has authorized the execution of development agreements between local governments and a person having ownership or control of real property within its jurisdiction pursuant to RCW 36.70B.170(1); and,

WHEREAS, pursuant to RCW 36.70B.170, a local government and person owning or controlling real property may enter into a development agreement which may set forth the development standards and other provisions that shall apply to, govern and vest the development, use and mitigation of the development of real property for the duration specified in the agreement; and

WHEREAS, the legislative findings supporting the enactment of RCW 36.70B.170 provide:

> The legislature finds that the lack of certainty of the approval of development projects can result in a waste of public and private resources escalate housing costs for consumers and discourage the commitment to comprehensive planning which would make maximum efficient use of resources at the least economic cost to the public. Assurance to a development project applicant that upon government approval the project may proceed in accordance with existing policies and regulations, and subject to conditions of approval, all as set forth in a development agreement, will strengthen the public planning process, encourage private participation and comprehensive planning, and reduce the economic cost of development. Further, the lack of public facilities and services is a serious impediment to development of new housing and commercial uses. Project applicants and local governments may include provisions and agreements whereby applicants are reimbursed over time for financing public facilities. It is the intent

of the legislature by RCW 36.70B.170 through 36.70B.210 to allow local governments and owners and developers of real property to enter into development agreements; [and,]

WHEREAS, the parties recognize the importance of jobs and residential densification within the City and particularly within the area that includes the Property. In furtherance of the desire to implement the City's Town Center zoning and Comprehensive Plan designations, including the desire to provide residences within walking or short commute distances from downtown employment centers as they are developed, the parties wish to plan for the development of this area and increase predictability for each of the parties regarding the future development of the Property; and,

WHEREAS, for the purposes of this Agreement, "Development Standards" includes, but is not limited to, all of the standards listed in RCW 36.70B.170(3), Washougal Municipal Code ("WMC") Titles 16, 17 and 18, and any development standards provided herein;

NOW, THEREFORE, in consideration of the mutual promises, covenants and provisions set forth herein, the receipt and adequacy of which consideration is hereby acknowledged, the parties hereto agree as follows:

AGREEMENT

Section 1. Incorporation of Recitals. The recitals set forth above are true and correct and are incorporated by reference as if fully set forth herein.

Section 2. Development Agreement. This Agreement is a Development Agreement to be implemented under the authority of and in accordance with RCW 36.70B.170 through RCW 36.70B.210, and it shall become a contract between the Owner and the City upon its approval by ordinance or resolution following a public hearing as provided for in RCW 36.70B.170 and upon execution by all parties.

Section 3. Term of Agreement. This Agreement shall commence upon the Effective Date, and shall be valid for a period of fifteen (15) years, unless extended or terminated by mutual consent of the parties in writing; provided however, if: (1) this Agreement, or (2) any land use applications related to the

Property that are filed during the term of this Agreement, are appealed, the term of this Agreement shall be tolled for the period of time during which the appeal is pending.

Section 4. Vesting. Any land use applications submitted with respect to the Property during the term of this Agreement shall be vested to the existing zoning, environmental, and land use regulations and Development Standards applicable to the Property that are in effect on the Effective Date of this Agreement, unless otherwise prohibited by law or as provided for in this Agreement. Any land use approvals affecting the Property issued during the term of this Agreement and which, but for this Agreement would expire during the term of this Agreement, shall remain in effect during the term of this Agreement. The vesting provided for under this Agreement shall not apply to system development charges, impact fees, application fees, review fees, and inspection fees.

All development activity authorized by the Master Plan under the Agreement shall be subject to the Uniform Building Codes (including electrical, fire, earthquake, and other similar uniform construction codes) as adopted by the State and City in effect on the date a complete application for the particular construction or building permit is submitted to the City unless otherwise specified in this Agreement.

The vesting provided for under this Agreement shall not apply to rules, requirements, or mitigation measures determined by the City to be reasonably necessary to avoid a decision by a state or federal administrative agency, or a court of competent jurisdiction, that the City unlawfully failed to comply with state or federal laws or regulations in approving subsequent development or construction permits, and to any requirement or new regulation which the City believes in good faith is necessary to avoid impairment of the City's eligibility for funding, grants, program eligibility or other resources sought by the City.

Pursuant to RCW 36.70B.170(4), the City reserves the authority to impose new or different regulations to the extent required by a serious threat to public health and safety.

Section 5. Master Plan. Attached as Exhibit "B" and incorporated by reference herein is a Mixed-Use Master Plan that shall guide the development

of the Property (the "Master Plan"). The Parties recognize that the timing of the Property's development is largely dependent upon economic conditions. The Master Plan identifies the uses which shall be allowed on various portions of the Property and provides for their approximate locations and the approximate location of the major transportation circulation network for the Property and immediately surrounding area. Future development of the Property shall be generally consistent with the Master Plan.

It is contemplated by the parties that due to the number of years it may take the Master Plan to fully build out, changing market conditions, future development patterns within the area and other factors, the parties may wish to revisit some portions of the Master Plan at a future time. While nothing contained herein shall be construed to obligate either party to amend the Master Plan or this Agreement, it is recognized that future evolution of the City may warrant consideration of factors affecting Master Plan build-out.

Section 6. SEPA. Pursuant to the State Environmental Policy Act ("SEPA"), piecemeal environmental review is discouraged. As such, the parties wish for SEPA review to be accomplished as part of the Agreement for as many of the Master Plan's potential adverse environmental impacts as can be reasonably analyzed, based upon current information submitted with this Agreement, including, but not limited to, the Master Plan and its transportation impacts. This may be done under the Consolidated Review provisions of SEPA. The SEPA checklist ("Checklist") attendant with this Agreement identifies various potential adverse environmental impacts of the full build-out of the Property including to transportation, parks, trees, wetlands, wildlife habitat, sewer, water and storm water. The Checklist also identifies a variety of technical reports or information that provides a basis for the proposed mitigation or partial mitigation of these impacts.

It is the intent of this Agreement and its attendant SEPA process to have the City issue a Threshold Determination (as that term is utilized in Chapter 43.21C RCW) on the identified impacts of the implementation of the Master Plan. Impacts that are identified at future stages of the development, including but not limited to, site plan approval, preliminary plat approval, short plat approval or building permit approvals that have been previously analyzed through this or other SEPA processes, including those associated with the City's action to zone and create Comprehensive Plan designations for the

Property, shall not be re-analyzed unless the future identified adverse impacts related to development of the Property were not previously identified or analyzed or are materially greater than those adverse impacts previously identified and analyzed.

Nothing in this Section 6 shall preclude the City from requesting information, at the Owner's cost, relating to the potential adverse environmental impacts associated with a specific land use application on the Property that have not been previously identified or analyzed as required under SEPA.

Section 7. Transportation. Transportation Engineers and the City have previously analyzed the transportation impacts of the full development of the Property and surrounding downtown area ("City's Traffic Study"). The uses provided for in the Master Plan are consistent with current zoning of the Property and were analyzed as part of the City's Traffic Study. At the request of the City, the Owner had an updated traffic study performed by a licensed traffic engineer ("Updated Traffic Study"), which is attached hereto as Exhibit "C." The Updated Traffic Study analyzes the transportation impacts of the Property's full development and specifically includes traffic impacts that were not considered in the City's Traffic Study.

Based upon the combined analyses of the City's Traffic Study and the Updated Traffic Study, the Property shall be vested during the term of this Agreement with 1,031 PM Peak Hour Trips and 11,218 Average Daily Trips, and no additional off site transportation mitigation or analysis will be required during the term of this Agreement other than the mitigation measures identified in the Traffic Study (a traffic signal at Washougal River Road/A Street when the development of the Property exceeds 463 PM Peak hour trips and a proportionate share contribution for improvements to the SR 14/Washougal River Road roundabout identified in the Updated Traffic Study); provided however, that in the event the Owner proposes uses or intensities of uses that would cause the total number of PM Peak Hour Trips or Average Daily Trips to exceed the number of trips analyzed as part of this Agreement, then the City may require additional transportation analysis and lawful mitigation. Consistent with the City's Transportation Capital Facilities Program and Transportation Impact Fee program, upon construction and acceptance by the City of transportation facilities constructed in connection with the development of the Property the Owner would receive Transportation

Impact Fee Credits in an amount based upon the reasonable cost of construction of the improvement as reviewed and approved by the City.

Section 8. Multifamily Tax Exemption Program ("MFTE Program"). The City acknowledges that the approved Master Plan contemplates the construction of multifamily housing development as Projects on the Property and that the vested standards allow multifamily development. The Parties further acknowledge that the Owner plans to authorize one or more Developers to build the Master Plan and that one or more Developers may build multifamily housing as a part of the Master Plan.

8.1. The Property is within the "town center core and east village district" designated by WMC 3.58 MFTE Program as a residential target area. Developers may therefore apply for their multifamily housing Projects to receive the limited eight-year exemption from ad valorem property taxation provided by WMC 3.58 Multifamily Tax Exemption Program and as modified herein. The City agrees it shall accept MFTE Program applications from Developers of this Property during the full Term of this Agreement as defined in Section 3 of this Agreement, even if the term of this Agreement extends beyond the sunset date of the MFTE Program provided in WMC 3.58.080. At the time of a Developer's application for a tax exemption for a multifamily Project, the City shall process said application pursuant to the procedures and requirements of WMC 3.58 in effect as of the effective date of this Agreement, and as modified herein. With respect to such application and granting of such tax exemption, the City and Owner agree:

> 8.1.1. The City shall not impose any additional discretionary requirements other than those requirements set forth under WMC 3.58 and as modified herein as of the effective date of this Agreement for multifamily housing development on the Property to qualify for the MFTE Program. Where the vested standards of this Agreement conflict with the standards and guidelines set forth in WMC 3.58.060, the vested standards shall control; provided however, the City reserves authority to impose new or different regulations to the extent required by a serious threat to public health and safety, as required by RCW 36.70B.170 (4).

8.1.2. Improvements that are amenities made available exclusively to residents of the multifamily housing development on the Property, including parking improvements, shall be improvements that qualify for the ad valorem property taxation under WMC 3.58.

8.2. Eligibility for the tax exemption is subject to review and approval by the City Community Development Director ("Director") of an application submitted pursuant to WMC 3.58.040(5) and (6) and a contract with the City approved by City Council as required by WMC 3.58.040(6)(a).

Section 9. Park Impact Fee Credit. The Developer is proposing a dedication of approximately 0.8-acres of land for park purposes near the city's "Downtown Park and Community Garden", which is identified in the city's adopted Parks Capital Facilities Plan (CFP). This park area, and the "Proposed connector trail" for the development are shown on the attached Master Plan (Exhibit B). The City has reviewed the park dedication and the "Proposed connector trail" on Exhibit B and the City hereby finds that this park dedication and trail, if constructed and dedicated to the public, would serve the goals and objectives of the capital facilities plan of the City and; therefore, are entitled to impact fee credits for the fair market value of the improvements pursuant to WMC 15.62.060.

Section 10. Remedies and Venue. This Agreement shall be construed in accordance with, and governed by, the laws of the State of Washington. Should a disagreement arise between the City and Owner regarding the interpretation and application of this Agreement, the parties agree to attempt to resolve the disagreement by first meeting and conferring. If such a meeting proves unsuccessful in resolving the dispute, the disagreement may be resolved by judicial action for which the parties agree to venue in the Superior Court for Clark County, State of Washington.

Section 11. Performance. Failure by either party at any time to require performance by the other party of any of the provisions hereof shall in no way affect the parties' rights hereunder to enforce the same, nor shall any waiver by a party of the breach hereof be held to be a waiver of any succeeding breach or a waiver of this non-waiver clause.

Section 12. Severability. If any portion of this Agreement is found to be invalid or unenforceable to any extent, the validity of the remaining provisions shall not be affected thereby.

Section 13. Inconsistencies. If any provisions of the Washougal Municipal Code are deemed inconsistent with the provisions of this Agreement, the provisions of this Agreement shall prevail.

Section 14. Binding on Successors and Recording. The rights and obligations created by this Agreement are assignable and shall be binding upon and inure to the benefit of Owner, the City, and their respective successors and assigns. Only Owner and the City or their successors and assigns shall have the right to enforce the terms of this Agreement. This Agreement shall be recorded against the real property legally described on Exhibit "A" with the Clark County Auditor.

Section 15. No Joint Venture. Nothing in this Agreement is intended to create any type of joint venture relationship between the parties as to the Property or its development.

Section 16. Amendments. This Agreement may only be amended by mutual agreement of the parties, and only after approval of the Washougal City Council.

Section 17. Entire Agreement. This document contains the entire agreement between the parties with respect to the subject matter of the Agreement.

Section 18. Voluntary Agreement. The parties intend and acknowledge that this Agreement is entered into voluntarily without duress and is a voluntary contract binding upon the parties hereto, as well as their successors and assigns.

Section 19. Indemnification. Each party shall protect, defend, indemnify and hold harmless the other party and their officers, agents, and employees, from and against any and all claims, actions, suits, liability, loss, costs, expenses, and damages of any nature whatsoever, which are caused by or

result from any negligent act or omission of the party's own officers, agents, and employees in performing obligations pursuant to this Agreement. Each party shall retain the right to select its own counsel for such defense. In the event of concurrent negligence, each party shall indemnify and hold the other party harmless only to the extent of that party's negligence.

Section 20. Attorneys' Fees and Costs. In any judicial action to enforce or determine a party's rights under this Agreement, the prevailing party (or the substantially prevailing party, if no one party prevails entirely) shall be entitled to reasonable attorneys' fees and costs.

Section 21. Mutual Drafting and Construction. The parties agree that both parties participated fully in the negotiation and drafting of this Agreement and the rules of construction of ambiguities against the drafter shall not apply to either party.

Section 22. Headings. The headings in this Agreement are inserted for reference only and shall not be construed to expand, limit, or otherwise modify the terms and contingencies of this Agreement.

Section 23. Parties and Authority. The signatories below to this Agreement represent that they have the full authority of their respective entities to commit to all of the terms of this Agreement, to perform the obligations hereunder and to execute the same.

Section 24. Force Majeure. Neither party shall be deemed to be in default where delays in performance or failures to perform are due to war, insurrection, strikes or other labor disturbances, walk-outs, riots, floods, earthquakes, fires, casualties, acts of God, epidemics, pandemics, or other restrictions or bases for excused performance which is not within the reasonable control of the party to be excused.

Section 25. Correspondence and Notice. Notices or communications required or desired to be given under this Agreement shall be in writing and sent either by: (a) United States Postal Service first class mail, postage pre-paid; (b) recognized overnight courier service which customarily maintains a contemporaneous permanent delivery record; or (c) by e-mail to the e-mail

addresses designated below, if the subject line indicates that the e-mail is formal notice under this Agreement. The notice shall be deemed delivered on the earlier of: (a) Actual receipt; (b) three (3) business days from deposit in the United States mail; (c) the delivery date as shown in the regular business records of the recognized overnight courier service; or (d) the day and time the email message is received by the recipient's email system, provided, however, that emails received between 4:30 PM and 8:30 AM will be considered delivered as of the start of the next business day. Notices shall be addressed as follows:

To CITY:

City of Washougal
Attn: Mitch Kneipp
Community Development Director
1701 C Street
Washougal, WA 98671
mitch.kneipp@cityofwashougal.us

To OWNER:

Pendleton Woolen Mills, Inc.
Attn: John Bishop
President/Chief Executive Officer
PO Box 3030
Portland, OR 97208-3030
John.Bishop@penwool.com

Either party, by written notice to the other in the manner herein provided, may designate an address different from that set forth above.

Section 26. No Third-Party Beneficiary. Unless expressly provided for herein, nothing in this Agreement is intended to create any third-party beneficiary relationships.

Section 27. Counterparts. This Agreement may be executed in as many counterparts as may be deemed necessary or convenient, each of which, when so executed, shall be deemed an original, but all such counterparts shall constitute but one and the same instrument.

Exhibits:

Exhibit A: Legal Description of Property
Exhibit B: Master Plan
Exhibit C: Transportation Analysis

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the dates set forth below:

CITY OF WASHOUGAL	PENDLETON WOOLEN MILLS, INC.
By _____	By _____
Title _____	Title _____

STATE OF WASHINGTON)
) ss.
COUNTY OF CLARK)

I certify that I know or have satisfactory evidence that _____ is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute this instrument and acknowledged it as the _____ of Pendleton Woolen Mills, Inc. to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED:_____, 2025.

_____

NOTARY PUBLIC for the State of Washington, residing in the County of Clark

My Commission Expires:

_____

STATE OF WASHINGTON)
) ss.
COUNTY OF CLARK)

I certify that I know or have satisfactory evidence that _____ is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute this instrument and acknowledged it as the _____ of the CITY OF WASHOUGAL, to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED:_____, 2025.

_____

NOTARY PUBLIC for the State of Washington, residing in the County of Clark
My Commission Expires:

_____

_____

Exhibit A

PARCEL I:

All of Block 13 of the Town of Washougal, in the County of Clark and State of Washington, as per the duly recorded plat thereof recorded in Volume A of Plats, page 21, Clark County, Washington.

PARCEL II:

All of Block 14 of the Town of Washougal, in the County of Clark and State of Washington, as per the duly recorded plat thereof recorded in Volume A of Plats, page 21, Clark County, Washington.

PARCEL III:
All of Blocks 1 and 2, of Mt. Hood Addition to the Town of Washougal, Washington, as per the duly recorded plat thereof recorded in Volume C of Plats, page 92, Clark County, Washington.

TOGETHER WITH vacated Jefferson Street lying between Front Street and 1st Street, as said streets are depicted on the said plat of Mt. Hood Addition to the Town of Washougal, Washington.

PARCEL IV:

A tract of land situated in the Northwest quarter of Section 17, Township 1 North, Range 4 East of the Willamette Meridian, in Clark County, Washington, being described as follows:

BEGINNING at a point which is South 300.00 feet and South 89°59'40" East 150.00 feet from the Southwest corner of Lot 3, Block 4, SURBER'S ADDITION, according to the plat thereof recorded in Volume 'A' of Plats, page 62; thence South 89°59'40" East 2.00 feet; thence South 0°01'50" East 32.65 feet; thence South 89°59'40" East 98.30 feet; thence North 0°01'50" West, 78.00 feet; thence North 89°59'10" East 190.47 feet; thence North 0°01'50" West 95.00 feet; thence South 89°59'10" West 290.77 feet; thence South 01°01'50" East 140.37 feet to the point of beginning.

PARCEL V:

That portion of the Northeast quarter of Section 18, Township 1 North, Range 4 East of the Willamette Meridian, Clark County, Washington, lying within the Richard Ough Donation Land Claim, described as follows:

BEGINNING at a point 160 feet West of the Southwest corner of Block 13, Washougal City, according to the plat thereof, recorded in Volume A of Plats, page 21, records of Clark County, Washington; thence West 100 feet; thence North 100 feet; thence East 100 feet; thence South 100 feet to the Point of Beginning.

EXCEPT that portion conveyed to the State of Washington for highway purposes by deed recorded under Auditor's File No. G 375888.

PARCEL VI:

A tract of land situated in the Northeast quarter of Section 18, Township 1 North, Range 4 East of the Willamette Meridian, in Clark County, Washington, being more particularly described as follows:

All that portion of the following described tract of land lying North of the Northerly line of State Highway 14:

BEGINNING at a point 74 chains and 17 links East and 4 chains and 80 links South of the Northwest corner of Section 18, in Township 1 North of Range 4 East of the Willamette Meridian, and running thence West 8 chains and 34 links; thence South to low water mark on the right bank of the Columbia River; thence by the meanderings of the right bank of said river at low water mark upstream to a point due South of the place of beginning, and thence North in a direct line to the place of beginning.

EXCEPTING THEREFROM that portion lying within the boundaries of Pendleton Way.

PARCEL VII:

A tract of land situated in the Northwest quarter of Section 17 and the Northeast quarter of Section 18, Township 1 North, Range 4 East of the Willamette Meridian, in Clark County, Washington, being more particularly described as follows:
Commencing at the Southeast corner of the intersection of Main and Front Streets in Washougal, being on the East line of Main Street 30 feet South of the Southwest corner of Block 14 of Washougal; thence East along the South line of Front Street 360 feet to a point 30 feet South of the Southeast corner of Lot 6, Block 1 of Mt. Hood Addition to Washougal; thence South parallel with the East line of Main Street 200 feet; thence West parallel with the South line of Front Street 360 feet to the East line of Main Street; thence North along the East line of Main Street 200 feet to the place of beginning.

PARCEL VIII:

A tract of land situated in the Northwest quarter of Section 17, Township 1 North, Range 4 East of the Willamette Meridian, in Clark County, Washington, being more particularly described as follows:

BEGINNING at a point 300 feet South of the Southeast corner of Block 3 of Surbers Addition to Washougal, according to the plat thereof recorded in Volume 'A' of Plats, page 62; thence West 75 feet; thence South 110 feet; thence East 75 feet; thence North 110 feet to the place of beginning.

PARCEL IX:

A tract of land situated in the Northwest quarter of Section 17, Township 1 North, Range 4 East of the Willamette Meridian, in Clark County, Washington, being more particularly described as follows:

BEGINNING at a point which is South 300 feet from the Southwest corner of Lot 3, Block 4, Surber's Addition to the City of Washougal, according to the plat thereof, recorded in Volume 'A' of Plats, page 62, records of Clark County, Washington; thence South 89°59'40" East 152 feet; thence South 0°1'50" East 32.65 feet; thence South 89°59'40" East 98.30 feet; thence North 0°1'50" West 78 feet; thence North 89°59'10" East 190.47 feet; thence South 0°1'50" East 265 feet; thence South 89°59'10" West 480.77 feet; thence North 0°1'50" West 219.69 feet; thence South 89°59'40" East 40.0 feet to the point of beginning.

PARCEL X:

A tract of land situated in the Northwest quarter of Section 17 and the Northeast quarter of Section 18, Township 1 North, Range 4 East of the Willamette Meridian, in Clark County, Washington, being more particularly described as follows:

All that portion of the following described tract of land lying North of the Northerly line of State Highway 14:

BEGINNING at a point which is 968.3 feet South from the Southeast corner of Block 11 of Washougal City, as per the recorded plat thereof, and running thence North 68°47' West 212 feet to the East line of Main Street in Washougal City, said point being 30 feet North of the Western Transportation Company's 30-foot right of way; thence North along the East line of Main Street 400 feet, more or less, to a point 230 feet South of the Southwest corner of Block 14 in said plat of Washougal City; thence running East 360 feet; thence North 200 feet to a point 30 feet South of the Southeast corner of Lot 6 in Block 1 of Mt. Hood Addition to Washougal City, said point being on the South boundary of said Mt. Hood Addition as per recorded plat thereof; thence East on the South boundary of said Mt. Hood Addition as recorded in Plat Book C, page 92, Clark County Records, 293 feet to the Southeast corner of said Mt. Hood Addition; thence North 30 feet to the Southeast corner of Lot 3 of Block 2 of Mt. Hood Addition; thence East along the South line of the Henry Richi et al tract as recorded in Book 88, page 4 of said records, and along the South line of the Anna S. Anderson tract 619 feet more or less, to the East line of the Richard Ough Donation Land Claim; thence South along the East line of the said Ough D.L.C. 1584 feet, more or less, to the Southeast corner of said Ough D.L.C.; thence following the meander line of the Columbia River down stream about 810 feet to a point due South of the center of Jefferson Street in Washougal City; thence North 200 feet, more or less, to a point 890 feet South and 20 feet East of the Southeast corner of Block 1 of Mt. Hood Addition; thence North 57°9' West 334 feet to the point of beginning.

PARCEL XI:

All that portion of vacated Front Street described as follows:

Beginning on the East line of Block 2, Mt. Hood Addition to the Town of Washougal, Washington, as per the duly recorded plat thereof recorded in Volume C of Plats, page 92, Clark County, Washington; thence West along the North line of vacated Front Street, to the Southwest corner of Block 14, of the Town of Washougal, in the County of Clark and State of Washington, as per the duly recorded plat thereof recorded in Volume A of Plats, page 21, Clark County, Washington; thence South 30 feet; thence West to a point 30 feet South of the Southeast corner of said Block 2, Mt. Hood Addition to the Town of Washougal; thence North 30 feet to the point of beginning. ALSO that portion of vacated Love Street lying South of 1st Street (now known as A Street) and North of vacated Front Street.

PARCEL XII:

TRACT A:

A tract of land situated in the Northwest quarter of Section 17 and the Northeast quarter of Section 18, Township 1 North, Range 4 East of the Willamette Meridian, in Clark County, Washington, being more particularly described as follows:

All that portion of the following described tract of land lying South of the Southerly line of State Highway 14:

BEGINNING at a point which is 968.3 feet South from the Southeast corner of Block 11 of Washougal City, as per the recorded plat thereof, and running thence North 68°47' West 212 feet to the East line of Main Street in Washougal City, said point being 30 feet North of the Western Transportation Company's 30-foot right of way; thence North along the East line of Main Street 400 feet, more or less, to a point 230 feet South of the Southwest corner of Block 14 in said plat of Washougal City; thence running East 360 feet; thence North 200 feet to a point 30 feet South of the Southeast corner of Lot 6 in Block 1 of Mt. Hood Addition to Washougal City, said point being on the South boundary of said Mt. Hood Addition as per recorded plat thereof; thence East on the South boundary of said Mt. Hood Addition as recorded in Plat Book C, page 92, Clark County Records, 293 feet to the Southeast corner of said Mt. Hood Addition; thence North 30 feet to the Southeast corner of Lot 3 of Block 2 of Mt. Hood Addition; thence East along the South line of the Henry Richi et al tract as recorded in Book 88, page 4 of said records, and along the South line of the Anna S. Anderson tract 619 feet more or less, to the East line of the Richard Ough Donation Land Claim; thence South along the East line of the said Ough D.L.C. 1584 feet, more or less, to the Southeast corner of said Ough D.L.C.; thence following the meander line of the Columbia River down stream about 810 feet to a point due South of the center of Jefferson Street in Washougal City; thence North 200 feet, more or less, to a point 890 feet South and 20 feet East of the Southeast corner of Block 1 of Mt. Hood Addition; thence North 57°9' West 334 feet to the point of beginning.

TRACT B:

A tract of land situated in the Northwest quarter of Section 17 and the Northeast quarter of Section 18, Township 1 North, Range 4 East of the Willamette Meridian, in Clark County, Washington, being more particularly described as follows:

BEGINNING 890 feet South and 20 feet East of the Southeast corner of Block 1 of Mt. Hood Addition to Washougal, Washington, thence North 57°09' West 334 feet; thence North 68°47' West 212 feet to the East line of Main Street; thence South 30 feet, more or less, to the North line of tract deeded to Western Transportation Co., by deed recorded in Volume 133, page 430, records of said County; thence South 68°47' East 212 feet; thence South 40°51' East 200 feet; thence South to the Columbia River; thence following the meanders of said River Easterly to a point due South of the place of beginning; thence North to the place of beginning.

PARCEL XIII:

A tract of land situated in the Northwest quarter of Section 17 and the Northeast quarter of Section 18, Township 1 North, Range 4 East of the Willamette Meridian, in Clark County, Washington, being more particularly described as follows:

Tide or shore lands of the second class in front of and abutting on the below described parcel or tract of land abutting on and adjacent to the Columbia River.

BEGINNING at a point which is 968.3 feet South from the Southeast corner of Block 11 of Washougal City as per recorded plat thereof and running thence North 68°47' West 212 feet to the East line of Main Street in Washougal City, said point being 30 feet North of the Western Transportation Companies 30 feet rightaway; thence North along the East line of Main Street 400 feet, more or less, to a point 230 feet South of the Southwest corner of Block 14 in said plat of Washougal City; thence running East 360 feet; thence North 200 feet to a point 30 feet South of the Southeast corner of Lot 6 of Block 1 of Mt. Hood Addition to Washougal City, said point being on the South Boundary of said Mt. Hood Addition as per recorded plat thereof; thence East on the South boundary of said Mt. Hood addition as recorded in plat book C page 92 records of Clark

County, 293 feet to the Southeast corner of said Mt. Hood Addition; thence North 30 feet to the Southeast corner of Lot 3 of Block 2 of Mt. Hood Addition; thence East along the South line of the Henry Richi et al tract as recorded in Book 88 on page 4 of said County records, and along the South line of the Anna S. Anderson tract 619 feet, more or less, to the East line of the Richard Ough D.L.C.; thence South along the East line of the Richard Ough D.L.C. 1584 feet, more or less, to the Southeast corner of the said Ough D.L.C.; thence following the meander line of the Columbia River down stream about 810 feet to a point due South of the center of Jefferson Street in Washougal City; thence North 200 feet, more or less, to a point 890 feet South and 20 feet East of the Southeast corner of Block 1 of Mt. Hood Addition; thence North 57°9' West 334 feet to the point of beginning.

PARCEL XIV:

A tract of land situated in the Northwest quarter of Section 17, Township 1 North, Range 4 East of the Willamette Meridian, in Clark County, Washington, being described as follows:

BEGINNING at a point on the West line of that parcel of land deeded to the Port of Camas-Washougal, by deed recorded under Auditor's File No. G 308064, records of Clark County, Washington, said point lying North 380.69 feet from the Southwest corner of C.C. Stiles Donation Land Claim; thence North 469.08 feet; thence leaving said West line South 84°56'28" East 80.31 feet; thence South 82°04'43" East 100.12 feet; thence South 84°56'28" East 400.00 feet; thence South 73°37'52" East 101.98 feet to a point, hereinafter called Point A; thence South 6°31'37" West 75.04 feet to a point on the canal; thence along the canal to a point lying South 21°46'58" West 254.87 feet; thence continuing along said canal the following three courses: North 83°15'58" West 48.51 feet; North 75°18'11" West 50.00 feet; South 82°19'12" West 28.16 feet; thence leaving said canal North 55°13'43" West 65.58 feet; thence South 52°10'58" West 115.27 feet; thence along the arc of a 60 foot radius tangent curve to the left through a central angle of 27°12'50" an arc length of 28.50 feet; thence South 24°58'08" West 192.80 feet to a point, hereinafter called Point B; thence North 55°03'11" West 248.84 feet to the true point of beginning.

PARCEL XV:

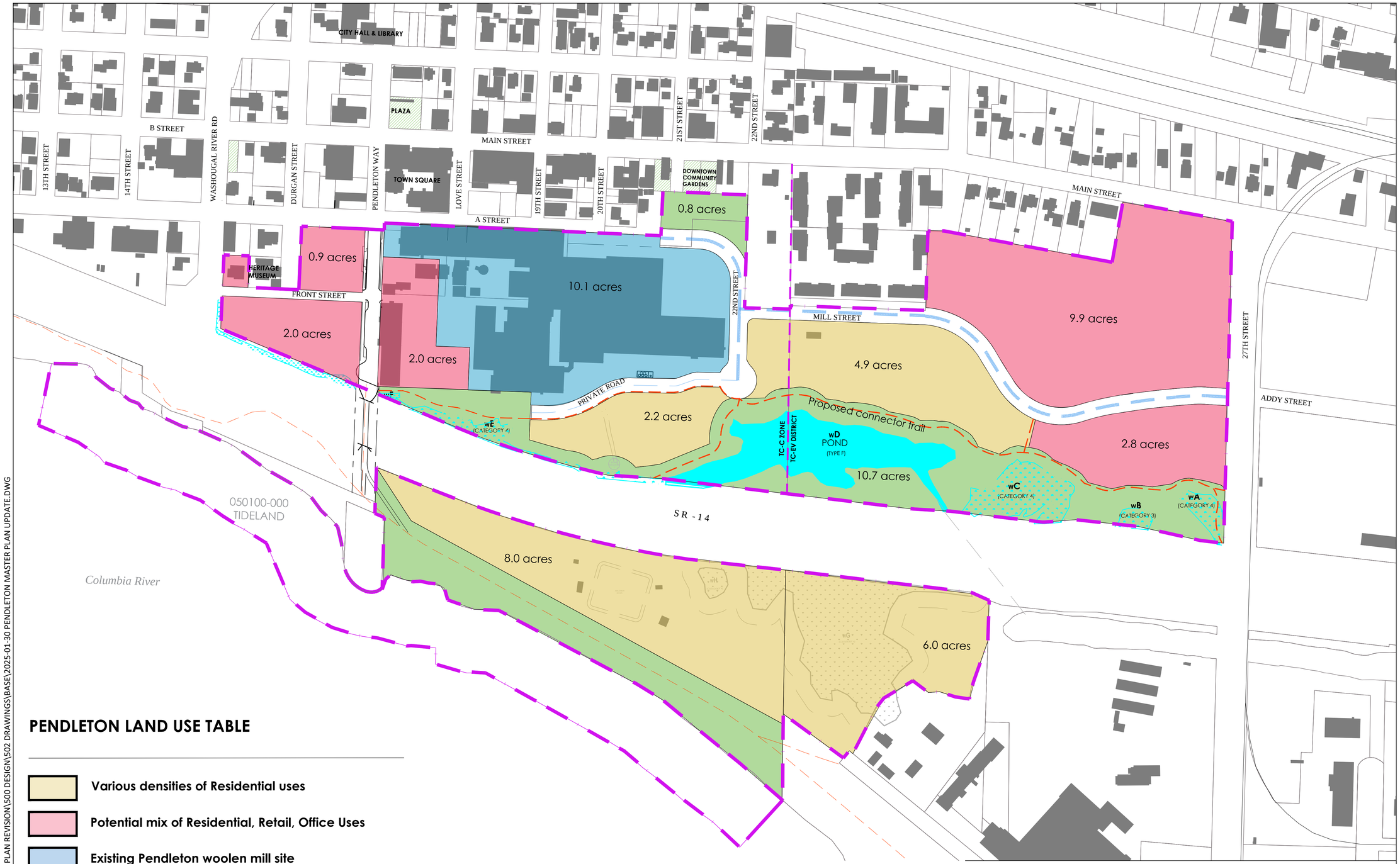
TRACT A:

A tract of land situated in the Northwest quarter of Section 17, Township 1 North, Range 4 East of the Willamette Meridian, in Clark County, Washington, being described as follows:
BEGINNING at a point on the West line of the C.C. Stiles D.L.C. which is 1023.61 feet North of the Southwest corner of said claim; thence North along the West line of said claim 655.00 feet; thence South 89°12'23" East 436.06 feet; thence North 0°02'04" West 250.30 feet; thence South 89°09'59" East 54.31 feet; thence South 81°01'48" East 911.98 feet; thence South 0°09'11" West 1030.46 feet; thence North 78°49'39" West 1415.06 feet to the point of beginning.

TRACT B:

A tract of land situated in the Northwest quarter of Section 17, Township 1 North, Range 4 East of the Willamette Meridian, in Clark County, Washington, being described as follows:
BEGINNING at a point on the Southerly right of way line of Second Street that is North 1952.43 feet and East 1579.01 feet from the Southwest corner of the C.C. Stiles D.L.C.; thence North 81°11'19" West 189.73 feet to the true point of beginning of the following described parcel; thence North 81°11'19" West along said street 356.86 feet; thence South 8°36' West 198.74 feet; thence South 81°01'48" East 386.57 feet; thence North 0°09'11" East 202.11 feet to the true point of beginning.

EXHIBIT B



PENDLETON LAND USE TABLE

- Various densities of Residential uses
- Potential mix of Residential, Retail, Office Uses
- Existing Pendleton woolen mill site
- Open space
- Open space trail
- **Proposed Streets** Neighborhood, local and private

0 150 300
SCALE: 1" = 150'

PENDLETON DISTRICT PLAN

Plan acreage is approximate.

FILE: W:\18149 PENDLETON MASTER PLAN REVISION\500 DESIGN\502 DRAWINGS\BASE\2025-01-30 PENDLETON MASTER PLAN UPDATE.DWG

MacKay Sposito
ENERGY PUBLIC WORKS LAND DEVELOPMENT
www.mackaysposito.com

PENDLETON WOOLEN MILLS
Washougal, WA

District Master Plan

REVISIONS:
08/22/2023
08/23/2023
01/30/2025

JOB NO.:	18149
DATE:	06/27/2023
SCALE:	AS NOTED
DESIGNED BY:	
DRAWN BY:	MP
CHECKED BY:	KS

P01

NO. 1 OF 1

EXHIBIT C

MACKENZIE.

February 1, 2024

City of Washougal
Attention: Mitch Kneipp
211 39th Street
Washougal, WA 98671

Re: **Pendleton District Master Plan**
Project Number 2230303.00

Dear Mitch:

Mackenzie has prepared this analysis to address the potential impacts and vest traffic capacity for development of the Pendleton District Master Plan in Washougal, Washington. The analysis utilizes traffic counts and traffic analyses from the vicinity as background data.

PROJECT DESCRIPTION

The proposed development agreement relates to a proposed conceptual master plan consisting of approximately 63.8 acres of land in downtown Washougal, Washington. The subject property is currently owned by Pendleton Woolen Mills, and consists of the 10.1-acre mill site, 17.6 acres of mixed-use area at the east and west ends of the property, and 21.1 acres of residential area in the center of the property, including an area south of SR 14. The master plan proposes approximately 10.7 acres of wetland to be designated green space on the northern frontage of SR 14. This property contains multiple zones, including Town Center- Core (TC-C) and Town Center- East Village (TC-EV). As a part of this master plan, Mill Street will be extended from 22nd Street to the intersection of Addy Street and 27th Street (the "Addy Street Connector") and a short private road will provide access south of the mill. The District Plan showing these areas is in Attachment A.

For purposes of this analysis, we have included the following intersections where development of the Pendleton Master Plan area will add more than a few trips during peak hours:

1. Washougal River Road/E Street (Signalized)
2. Washougal River Road/B Street/Main Street (Signalized)
3. Washougal River Road/A Street (Unsignalized)
4. SR 14/Washougal River Road (roundabout)
5. 32nd Street/D Street/Evergreen Highway (Signalized)
6. 32nd Street/Main Street/B Street (Unsignalized)
7. 32nd Street/Addy Street (Unsignalized)
8. SR 14/32nd Street (Roundabout)
9. 27th Street/Addy Street (Unsignalized)

PRIOR ANALYSIS

The following five traffic studies were reviewed based on their impact to the surrounding area. These studies are included as Attachment F.

Traffic counts included in these studies from 2019 were utilized in the analysis, and trips added by the projects were included as "in-process" trips in the post- development scenario.

April 2013 TIA Prepared by Kittelson for 6th Street Development

This TIA was prepared to analyze the impacts of the Port of Camas-Washougal's 6th street development with an analysis year of 2020. New traffic counts were collected at all study area intersections. The post- development scenario adds 510 PM peak hour trips, 2% annual background growth (1% on SR 14), and in-process trips from the Steigerwald Commerce Center and the Parker's Landing Development. All intersections were found to operate acceptably in the post-development scenario. Both intersections on SR- 14 were analyzed in their previous configurations, before the installation of the existing roundabouts.

August 2013 TIA Supplement Prepared by Kittelson for Parker's Landing Development and 6th Street Development

This supplement to the above TIA was prepared to analyze the impacts from the Parker's Landing Development and the 6th street development with an analysis year of 2028. No additional traffic counts were collected. The post-development scenario adds an additional eight years of background growth to the original April 2013 TIA. All intersections were found to operate acceptably in the post-development scenario. Both intersections on SR- 14 were analyzed in their previous configurations, before the installation of the existing roundabouts.

August 2017 TIA Prepared by Global Transportation Engineers (GTE) for CERB Report

This TIA was prepared to analyze proposed land use changes in downtown Washougal, with an analysis year of 2035. Intersections were limited to those in Washougal and did not include any intersections on SR 14. Existing traffic counts dated 2010, 2012, and 2013 were used, and one new traffic count was collected at the intersection of Washougal River Road and A Street. The methodology of the report presents a 3.97% annual growth rate. This study concluded that all unsignalized intersections analyzed would require signalization under year 2035 conditions.

February 2023 TIA Prepared by H. Lee & Associates for E Street Mixed-Use Development

This TIA was prepared to analyze potential traffic impacts associated with the E Street Mixed-Use Development located at 1800 E Street, with an analysis year of 2028. The only overlapping study area intersection is the intersection of E Street and Washougal River Road. New traffic counts were collected at all study area intersections. The post-development scenario adds 67 PM peak hour trips, and a 2% yearly background growth rate. All intersections were found to operate acceptably under year 2028 conditions.

May 2022 Trip Generation Memo Prepared by DKS for Block 8 Multi-Use Development

This trip generation memo presents the expected trips associated with the Block 8 Multi-Use Development located at 1625 Main Street. A total of 22 PM peak hour trips are projected, with 60% to from the West on SR 14, 20% to/from the north on Washougal River Road, and 20% to/from the east on Main Street. No further analysis was conducted.

RECENT AND PLANNED IMPROVEMENTS

Several recent roadway improvements have been completed, that were not included in 2013 reports, nor were the projects completed prior to the 2019 traffic counts used in this report:

Washougal River Road/SR 14

This intersection was reconfigured from a multi-lane signalized intersection to a single lane roundabout with a southbound to westbound bypass lane in 2019.

SR 14/32nd Street

This intersection was reconfigured from an unsignalized intersection with right turns only on 32nd Street to a roundabout in 2019. The roundabout has a dedicated lane for left turns on the eastbound approach, a southbound to westbound bypass lane, and a single lane on the other approaches.

Several projects are planned by the City of Washougal within the study area, and are listed in the City's Capital Improvement plan (CIP) list and/or the TIF list:

32nd Street Underpass

This project is proposed to grade-separate 32nd Street at the BNSF rail crossing and adds a roundabout at the intersection of 32nd Street with Main Street. It is currently in the planning phase and is anticipated to be completed in the next five years. Only design costs are currently reflected in the City's Capital Improvement Plan.

- TIF list project A, 2021 project cost: $50,000,000. Private share: $7,500,000.
- Funding – $40,000,000 federal grant, $7,000,000 Washington State funds, $4,820,000 local funding. Note that this adds up to more than $50,000,000 and the discrepancy is mainly due to inflation and increased construction costs since the original estimate.
- Schedule – Design underway, construction not scheduled (anticipated within five years).

32nd Street/Addy Street

Bike lanes and turn lanes are planned along Addy Street between 27th Street to 45th Street, which includes the study area intersection of 32nd Street.

- TIF list Project Z, 2021 project cost: $7,810,160. Private share: $1,952,540.
- This project adds bike lanes and turn lanes along Addy Street from 27th Street to 45th Street.
- No schedule or current funding is identified.

27th Street/Addy Street

Bike lanes and turn lanes are planned along both Addy Street and Main Street, including this intersection.

- TIF list Project Z, 2021 project cost: $7,810,160. Private share: $1,952,540. Widens and adds bike lanes and turn lanes along Addy Street from 27th Street to 45th Street.
- TIF list Project B, 2021 project cost: $3,862,541. Private share: $579,381. Widens and adds bike lanes and turn lanes along 27th Street from Main Street to SR 14.
- No schedule or current funding is identified for either project.

Addy Street Connector

The Addy Street Connector is a proposed new street connecting 20th Street to Addy Street at 27th Street. It would pass through the subject site and is shown on the attached site plan (Attachment A).

- TIF list Project AA, 2021 project cost: $7,000,000. Private share: 2,800,000.
- This is project AA on the Washougal TIF list and is listed as a high priority.
- No schedule or current funding is identified.

TRAFFIC VOLUME ESTIMATES

The traffic analyses prepared in 2013 utilized volumes from that year, with the addition of background growth and in-process volumes to estimate 2020, 2028, and 2035 volumes (consistent with comp plan). More recent counts were conducted in 2019 at the study area intersections, so these were used in this analysis with the exception of the intersection of Washougal River Road with A Street, which uses 2017 counts sourced from the 2017 CERB report. These counts represent the most recently available traffic volumes for the study area and reflect pre-COVID conditions. We reviewed current traffic volumes on SR 14 provided by WSDOT and found no significant difference in volumes traveling along the highway west of Washougal River Road between the 2023 and 2019 counts, indicating current conditions are likely similar to 2019 volumes. The existing traffic volumes are presented in Attachment B, figure 2.

Trip reroute adjustments were made to reflect the addition of the roundabout at 32nd Street and SR 14. The 2019 counts were taken in early 2019, and the roundabout was installed later that year. Prior to the installation of the roundabout, 32nd Street was right turn only in both directions, which required drivers from the south who wished to travel west on SR 14 to travel around the "block" bounded by 27th Street, Addy Street, 32nd Street, and SR 14. The roundabout allows full movement at this intersection, which allows traffic to travel directly from 32nd Street to SR 14 westbound, as well as continuing northbound on 32nd Street. Reroutes associated with this change are shown in Attachment B, figure 3.

We also included in-process trips from the following projects which have been approved or are currently under review and will impact study area intersections. These trips are presented in Attachment B, figure 4.

- Block 8 – residential mixed use, 22 PM trips.
- E Street – retail/commercial mixed use, 67 PM trips.
- Stiegerwald Commerce Center, 641 PM trips.
- 6th Street Development – residential mixed-use, 290 PM trips.

- Parker's Landing – residential mixed-use, total trip generation unavailable. In-process trips at study area intersections obtained from 6th Street Development TIA.

DEVELOPMENT ASSUMPTIONS

The existing zoning of the subject site is a mix of TC-C and TC-EV zones, with TC-C zoning on the west of the site and TC-EV zoning on the east of the site. The area to the south of SR 14 was previously zoned as Heavy Industrial (HI) but has been updated to TC-C zoning. Per Washougal Municipal Code 18.35.020, the TC-C district is meant to have the "highest intensity uses" while the TC-EV district is meant to have a "mixture of higher density housing and retail." Most of the land which is currently vacant, apart from the Pendleton mill, one single family home, and the Pendleton water treatment facility in the residential district south of SR 14.

Per WMC 18.32.10, The TC-C zoning is intended to have mix of uses, including both higher-density residential uses and commercial uses such as retail and office space. For these zones, we have assumed the basic FAR for commercial use, 0.5, split evenly between retail and office uses. Additionally, we assumed 22 units of multi-family housing per acre in the current TC-C zone, and 16 units of multi-family housing per acre in the current TC-EV zone. An additional 38 units of multi-family housing are assumed to account for a proposed density transfer associated with wetland areas. The proposed residential districts will be a mix of AR-16 and AR-22 densities, as defined in WMC 18.14. These zones allow for some limited commercial use, however, for this analysis they are assumed to be 100% multi-family housing, developed at the maximum density allowed per respective zone. A map of development areas and their assumed uses is provided as Attachment C.

ADDED TRIPS

Trip generation for the proposed development site was estimated using trip generation rates presented in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual,* 11th Edition. Table 1 presents the ITE code and associated trip generation for our assumed land uses. The existing 16,200square feet (SF) Pendelton Mill Store is subtracted from the assumed density of the retail area for TC-C area 1.

TABLE 1 – PROPOSED TRIP GENERATION

ITE Code	Land Use	Units	Size	PM Peak Hour			Daily
				In	Out	Total	
220	Multi- Family Residential (Low-Rise)	DU	781	252	147	399	5,263
710	General Office Building	KSF	191.55	47	229	276	2,077
822	Strip Retail Plaza	KSF	175.35	351	349	700	7,859
Total Proposed Trips				650	725	1,375	15,199

As shown in Table 1, the site is expected to generate a total of 1,375 PM peak hour trips, and 15,199 daily trips at full build out.

Due to the large size and variety of land uses allowed by the property's existing zoning, it is expected that a certain level of the property's trips will be internal trips, which occur from one site use to another, without creating an additional external trip. To estimate the internal trip rates for this site, we utilized the NCHRP Report 684 internal trip capture tool. Table 2 below shows the internal trips, and the resulting external trips, calculated by subtracting internal trips from the results presented in Table 1 (above).

TABLE 2– INTERNAL AND EXTERNAL TRIPS								
ITE Code	Land Use	Units	Size	Percent/ Trips	PM Peak Hour			Daily
					In	Out	Total	
	INTERNAL							
220	Multi- Family Residential (Low-Rise)	DU	781	Percent	38%	28%	34%	33%
				Trips	96	41	137	1,737
710	General Office Building	KSF	191.55	Percent	28%	14%	17%	21%
				Trips	13	33	46	436
822	Strip Retail Plaza	KSF	175.35	Percent	18%	28%	23%	23%
				Trips	63	98	161	1,808
Total Internal Trips					172	172	344	3,981
	EXTERNAL							
220	Multi- Family Residential (Low-Rise)	DU	781	Trips	156	106	262	5,263
710	General Office Building	KSF	191.55	Trips	34	196	230	1,641
822	Strip Retail Plaza	KSF	175.35	Trips	288	251	539	6,051
Total External Trips					478	553	1,031	11,218

The total reduction in PM site trips is 25%. This results in a total external trip generation of 1,031 PM peak hour trips, and 11,218 daily trips.

Trips generated by the proposed master plan were assigned to study area intersections following the trip assignment presented in the 2013 Kittelson TIA. The site was divided into four areas in order to accurately route trips through the roadway network. Trip distribution and assignment information for trips to and from each area of the site is shown in Attachment B, Figures 6 through 9. The combined trip assignment for all external site trips is shown in Attachment B, Figure 10. Two percent of vehicle trips are assumed to be to or from the areas to the north of the site, but south of the BNSF right of way and east of Washougal River Road. These trips do not pass through study area intersections, and therefore do not appear in this analysis.

CAPACITY RESULTS

This operational analysis addresses capacity results for the PM peak hour at all study area intersections.

Intersection Operation Analysis

Intersection capacity is generally characterized by three measures: volume-to-capacity (v/c) ratio, average delay (measured in seconds), and level-of-service (LOS).

- V/C ratio is a measurement of capacity used by a given traffic movement or for an entire intersection. It is defined by the rate of traffic flow or traffic demand divided by the theoretical capacity.
- Delay is a measurement of the average vehicle delay resulting from the type of traffic control and the conflicting traffic volumes. An average delay can be expressed for a certain movement, a specific lane, a single approach, or for an entire intersection.
- LOS is an expression of the average control delay (in seconds) experienced by drivers as represented by a letter on the scale from A through F. As defined in the Highway Capacity Manual (HCM), LOS A represents optimum operating conditions and minimum delay, while LOS F indicates lengthy delays and often over-capacity conditions.

Performance Measures

The study intersections along SR 14 are identified as WSDOT intersections of high importance, with an LOS D standard based on RCW 47.06.140(2).

The intersections along 32nd and Washougal River Road which are not along SR 14 are subject to the standard outlined in WMC 18.90.050(1). The LOS standard at these intersections is D, and each individual approach must maintain a v/c ratio less than 1. The unsignalized intersections must meet an LOS standard of E.

Methodology

Intersection operations were analyzed with the use of Synchro software, which uses the HCM methodologies. Peak hour capacity results were reported using HCM 6 methodology for roundabout, TWSC, and signalized intersections.

Findings

Table 3 summarizes the PM peak hour intersection operation results. For signalized intersections, the overall intersection performance (v/c ratio, LOS, delay) is reported along with the lane group with the maximum v/c ratio and the lane group with the maximum delay. For unsignalized sections, the lane group with the maximum v/c ratio and the lane group with the maximum delay are reported. (See Attachment B, Figure 1 for the numbering and location of intersections.) Full capacity results are included in Attachment E.

Within the table, lane group operations that do not meet the agency standard are shown in **bold** type.

TABLE 3 – INTERSECTION OPERATIONS – PM PEAK HOUR					
Intersection		Criteria	Analysis Results (V/C Ratio-LOS-Delay)		
			Pre- Development	Post- Development	Mitigated
1	Washougal River Road/ E Street (Signalized)	Overall	C-31.5	D-38.6	Not Required
		Max V/C	0.92 (EBT+R)	0.95 (EBT+R)	
		Max LOS-Delay	D-46.1 (EBT+R)	D-53.1 (EBT+R)	
2	Washougal River Road/ B Street/Main Street (Signalized)	Overall	A-9.1	B-10.3	Not Required
		Max V/C	0.58 (NBT+R)	0.65 (NBT+R)	
		Max LOS-Delay	B-15.5 (WB)	B-15.6 (WB)	
3	Washougal River Road/ A Street (Unsignalized/ Signalized)	Overall	N/A	N/A	B-10.3
		Max V/C	0.254 (WB)	1.496 (WB)	0.79 (NBT+R)
		Max LOS-Delay	C-20.3 (EBL)	**F-286.6 (WB)**	B-14.8 (SBL)
4	Washougal River Road/SR 14 (Roundabout)	Overall	**F-70.8**	**F-146.2**	B-14.3
		Max V/C	1.179 (EB)	1.388 (EB)	0.823 (EBT+R)
		Max LOS-Delay	F-104.1 (EB)	F-192.3 (EB)	C-18.2 (EBT+R)
5	32nd Street/ D Street/Evergreen Highway (Signalized)	Overall	B-19.9	C-20.4	Not Required
		Max V/C	0.81 (EBT)	0.81 (EBT)	
		Max LOS-Delay	C-27.2 (EBT)	C-27.4 (EBT)	
6	32nd Street/Main Street/B Street (Unsignalized)	Max V/C	0.159 (EB)	0.460 (EB)	Not Required
		Max LOS-Delay	D-30.4 (WB)	E-35.9 (EB)	
7	32nd Street/ Addy Street (Unsignalized/Signalized)	Overall	N/A	N/A	Not Required
		Max V/C	0.262 (WB)	0.692 (EB)	
		Max LOS- Delay	C-23.6 (WB)	E-43.0 (EB)	
8	32nd Street/ SR 14 (Roundabout)	Overall	A-9.0	B-11.7	Not Required
		Max V/C	0.687 (WB)	0.811 (WB)	
		Max LOS-Delay	C-22.7 (WB)	D-34.6 (WB)	
9	27th Street/ Addy Street (Unsignalized)	Max V/C	0.021 (WB)	0.255 (EB)	Not Required
		Max LOS-Delay	A-9.1 (WB)	B-12.4 (EB)	

Acronyms: EB = Eastbound, WB = Westbound, NB = Northbound, SB = Southbound, L = Left, T = Through, R = Right

As shown in Table 3, all intersections provide acceptable levels of service in the post-development scenario aside from Washougal River Road/A Street and Washougal River Road/SR 14 (intersections 3 and 4).

POTENTIAL MITIGATION

A review of the two intersections not meeting standards resulted in potential mitigation options, which are presented in Table 3 and consists of the following:

Washougal River Road/ A Street

- Install a traffic signal.

Washougal River Road/ SR 14

- An additional eastbound left turn approach lane to accommodate the heavy left turn volume.
- A second westbound approach lane.
- Convert the southbound approach to yield control with a right turn lane and a shared right/through/left lane.
- Stripe the roundabout for two circulating lanes for SR 14 flow.

When development of the Property exceeds 463 PM peak hour trips (45% of full buildout), the project will cause the mobility standards at the Washougal River Road/A Street intersection to fall below the City's adopted level of service. Prior to the City's issuance of any building permit that would cause the project as a whole's trip generation to exceed 463 PM hour trips, the mitigation measures for that intersection as described above should be implemented. Analysis results for this intersection and scenario are included in Attachment E.

The roundabout at SR 14 and Washougal River Road currently does not meet mobility standards. As noted in Table 3, delays will increase on the eastbound approach with any added trips from any source. The recommended mitigation measures listed above are sufficient to not only mitigate the project's impacts, but would bring the intersection into compliance with WSDOT standards. The addition of just the eastbound left turn lane still leaves the westbound approach operating below standards. Because these measures provide significant capacity improvements over the existing roundabout configuration, we recommend WSDOT consider construction of these improvements to address long delays that will occur even without the project and to provide capacity needs for future growth in Washougal. Because of the small percentage of trips that the conceptual master plan's uses would contribute to this regional facility's overall capacity, proportionate share mitigation contributions at the time of development would be appropriate. The proposed lane configuration is shown in Attachment G. Full analysis results for this scenario are included in Attachment E.

Sincerely,

Brent Ahrend, PE

02/02/2024

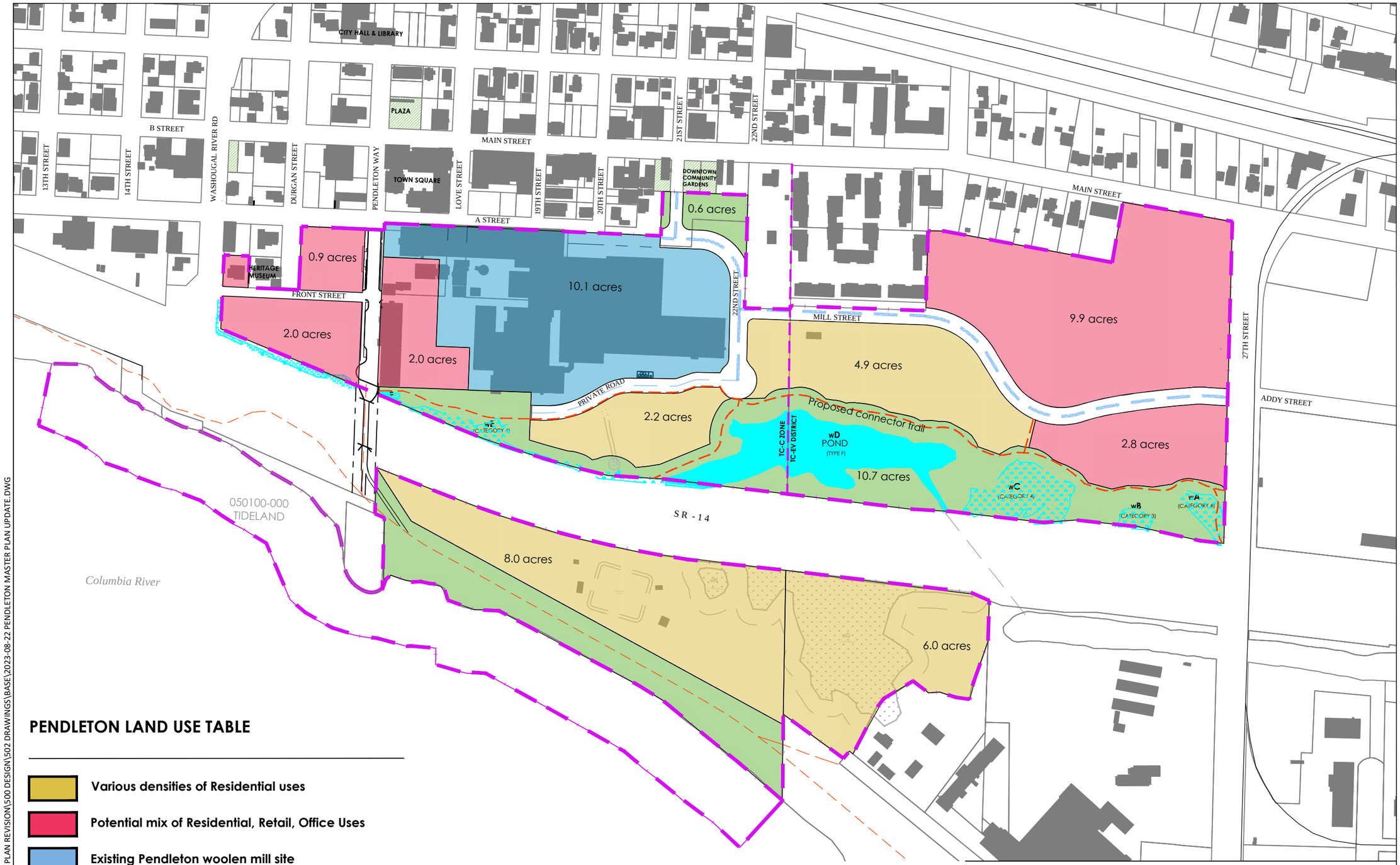
Enclosure(s): Attachment A – Site Plan
Attachment B – Figures
Attachment C – Land Use Map
Attachment D – Traffic Counts
Attachment E – Full Capacity Results

Attachment F – Prior Analyses
Attachment G – Proposed SR 14/Washougal River Road Roundabout Configuration

c: Randall Printz – Cascadia Development
Melanie Poe, Kurt Stonex – Mackay Sposito
John Bishop – Pendleton
Lewis Byrd – Mackenzie

ATTACHMENT A

SITE PLAN



PENDLETON LAND USE TABLE

- Various densities of Residential uses
- Potential mix of Residential, Retail, Office Uses
- Existing Pendleton woolen mill site
- Open space
- Open space trail
- Proposed Streets Neighborhood, local and private

0 150 300
SCALE: 1" = 150'

PENDLETON DISTRICT PLAN

Plan acreage is approximate.

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PENDLETON WOOLEN MILLS
Washougal, WA

District Master Plan

REVISIONS:
08/22/2023
08/23/2023

JOB NO.:	18149
DATE:	06/27/2023
SCALE:	AS NOTED
DESIGNED BY:	
DRAWN BY:	MP
CHECKED BY:	KS

P01

NO. 1 OF 1

FILE: W:\18149 PENDLETON MASTER PLAN REVISION\500 DESIGN\502 DRAWINGS\BASE\2023-08-22 PENDLETON MASTER PLAN UPDATE.DWG

ATTACHMENT B

FIGURES

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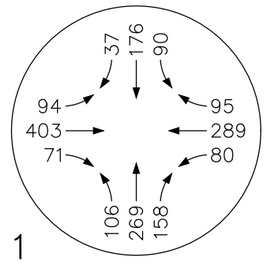
VICINITY MAP AND INTERSECTION LOCATIONS

PENDLETON DA
WASHOUGAL, WA

FIGURE
1



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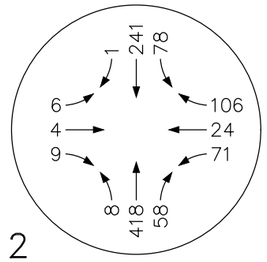

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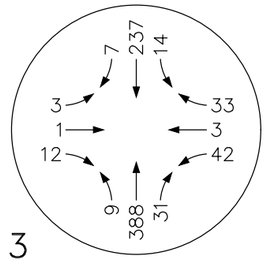

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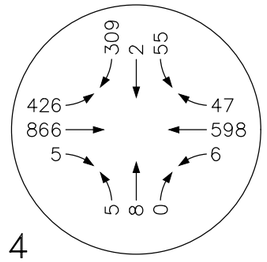

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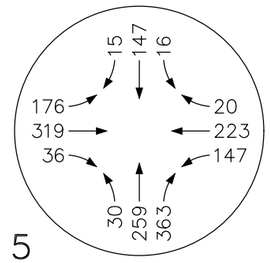

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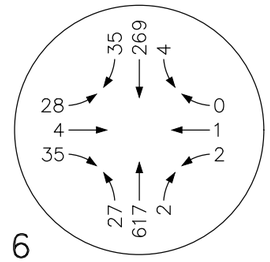

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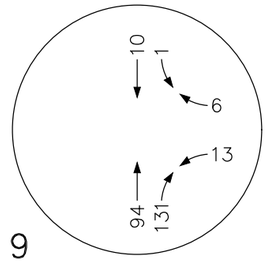

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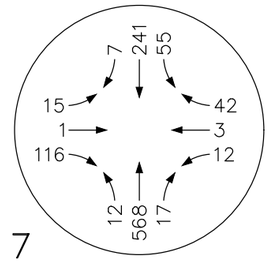

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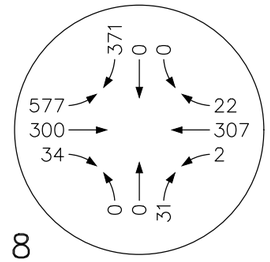

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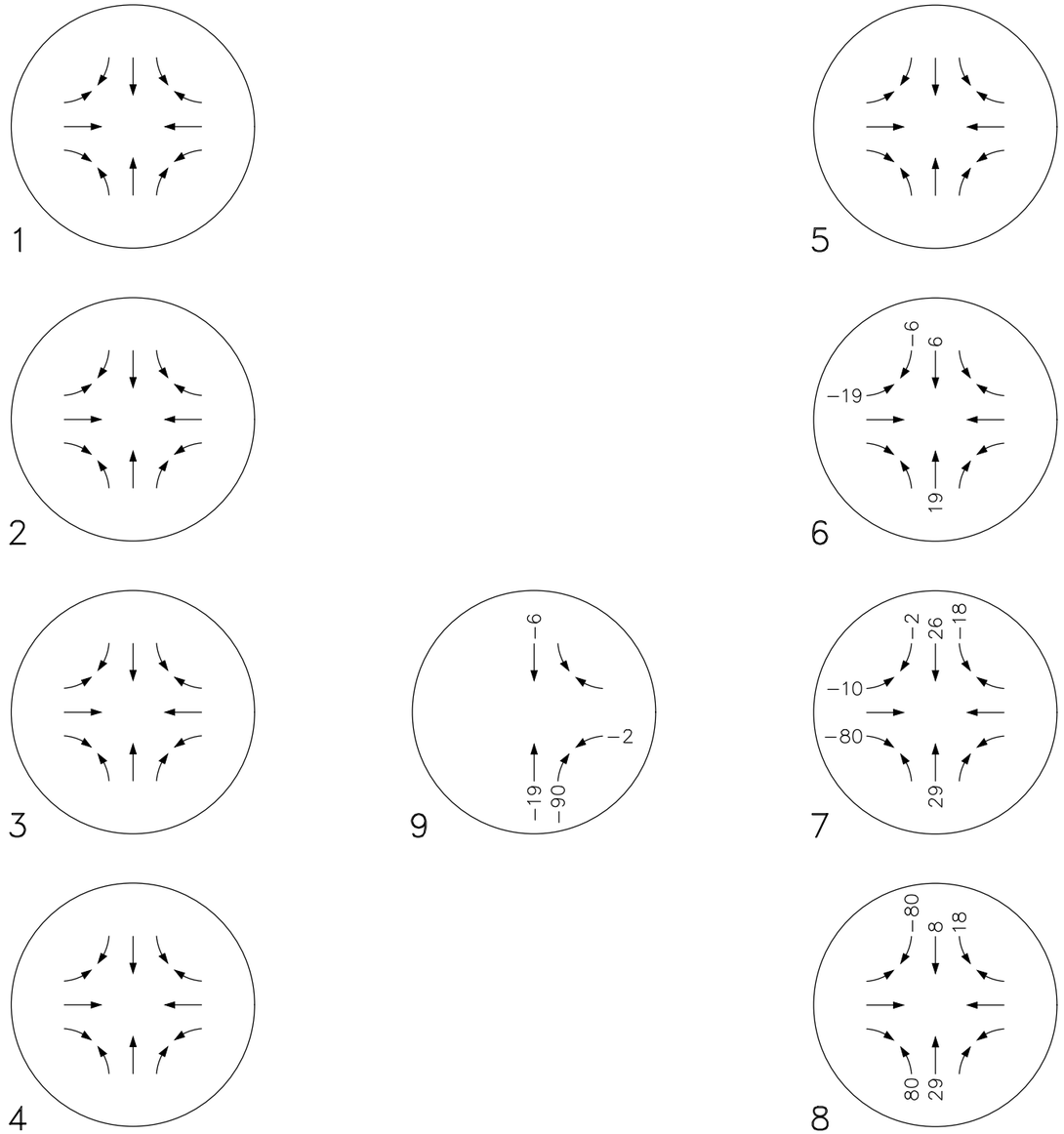
2019 (2017) EXISTING TRAFFIC VOLUMES - PM PEAK HOUR

PENDLETON DA
WASHOUGAL, WA

FIGURE
2



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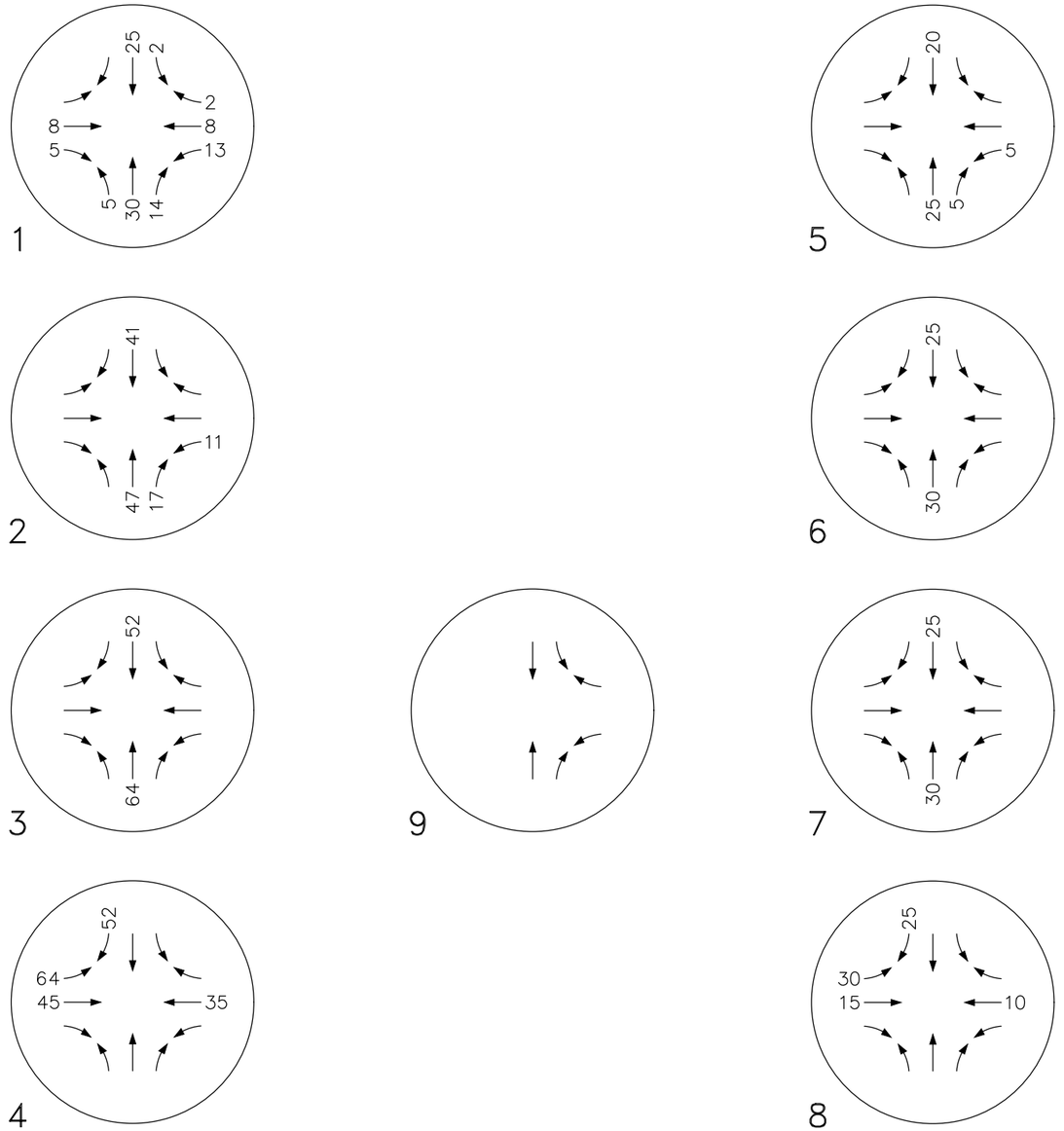
32ND STREET ROUNDABOUT
TRIP REROUTES
PM PEAK HOUR

PENDLETON DA
WASHOUGAL, WA

FIGURE
3



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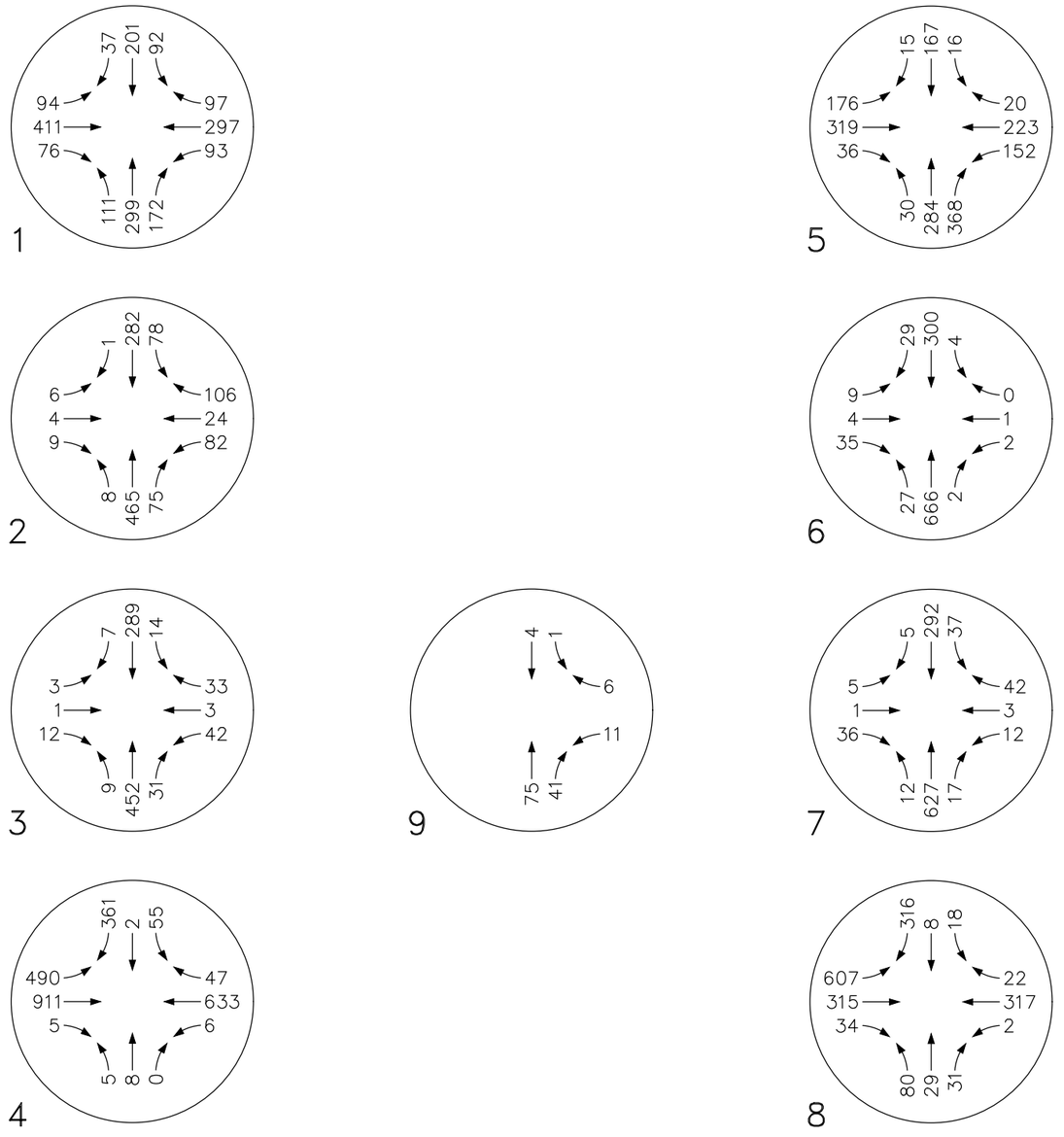
IN-PROCESS TRAFFIC VOLUMES - PM PEAK HOUR

PENDLETON DA
WASHOUGAL, WA

FIGURE 4



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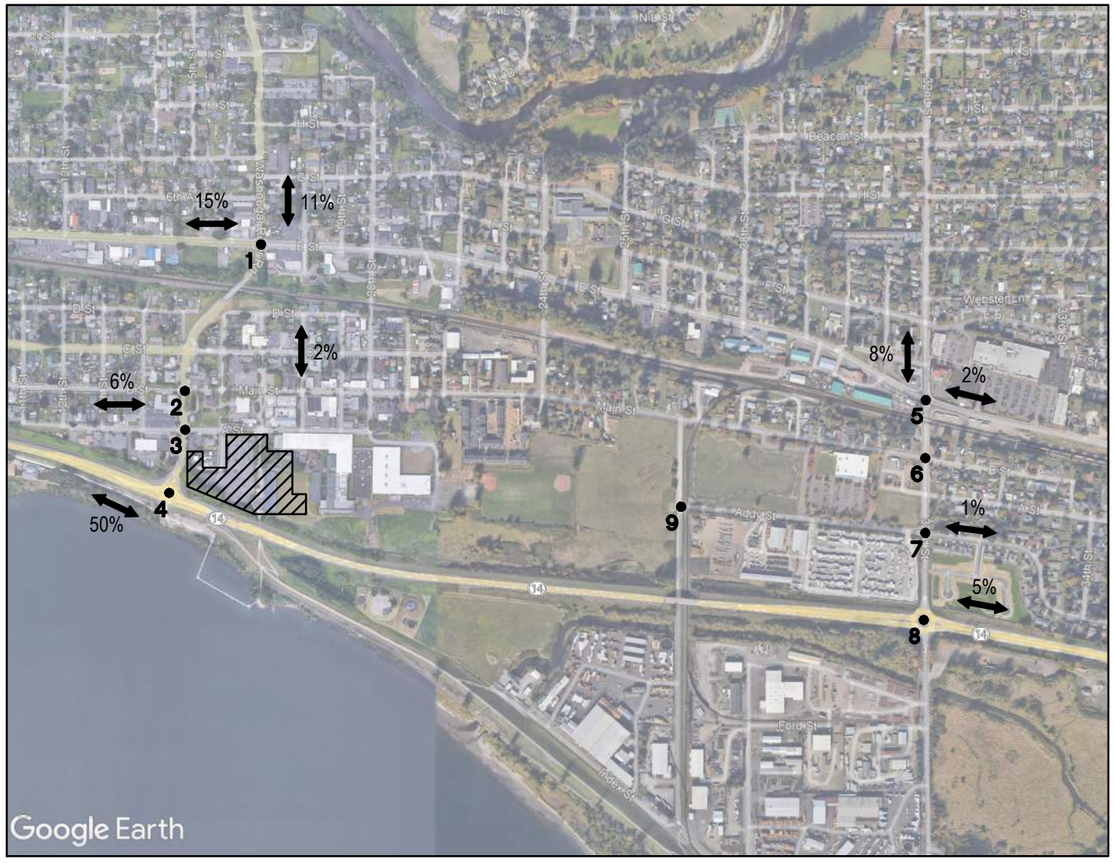
PRE-DEVELOPMENT TRAFFIC VOLUMES - PM PEAK HOUR

PENDLETON DA
WASHOUGAL, WA

FIGURE
5



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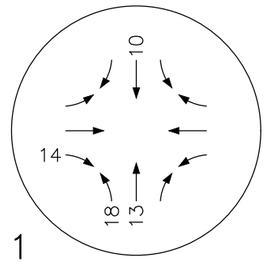

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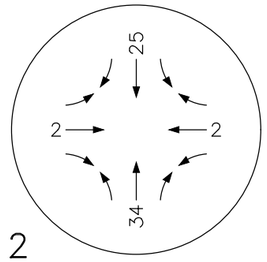

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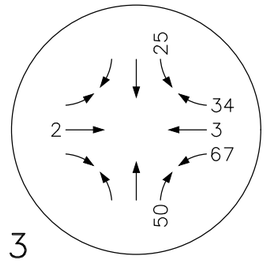

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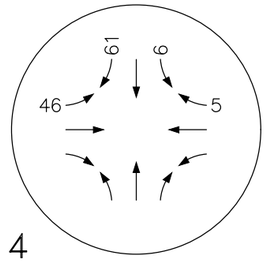

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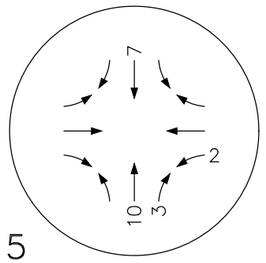

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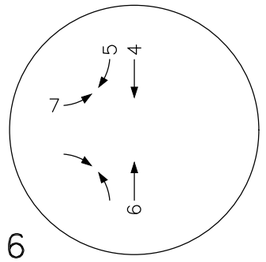

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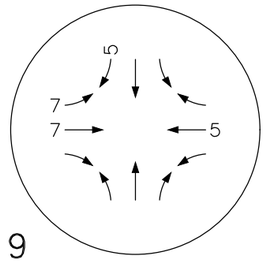

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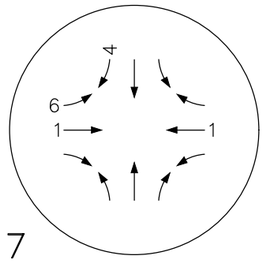

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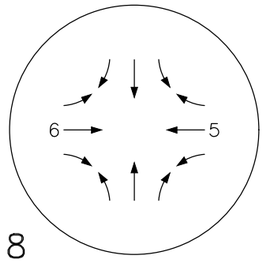

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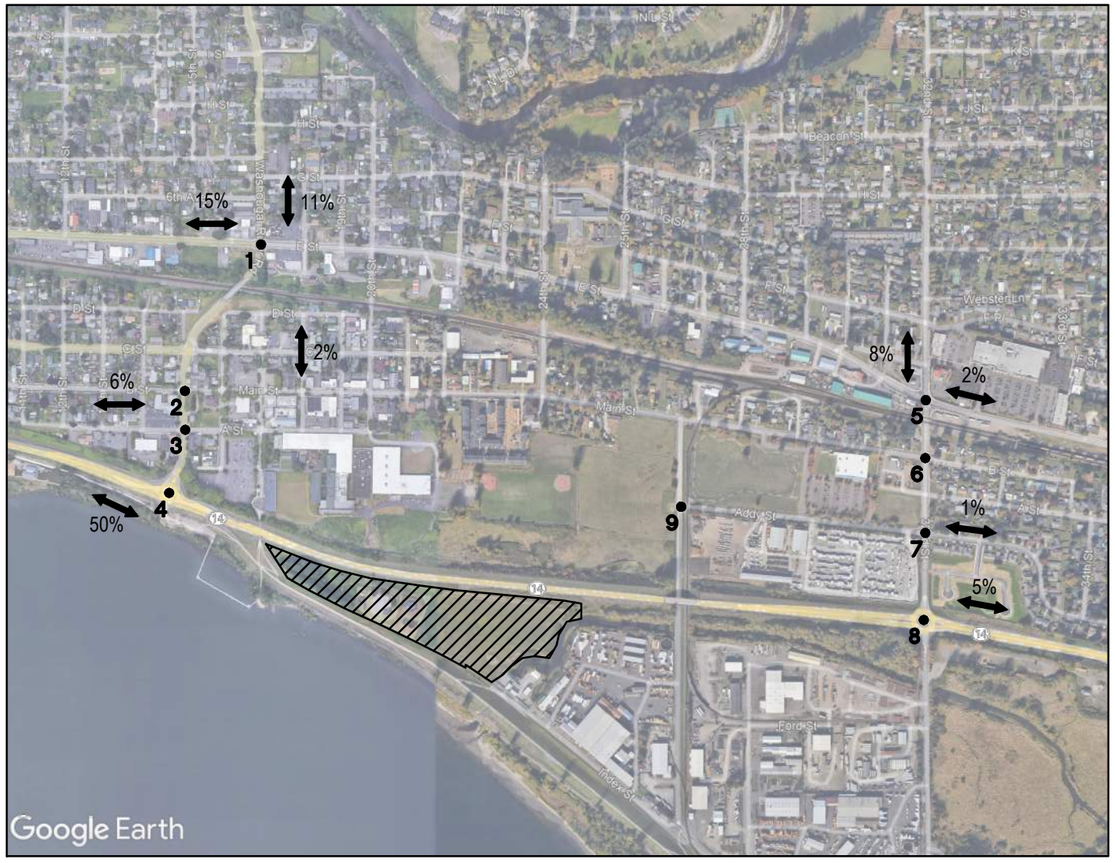
PRIMARY TRIP DISTRIBUTION + TRAFFIC ASSIGNMENT - PM PEAK HOUR, WEST OF MILL

PENDLETON DA
WASHOUGAL, WA

FIGURE
6



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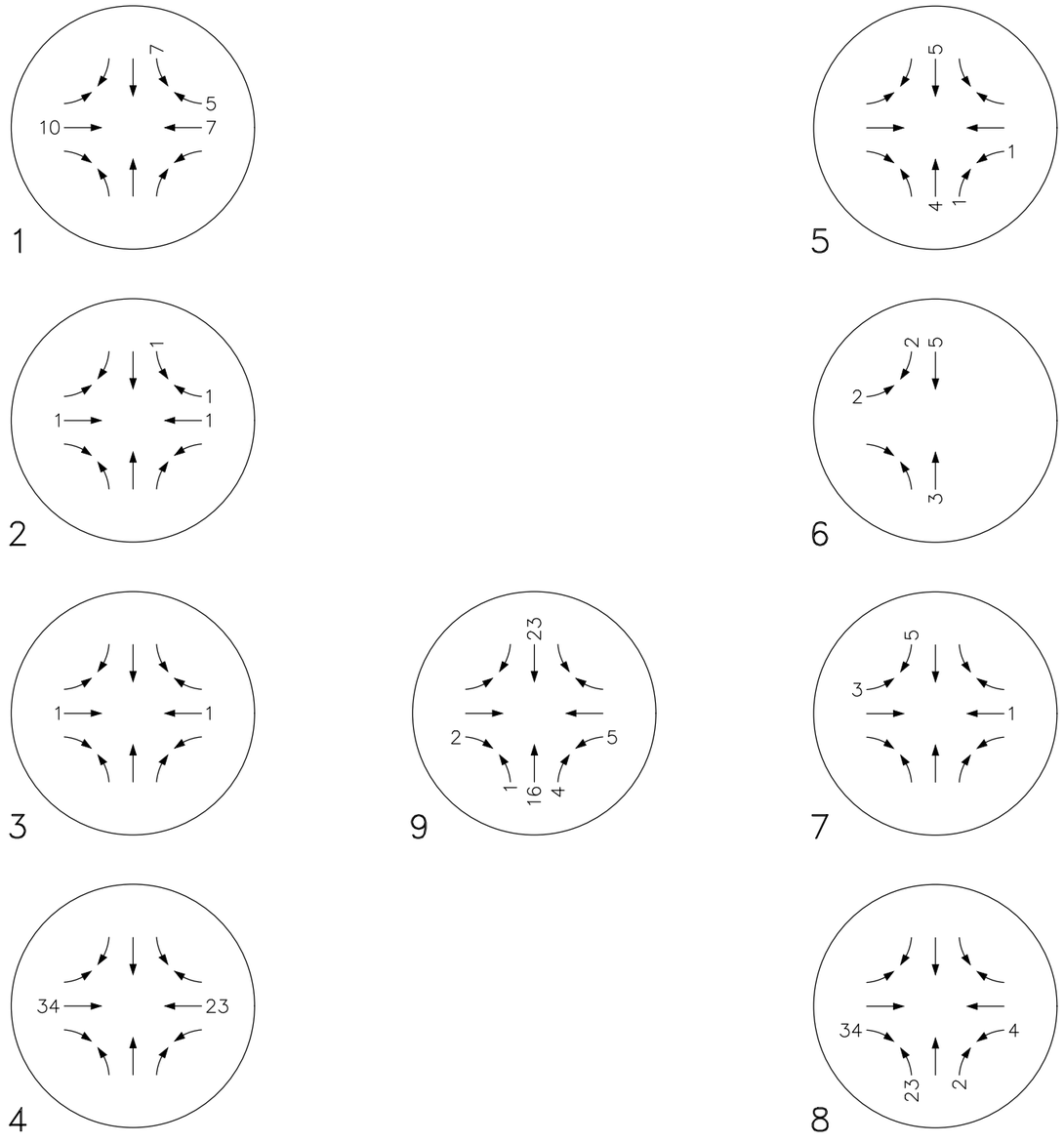

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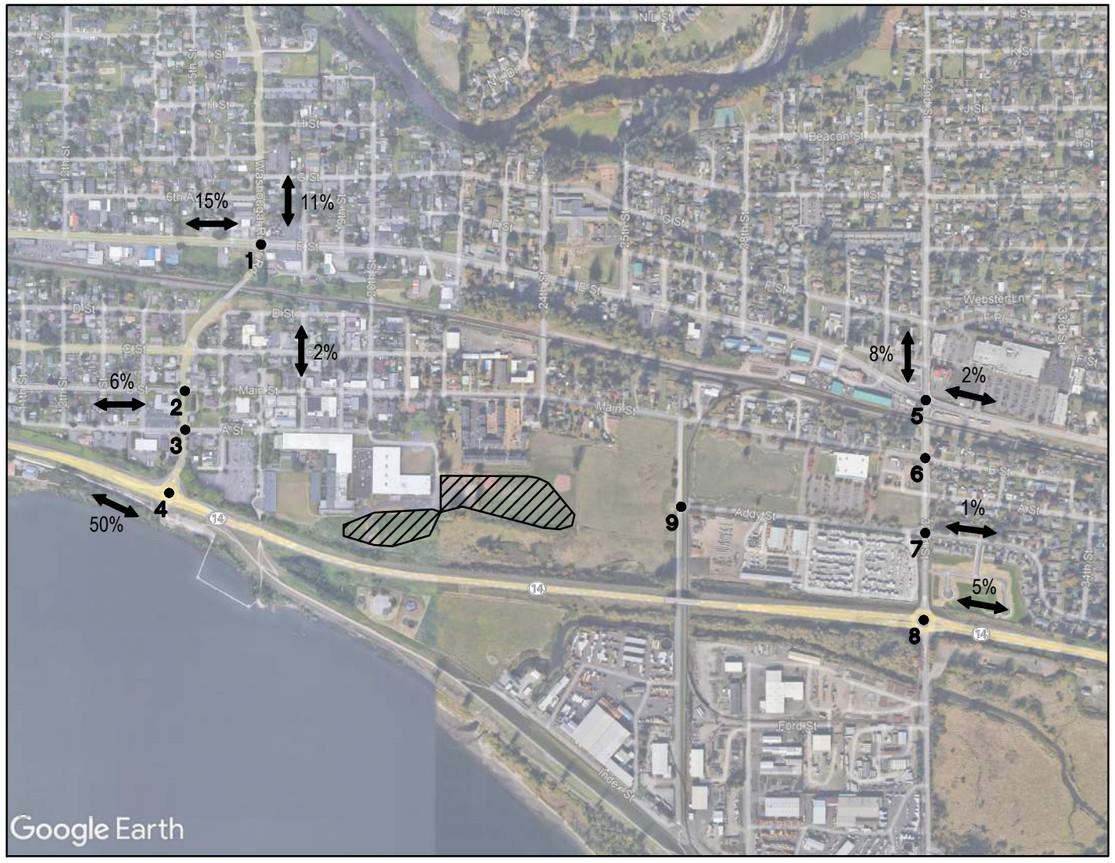
PRIMARY TRIP DISTRIBUTION + TRAFFIC ASSIGNMENT – PM PEAK HOUR, SOUTH OF 14

PENDLETON DA
WASHOUGAL, WA

FIGURE 7



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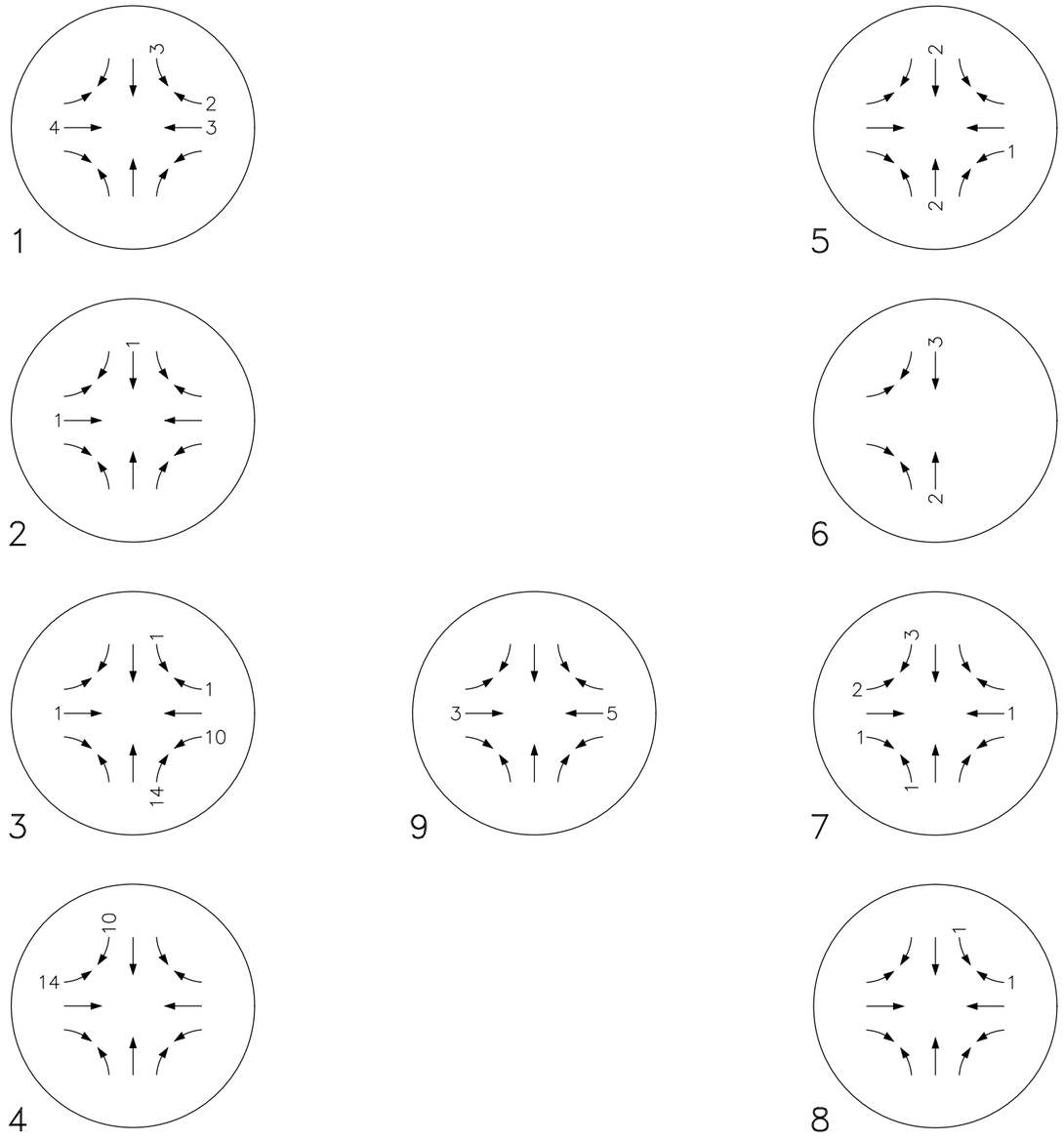

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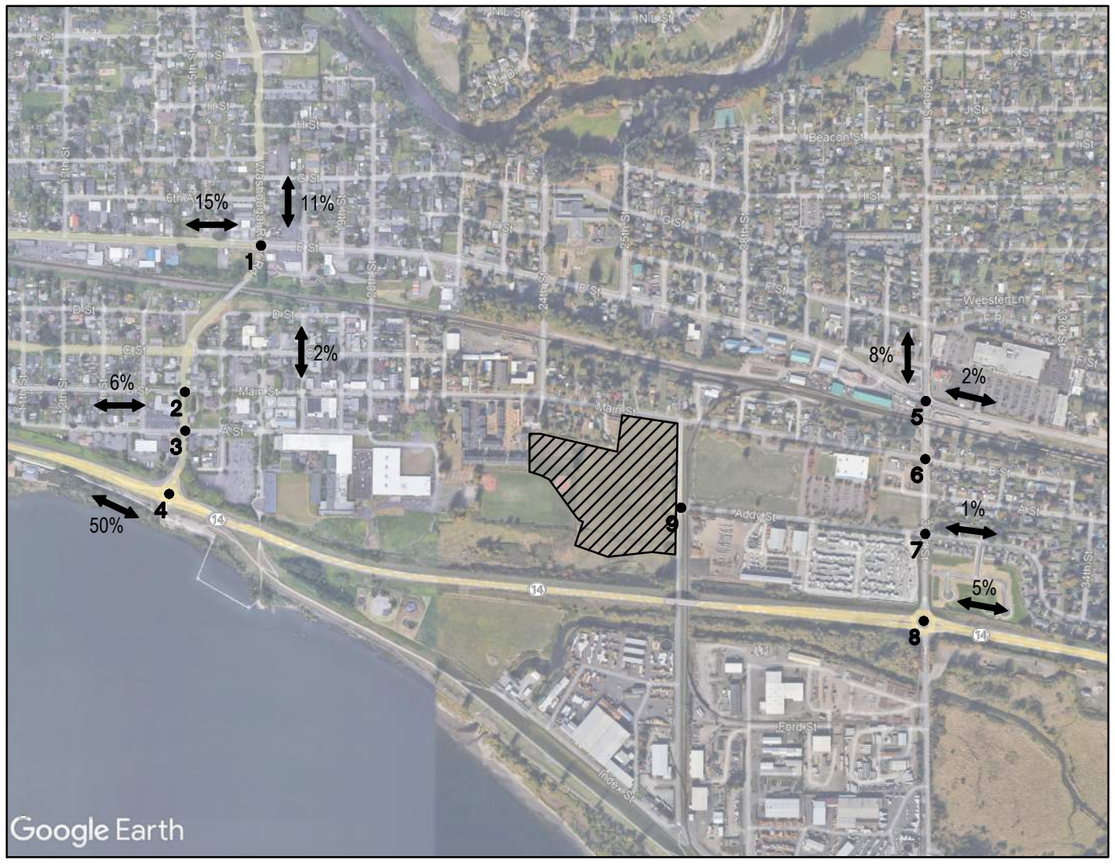
PRIMARY TRIP DISTRIBUTION + TRAFFIC ASSIGNMENT – PM PEAK HOUR, SOUTH OF MILL

PENDLETON DA
WASHOUGAL, WA

FIGURE 8



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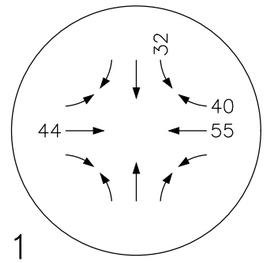

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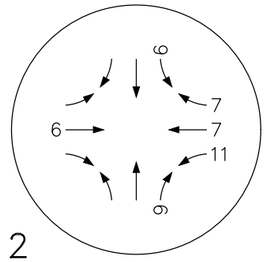

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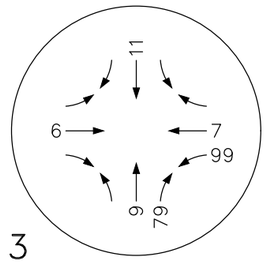

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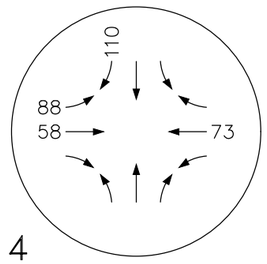

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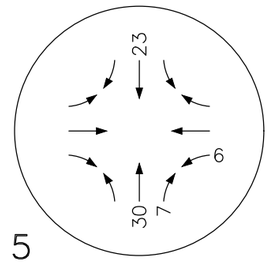

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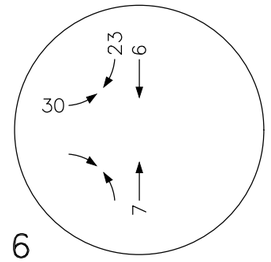

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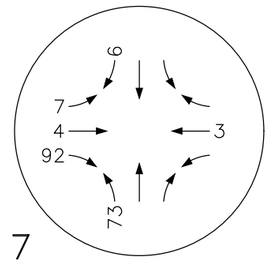

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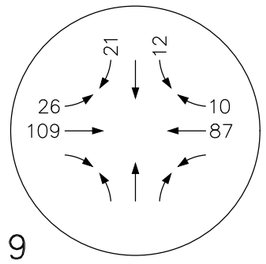

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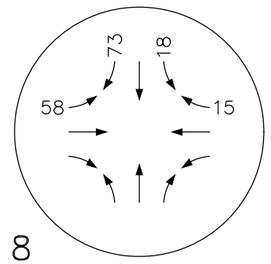

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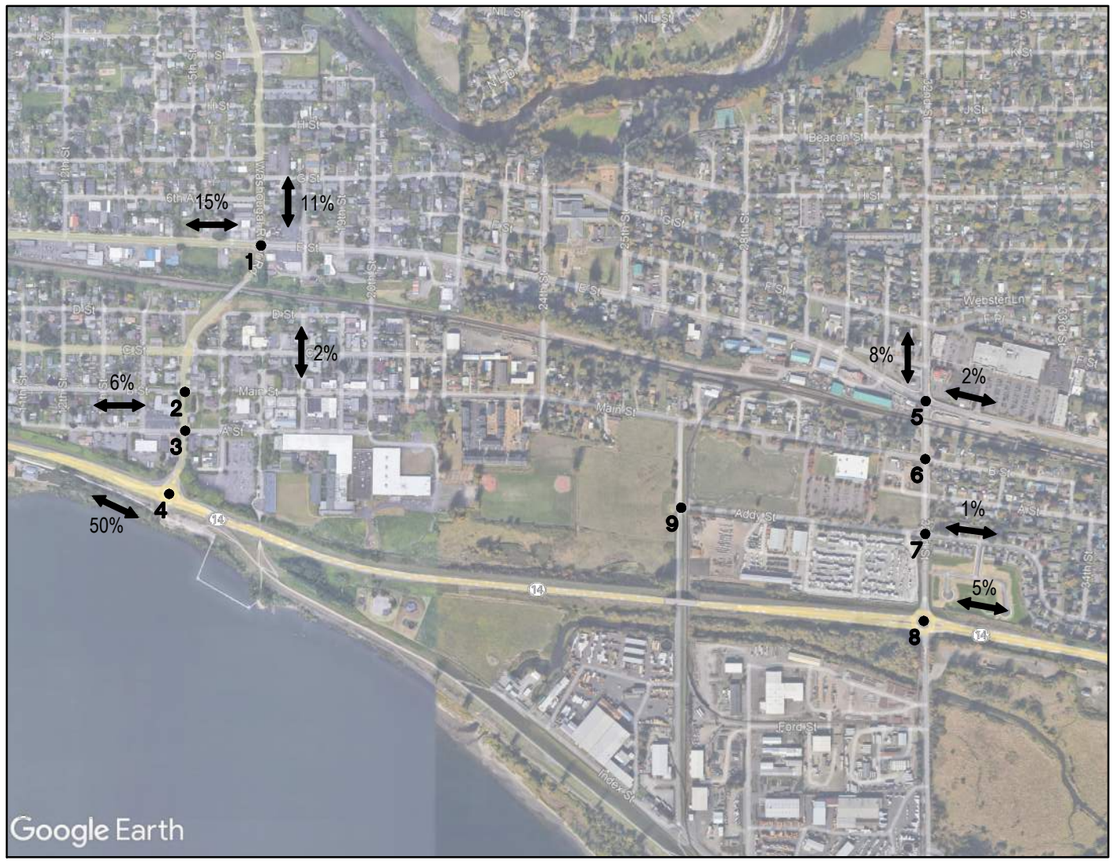
PRIMARY TRIP DISTRIBUTION + TRAFFIC ASSIGNMENT - PM PEAK HOUR, EAST OF MILL

PENDLETON DA
WASHOUGAL, WA

FIGURE 9



PM PEAK HOUR

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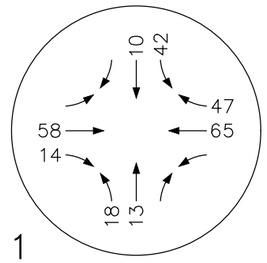

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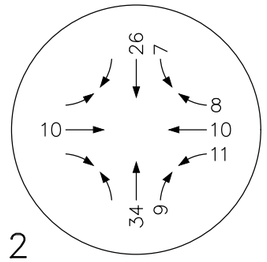

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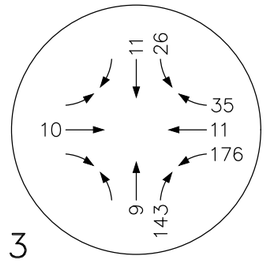

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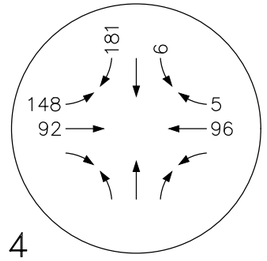

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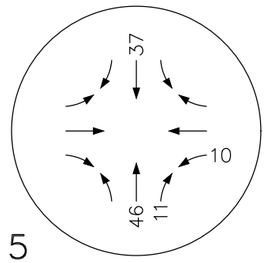

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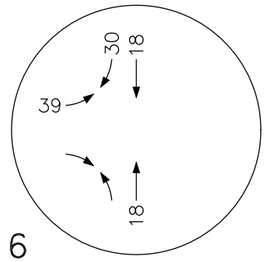

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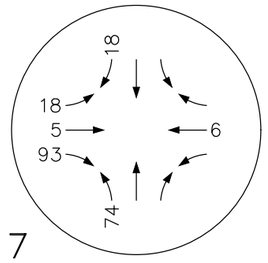

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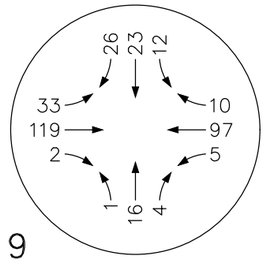

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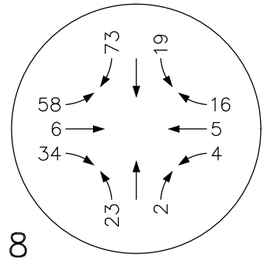

8

Portland 503.224.9560 Vancouver 360.695.7879 Seattle 206.749.9993
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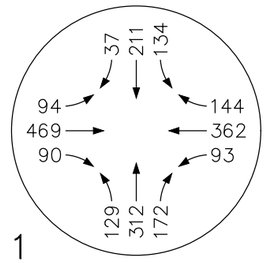
DATE: 1.5.2024
DRAWN BY: LCB
CHECKED BY: BTA
JOB NO: 223030300

PRIMARY TRIP DISTRIBUTION + TRAFFIC ASSIGNMENT - PM PEAK HOUR, SITE TOTAL

PENDLETON DA
WASHOUGAL, WA

FIGURE 10



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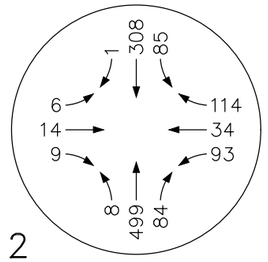

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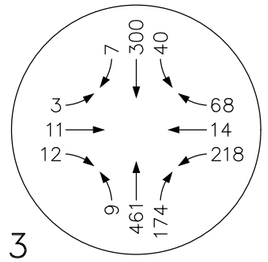

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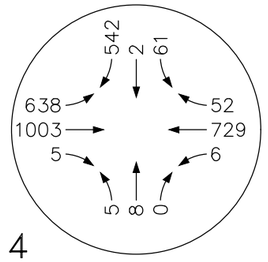

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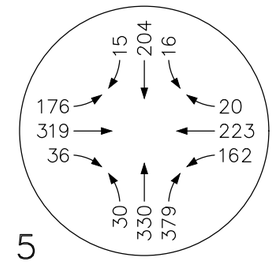

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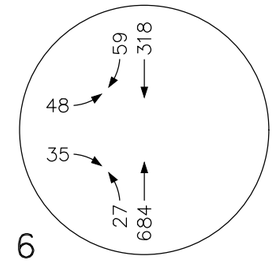

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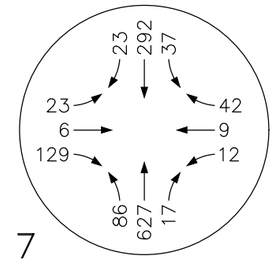

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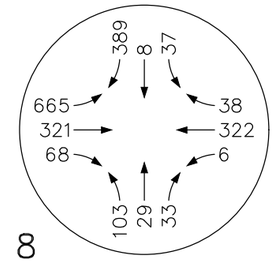

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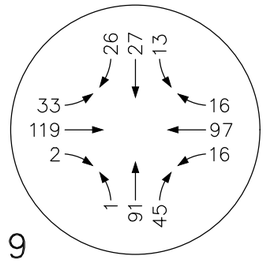

9

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DATE: 1.5.2024
DRAWN BY: LCB
CHECKED BY: BTA
JOB NO: 223030300

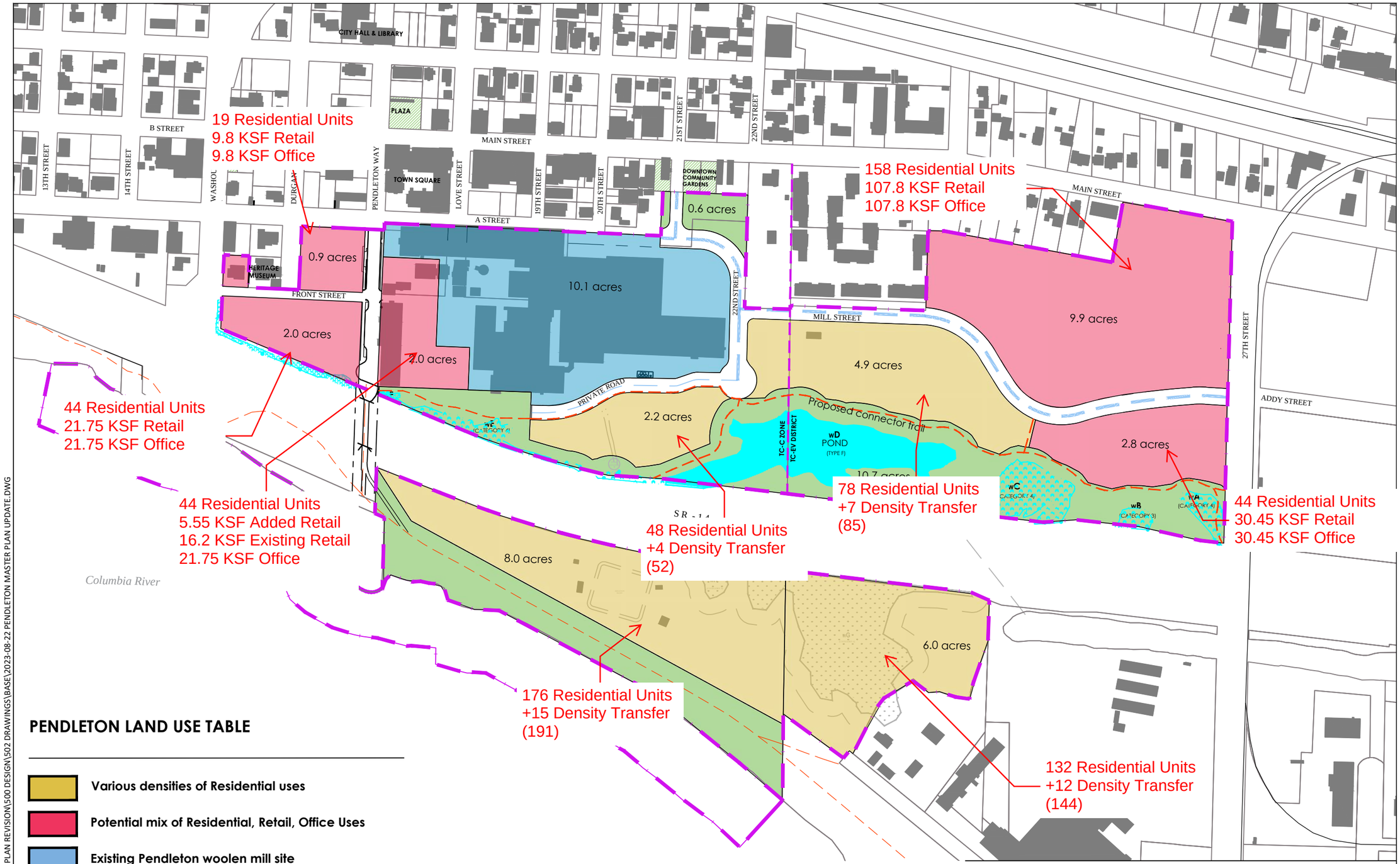
POST-DEVELOPMENT TRAFFIC VOLUMES - PM PEAK HOUR

PENDLETON DA
WASHOUGAL, WA

FIGURE
11

ATTACHMENT C

LAND USE MAP



PENDLETON LAND USE TABLE

- Various densities of Residential uses
- Potential mix of Residential, Retail, Office Uses
- Existing Pendleton woolen mill site
- Open space
- Open space trail
- **Proposed Streets** Neighborhood, local and private

0 150 300
SCALE: 1" = 150'

PENDLETON DISTRICT PLAN

Plan acreage is approximate.

FILE: W:\18149 PENDLETON MASTER PLAN REVISION\500 DESIGN\502 DRAWINGS\BASE\2023-08-22 PENDLETON MASTER PLAN UPDATE.DWG

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PENDLETON WOOLEN MILLS
Washougal, WA

District Master Plan

REVISIONS:
08/22/2023
08/23/2023

JOB NO.:	18149
DATE:	06/27/2023
SCALE:	AS NOTED
DESIGNED BY:	
DRAWN BY:	MP
CHECKED BY:	KS

P01

NO. 1 OF 1

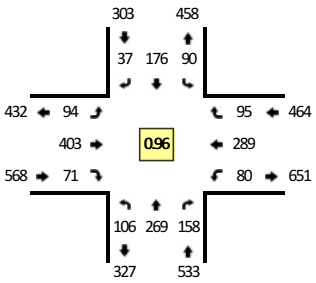
ATTACHMENT D

TRAFFIC COUNTS

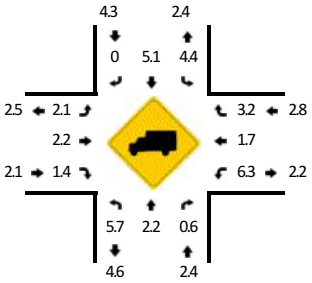
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

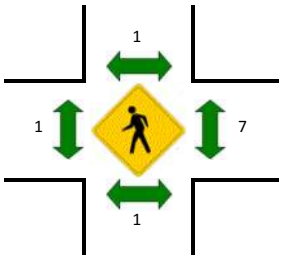
LOCATION: Washougal River Road -- E St | **QC JOB #:** 14886106
CITY/STATE: Clark, WA | **DATE:** Thu, Jan 24 2019

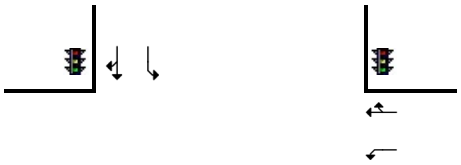
Peak-Hour: 4:35 PM -- 5:35 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

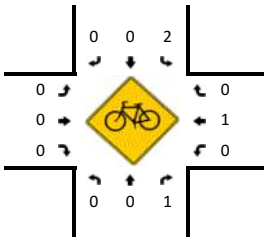


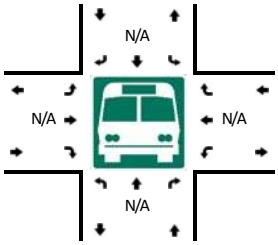
TRUE DATA TO IMPROVE MOBILITY

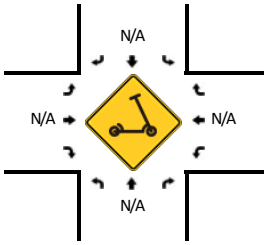












5-Min Count Period Beginning At	Washougal River Road (Northbound)				Washougal River Road (Southbound)				E St (Eastbound)				E St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	7	28	9	0	6	15	5	0	9	30	10	0	5	18	10	0	152	
4:05 PM	14	24	15	0	4	21	5	0	10	31	7	0	7	22	6	0	166	
4:10 PM	8	16	9	0	11	11	3	0	4	32	13	0	7	22	14	0	150	
4:15 PM	10	21	8	0	7	10	5	0	10	40	8	0	6	27	5	0	157	
4:20 PM	14	22	11	0	6	14	1	0	4	34	4	0	8	18	9	0	145	
4:25 PM	9	27	16	0	15	12	3	0	5	23	3	0	7	18	4	0	142	
4:30 PM	14	14	12	0	6	9	2	0	5	36	6	0	5	27	5	0	141	
4:35 PM	12	28	13	0	7	15	2	0	4	30	6	0	6	31	6	0	160	
4:40 PM	8	21	15	0	6	11	2	0	5	27	6	0	18	26	10	0	155	
4:45 PM	9	17	15	0	8	13	2	0	6	37	6	0	8	17	5	0	143	
4:50 PM	11	18	10	0	3	12	4	0	13	29	5	0	4	25	13	0	147	
4:55 PM	4	24	18	0	11	17	4	0	6	25	4	0	4	15	10	0	142	1800
5:00 PM	10	19	11	0	6	11	5	0	10	36	10	0	5	24	8	0	155	1803
5:05 PM	11	22	15	0	8	23	3	0	12	29	5	0	6	24	6	0	164	1801
5:10 PM	7	22	15	0	8	13	4	0	6	51	5	0	5	30	4	0	170	1821
5:15 PM	16	29	15	0	6	15	4	0	8	25	8	0	7	15	5	0	153	1817
5:20 PM	5	30	10	0	10	12	0	0	8	35	0	0	6	32	11	0	159	1831
5:25 PM	6	25	11	0	8	16	3	0	6	33	7	0	5	27	10	0	157	1846
5:30 PM	7	14	10	0	9	18	4	0	10	46	9	0	6	23	7	0	163	1868
5:35 PM	6	15	15	0	1	20	2	0	4	34	5	0	8	14	6	0	130	1838
5:40 PM	11	26	12	0	8	12	3	0	3	33	6	0	6	28	10	0	158	1841
5:45 PM	5	18	8	0	10	17	3	0	6	39	6	0	5	20	7	0	144	1842
5:50 PM	8	28	10	0	6	12	4	0	7	23	2	0	5	18	7	0	130	1825
5:55 PM	8	17	15	0	5	9	5	0	7	32	5	0	3	27	7	0	140	1823

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	112	252	164	0	88	188	48	0	112	464	80	0	64	312	72	0	1956
Heavy Trucks	0	12	0		4	8	0		0	8	0		0	0	4		36
Buses																	
Pedestrians		0				4				0				16			20
Bicycles	0	0	4		0	0	0		0	0	0		0	0	0		4
Scooters																	

Comments:

Report generated on 10/27/2023 11:19 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

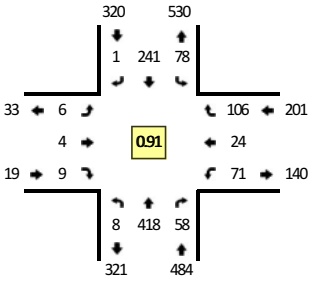
Type of peak hour being reported: Intersection Peak

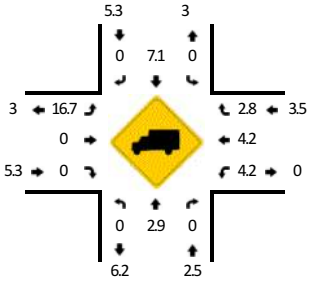
Method for determining peak hour: Total Entering Volume

LOCATION: Washougal River Road -- Main St
CITY/STATE: Clark, WA

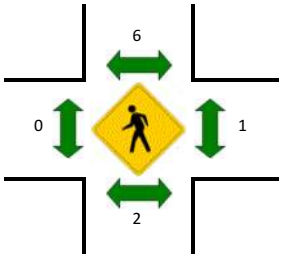
QC JOB #: 14886104
DATE: Thu, Jan 24 2019

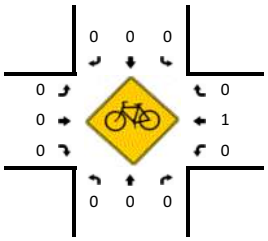
Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:00 PM -- 4:15 PM

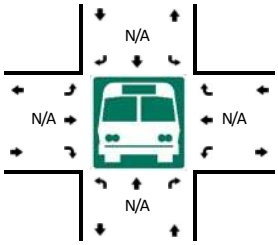


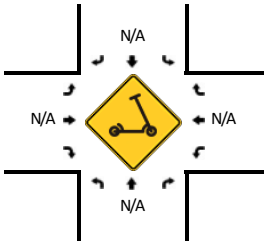


TRUE DATA TO IMPROVE MOBILITY









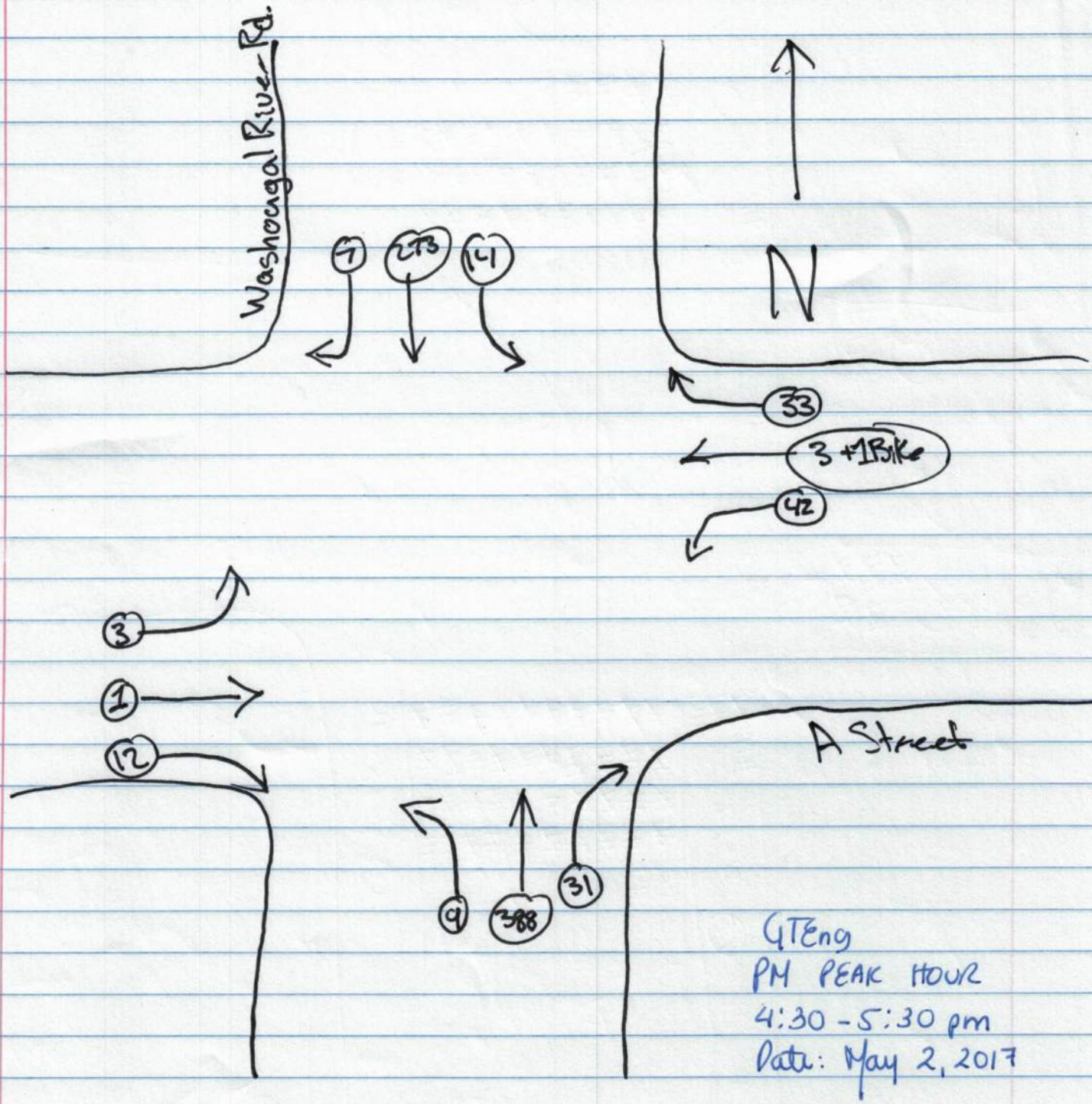
15-Min Count Period Beginning At	Washougal River Road (Northbound)				Washougal River Road (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	98	15	0	33	72	0	0	3	0	5	0	21	9	23	0	280	
4:15 PM	1	109	16	0	15	63	0	0	1	3	2	0	10	6	31	0	257	
4:30 PM	5	106	15	0	18	46	1	0	2	1	0	0	19	3	29	0	245	
4:45 PM	1	105	12	0	12	60	0	0	0	0	2	0	21	6	23	0	242	1024
5:00 PM	0	118	7	0	19	70	0	0	1	2	3	0	19	1	28	0	268	1012
5:15 PM	2	109	8	0	16	54	1	0	0	0	1	0	15	1	15	0	222	977
5:30 PM	2	93	13	0	17	73	0	0	1	2	4	0	14	2	18	0	239	971
5:45 PM	2	88	8	0	12	48	3	0	0	1	0	0	6	0	15	0	183	912

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	392	60	0	132	288	0	0	12	0	20	0	84	36	92	0	1120
Heavy Trucks	0	8	0		0	12	0		4	0	0		0	0	8		32
Buses																	
Pedestrians		4				4				0				0			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 10/27/2023 9:31 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212



GTEng
PM PEAK HOUR
4:30 - 5:30 pm
Data: May 2, 2017

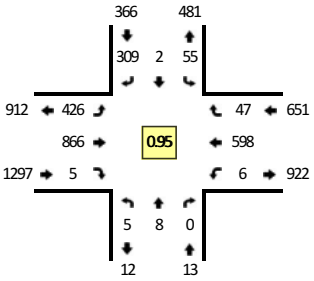
Type of peak hour being reported: Intersection Peak

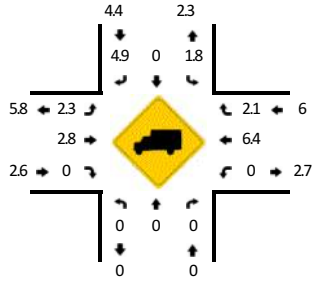
Method for determining peak hour: Total Entering Volume

LOCATION: Washougal River Road -- SR-14
CITY/STATE: Clark, WA

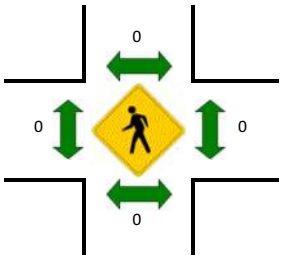
QC JOB #: 14886102
DATE: Thu, Jan 24 2019

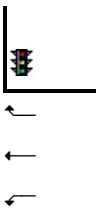
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

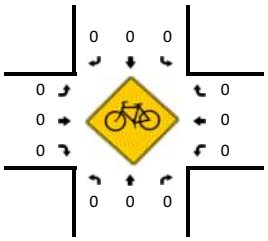


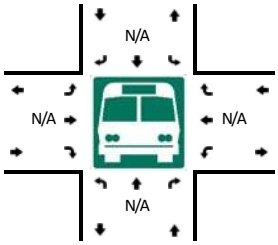


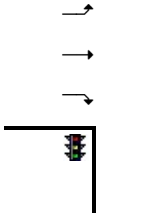
TRUE DATA TO IMPROVE MOBILITY

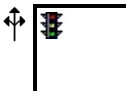


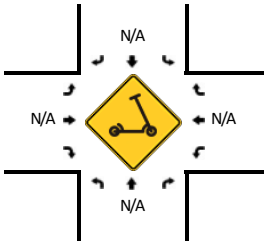












15-Min Count Period Beginning At	Washougal River Road (Northbound)				Washougal River Road (Southbound)				SR-14 (Eastbound)				SR-14 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	18	2	90	0	92	200	0	0	0	201	11	0	614	
4:15 PM	2	1	4	0	8	2	76	0	104	220	4	0	0	142	11	0	574	
4:30 PM	2	0	1	0	14	0	53	0	116	199	3	0	0	138	15	0	541	
4:45 PM	1	1	0	0	13	1	75	0	116	227	4	0	1	148	10	0	597	2326
5:00 PM	3	6	0	0	19	0	80	0	108	238	1	0	1	144	11	0	611	2323
5:15 PM	1	1	0	0	12	1	61	0	112	206	0	0	3	165	15	0	577	2326
5:30 PM	0	0	0	0	11	0	93	0	90	195	0	0	0	141	11	1	542	2327
5:45 PM	3	0	0	0	16	0	48	0	82	183	1	0	0	139	12	0	484	2214

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	24	0	0	76	0	320	0	432	952	4	0	4	576	44	0	2444
Heavy Trucks	0	0	0		0	0	12		16	36	0		0	36	0		100
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 10/27/2023 9:30 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

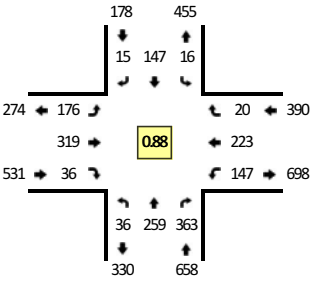
Type of peak hour being reported: Intersection Peak

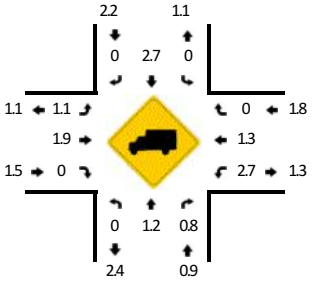
Method for determining peak hour: Total Entering Volume

LOCATION: 32nd St -- D St/Evergreen Way
CITY/STATE: Clark, WA

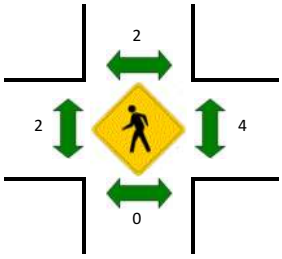
QC JOB #: 14886116
DATE: Thu, Jan 24 2019

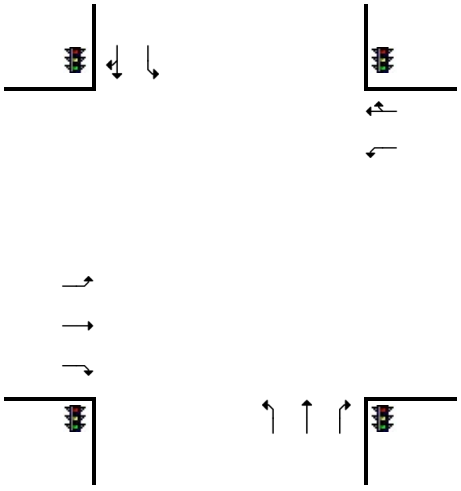
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

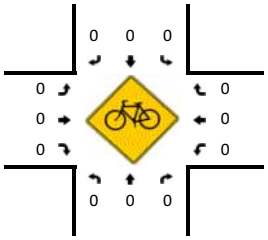


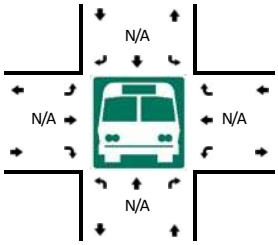


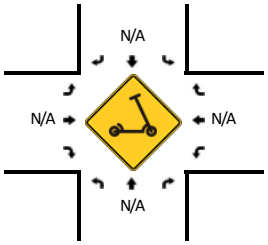
TRUE DATA TO IMPROVE MOBILITY











15-Min Count Period Beginning At	32nd St (Northbound)				32nd St (Southbound)				D St/Evergreen Way (Eastbound)				D St/Evergreen Way (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	11	67	83	0	7	52	4	0	48	78	9	0	39	60	10	0	468	
4:15 PM	10	75	68	0	11	33	5	0	36	83	8	0	33	46	6	0	414	
4:30 PM	4	49	85	0	6	24	9	0	47	78	9	0	24	69	2	0	406	
4:45 PM	11	70	107	0	5	31	1	0	37	77	10	0	35	63	3	0	450	1738
5:00 PM	6	40	65	0	6	32	3	0	38	75	4	0	33	52	10	0	364	1634
5:15 PM	9	95	95	0	2	44	2	0	50	78	16	0	49	55	4	0	499	1719
5:30 PM	10	54	96	0	3	40	9	0	51	89	6	0	30	53	3	0	444	1757
5:45 PM	11	54	64	0	8	39	4	0	38	89	8	0	37	46	1	0	399	1706

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	36	380	380	0	8	176	8	0	200	312	64	0	196	220	16	0	1996
Heavy Trucks	0	8	4		0	8	0		8	0	0		0	0	0		28
Buses																	
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

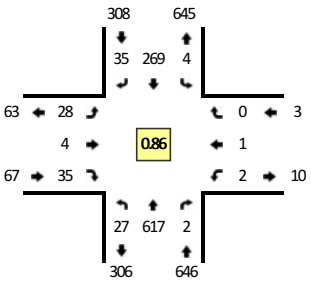
Report generated on 10/27/2023 11:19 AM

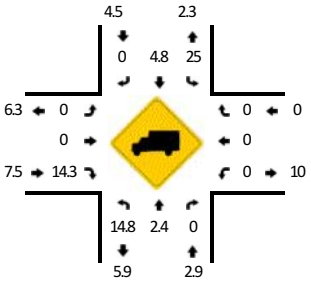
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

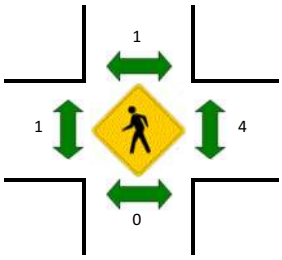
LOCATION: 32nd St -- Main St | **QC JOB #:** 14886114
CITY/STATE: Clark, WA | **DATE:** Thu, Jan 24 2019

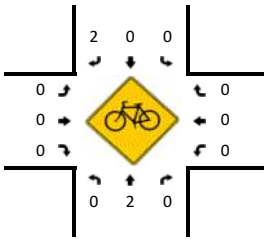
Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:00 PM -- 4:15 PM

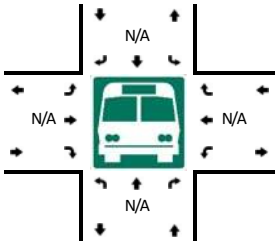


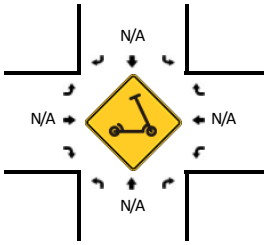


TRUE DATA TO IMPROVE MOBILITY









15-Min Count Period Beginning At	32nd St (Northbound)				32nd St (Southbound)				Main St (Eastbound)				Main St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	15	153	0	0	2	89	10	0	11	1	14	0	2	0	0	0	297	
4:15 PM	2	147	0	0	0	58	15	0	6	3	6	0	0	0	0	0	237	
4:30 PM	5	134	0	0	1	49	5	0	6	0	7	0	0	0	0	0	207	
4:45 PM	5	183	2	0	1	73	5	0	5	0	8	0	0	1	0	0	283	1024
5:00 PM	3	106	1	0	0	59	9	0	9	0	5	0	0	0	0	0	192	919
5:15 PM	2	181	0	0	0	93	17	0	8	0	4	0	1	1	0	0	307	989
5:30 PM	2	149	0	0	0	68	7	0	8	0	6	0	0	0	1	0	241	1023
5:45 PM	1	125	1	0	2	74	12	0	5	1	3	0	0	0	0	0	224	964

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	60	612	0	0	8	356	40	0	44	4	56	0	8	0	0	0	1188
Heavy Trucks	12	20	0		4	16	0		0	0	0		0	0	0		52
Buses																	
Pedestrians		0				4				4				4			12
Bicycles	0	8	0		0	0	4		0	0	0		0	0	0		12
Scooters																	

Comments:

Report generated on 10/27/2023 9:30 AM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

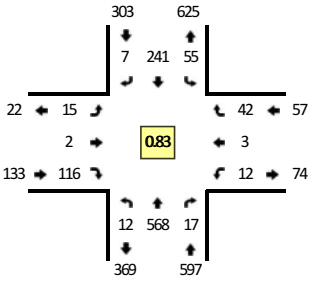
Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

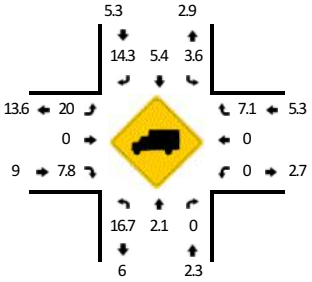
LOCATION: 32nd St -- Addy St
CITY/STATE: Clark, WA

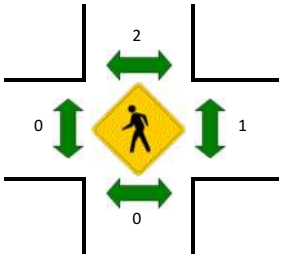
QC JOB #: 14886112
DATE: Thu, Jan 24 2019

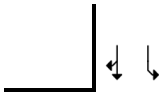
Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:00 PM -- 4:15 PM

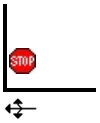


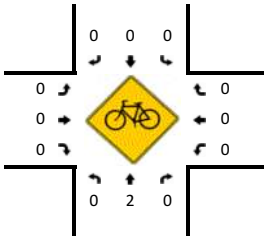
TRUE DATA TO IMPROVE MOBILITY

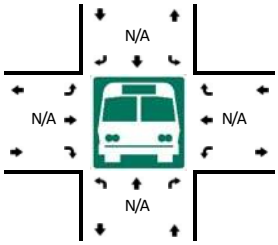


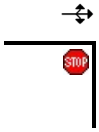


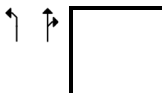


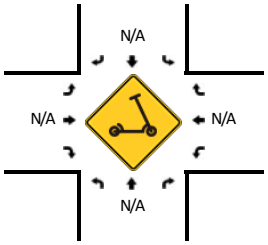












15-Min Count Period Beginning At	32nd St (Northbound)				32nd St (Southbound)				Addy St (Eastbound)				Addy St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	140	7	0	13	84	3	0	4	1	50	0	3	0	19	0	327	
4:15 PM	5	138	3	0	14	49	1	0	6	0	16	0	4	0	5	0	241	
4:30 PM	4	127	3	0	9	43	1	0	3	1	28	0	3	3	3	0	228	
4:45 PM	0	163	4	0	19	65	2	0	2	0	22	0	2	0	15	0	294	1090
5:00 PM	2	103	3	0	11	52	0	0	4	1	30	0	2	1	9	0	218	981
5:15 PM	2	154	9	0	19	70	3	0	1	0	14	0	1	0	11	0	284	1024
5:30 PM	2	133	9	0	13	57	2	0	2	1	15	0	2	0	15	0	251	1047
5:45 PM	1	119	9	0	13	64	0	0	0	1	15	0	2	1	10	0	235	988

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	560	28	0	52	336	12	0	16	4	200	0	12	0	76	0	1308
Heavy Trucks	4	24	0		0	8	0		0	0	12		0	0	8		56
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	8	0		0	0	0		0	0	0		0	0	0		8
Scooters																	

Comments:

Report generated on 10/23/2023 1:54 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

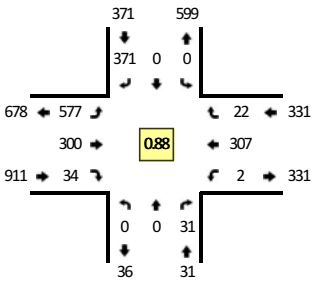
Type of peak hour being reported: Intersection Peak

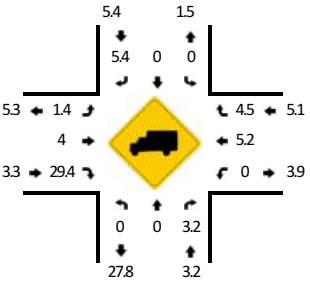
Method for determining peak hour: Total Entering Volume

LOCATION: 32nd St -- SR-14
CITY/STATE: Clark, WA

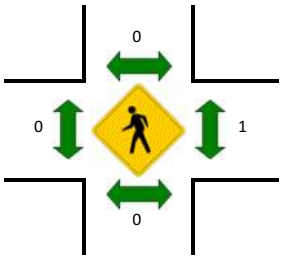
QC JOB #: 14886110
DATE: Thu, Jan 24 2019

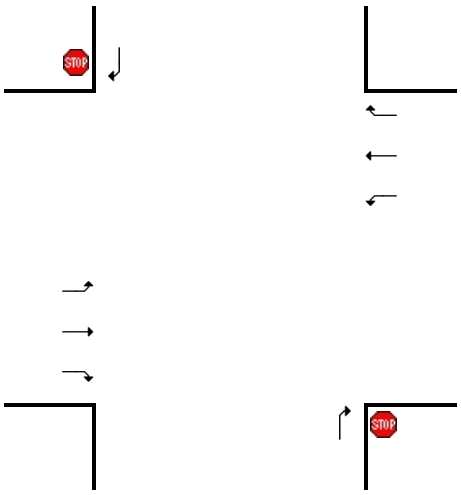
Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:00 PM -- 4:15 PM

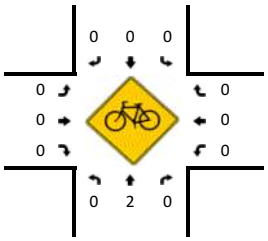


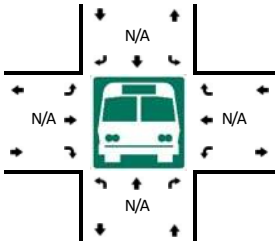


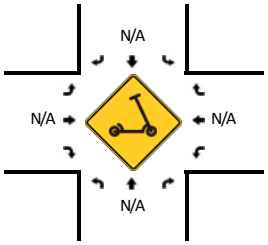
TRUE DATA TO IMPROVE MOBILITY











15-Min Count Period Beginning At	32nd St (Northbound)				32nd St (Southbound)				SR-14 (Eastbound)				SR-14 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	12	0	0	0	139	0	144	67	12	0	0	83	8	0	465	
4:15 PM	0	0	3	0	0	0	68	0	144	84	7	0	0	77	3	0	386	
4:30 PM	0	0	9	0	0	0	75	0	133	73	9	0	1	72	5	0	377	
4:45 PM	0	0	7	0	0	0	89	0	156	76	6	0	1	75	6	0	416	1644
5:00 PM	0	0	4	0	0	0	90	0	104	110	17	1	0	71	8	0	405	1584
5:15 PM	0	0	5	0	0	0	88	0	156	85	6	0	1	82	3	0	426	1624
5:30 PM	0	1	5	0	0	0	70	0	135	60	7	0	2	77	7	0	364	1611
5:45 PM	0	0	3	0	0	0	86	0	130	63	6	0	3	72	3	0	366	1561

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	48	0	0	0	556	0	576	268	48	0	0	332	32	0	1860
Heavy Trucks	0	0	0		0	0	20		16	4	12		0	16	4		72
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	8	0		0	0	0		0	0	0		0	0	0		8
Scooters																	

Comments:

Report generated on 10/27/2023 10:49 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

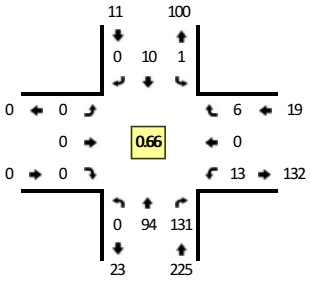
Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

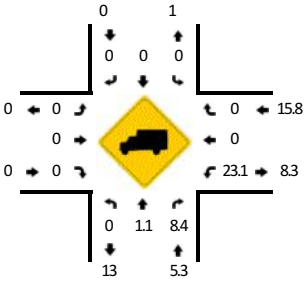
LOCATION: 27th St -- Addy St
CITY/STATE: Clark, WA

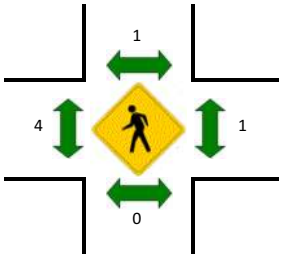
QC JOB #: 14886108
DATE: Thu, Jan 24 2019

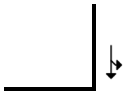
Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:00 PM -- 4:15 PM

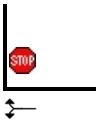


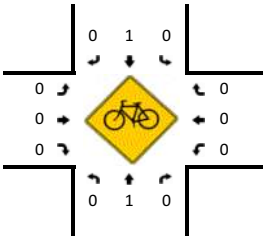
TRUE DATA TO IMPROVE MOBILITY

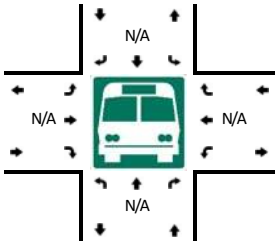


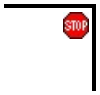


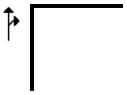


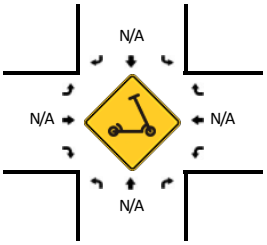












15-Min Count Period Beginning At	27th St (Northbound)				27th St (Southbound)				Addy St (Eastbound)				Addy St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	29	56	0	1	4	0	0	0	0	0	0	7	0	0	0	97	
4:15 PM	0	25	21	0	0	3	0	0	0	0	0	0	2	0	0	0	51	
4:30 PM	0	25	32	0	0	1	0	0	0	0	0	0	1	0	5	0	64	
4:45 PM	0	15	22	0	0	2	0	0	0	0	0	0	3	0	1	0	43	255
5:00 PM	0	28	40	0	0	5	0	0	0	0	0	0	0	0	1	0	74	232
5:15 PM	0	18	17	0	0	6	0	0	0	0	0	0	4	0	0	0	45	226
5:30 PM	0	9	14	0	0	3	0	0	0	0	0	0	3	0	0	0	29	191
5:45 PM	0	12	18	0	1	3	0	0	0	0	0	0	0	0	1	0	35	183

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	116	224	0	4	16	0	0	0	0	0	0	28	0	0	0	388
Heavy Trucks	0	0	12		0	0	0		0	0	0		4	0	0		16
Buses																	
Pedestrians		0				4				0				0			4
Bicycles	0	4	0		0	0	0		0	0	0		0	0	0		4
Scooters																	

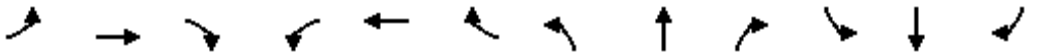
Comments:

Report generated on 10/27/2023 11:07 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

ATTACHMENT E

FULL CAPACITY RESULTS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	411	76	93	297	97	111	299	172	92	201	37
Future Volume (veh/h)	94	411	76	93	297	97	111	299	172	92	201	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1811	1870	1856	1811	1870	1870	1841	1826	1870
Adj Flow Rate, veh/h	98	428	79	97	309	105	116	311	179	96	209	39
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	6	2	3	6	2	2	4	5	2
Cap, veh/h	282	464	86	219	401	136	462	391	225	281	514	96
Arrive On Green	0.06	0.30	0.30	0.06	0.30	0.30	0.06	0.35	0.35	0.06	0.35	0.35
Sat Flow, veh/h	1781	1535	283	1725	1326	451	1725	1109	639	1753	1488	278
Grp Volume(v), veh/h	98	0	507	97	0	414	116	0	490	96	0	248
Grp Sat Flow(s),veh/h/ln	1781	0	1819	1725	0	1777	1725	0	1748	1753	0	1765
Q Serve(g_s), s	2.9	0.0	20.9	3.0	0.0	16.4	3.3	0.0	19.5	2.7	0.0	8.3
Cycle Q Clear(g_c), s	2.9	0.0	20.9	3.0	0.0	16.4	3.3	0.0	19.5	2.7	0.0	8.3
Prop In Lane	1.00		0.16	1.00		0.25	1.00		0.37	1.00		0.16
Lane Grp Cap(c), veh/h	282	0	550	219	0	537	462	0	616	281	0	610
V/C Ratio(X)	0.35	0.00	0.92	0.44	0.00	0.77	0.25	0.00	0.80	0.34	0.00	0.41
Avail Cap(c_a), veh/h	298	0	575	235	0	562	494	0	616	298	0	610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.8	0.0	26.1	20.0	0.0	24.6	15.0	0.0	22.6	17.3	0.0	19.3
Incr Delay (d2), s/veh	0.7	0.0	20.0	1.4	0.0	6.2	0.3	0.0	10.2	0.7	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	11.6	1.2	0.0	7.5	1.3	0.0	9.4	1.1	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.5	0.0	46.1	21.5	0.0	30.8	15.3	0.0	32.8	18.0	0.0	21.3
LnGrp LOS	B	A	D	C	A	C	B	A	C	B	A	C
Approach Vol, veh/h		605			511			606			344	
Approach Delay, s/veh		41.8			29.1			29.5			20.4	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	31.8	8.9	27.9	9.4	31.3	8.9	27.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.1	27.3	5.1	24.5	6.3	26.1	5.1	24.5
Max Q Clear Time (g_c+I1), s	4.7	21.5	5.0	22.9	5.3	10.3	4.9	18.4
Green Ext Time (p_c), s	0.0	1.6	0.0	0.5	0.0	1.3	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	31.5
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary
2: Washougal River Rd & B St/Main St

01/05/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	4	9	82	24	106	8	465	75	78	282	1
Future Volume (veh/h)	6	4	9	82	24	106	8	465	75	78	282	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1648	1870	1870	1841	1841	1856	1870	1856	1870	1870	1796	1870
Adj Flow Rate, veh/h	7	4	10	90	26	116	9	511	82	86	310	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	17	2	2	4	4	3	2	3	2	2	7	2
Cap, veh/h	191	115	171	224	64	165	680	878	141	465	1007	3
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	338	532	790	467	296	763	1068	1560	250	824	1789	6
Grp Volume(v), veh/h	21	0	0	232	0	0	9	0	593	86	0	311
Grp Sat Flow(s),veh/h/ln	1660	0	0	1525	0	0	1068	0	1810	824	0	1795
Q Serve(g_s), s	0.0	0.0	0.0	3.9	0.0	0.0	0.2	0.0	8.7	3.1	0.0	3.7
Cycle Q Clear(g_c), s	0.4	0.0	0.0	5.6	0.0	0.0	3.9	0.0	8.7	11.8	0.0	3.7
Prop In Lane	0.33		0.48	0.39		0.50	1.00		0.14	1.00		0.00
Lane Grp Cap(c), veh/h	477	0	0	453	0	0	680	0	1019	465	0	1010
V/C Ratio(X)	0.04	0.00	0.00	0.51	0.00	0.00	0.01	0.00	0.58	0.18	0.00	0.31
Avail Cap(c_a), veh/h	815	0	0	793	0	0	680	0	1019	465	0	1010
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.7	0.0	0.0	14.6	0.0	0.0	5.7	0.0	5.8	9.6	0.0	4.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	2.4	0.9	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	1.8	0.0	0.0	0.0	0.0	2.7	0.6	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.7	0.0	0.0	15.5	0.0	0.0	5.8	0.0	8.2	10.5	0.0	5.5
LnGrp LOS	B	A	A	B	A	A	A	A	A	B	A	A
Approach Vol, veh/h		21			232			602			397	
Approach Delay, s/veh		12.7			15.5			8.2			6.6	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	27.4	13.3	27.4	13.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	22.9	18.1	22.9	18.1
Max Q Clear Time (g_c+I1), s	10.7	2.4	13.8	7.6
Green Ext Time (p_c), s	3.4	0.0	1.7	1.0

Intersection Summary	
HCM 6th Ctrl Delay	9.1
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	1	12	42	3	33	9	452	31	14	289	7
Future Vol, veh/h	3	1	12	42	3	33	9	452	31	14	289	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	95	-	-	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1	13	46	3	36	10	491	34	15	314	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	896	893	318	883	880	508	322	0	0	525	0	0
Stage 1	348	348	-	528	528	-	-	-	-	-	-	-
Stage 2	548	545	-	355	352	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	261	281	723	266	286	565	1238	-	-	1042	-	-
Stage 1	668	634	-	534	528	-	-	-	-	-	-	-
Stage 2	521	519	-	662	632	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	238	275	723	256	280	565	1238	-	-	1042	-	-
Mov Cap-2 Maneuver	238	275	-	256	280	-	-	-	-	-	-	-
Stage 1	663	625	-	530	524	-	-	-	-	-	-	-
Stage 2	481	515	-	640	623	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.5	19.4	0.1	0.4
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1238	-	-	238	642	334	1042	-	-
HCM Lane V/C Ratio	0.008	-	-	0.014	0.022	0.254	0.015	-	-
HCM Control Delay (s)	7.9	-	-	20.3	10.7	19.4	8.5	-	-
HCM Lane LOS	A	-	-	C	B	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	1	0	-	-

Intersection	
Intersection Delay, s/veh	70.8
Intersection LOS	F

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	1480	721	13	440
Demand Flow Rate, veh/h	1519	762	13	460
Vehicles Circulating, veh/h	67	539	1573	717
Vehicles Exiting, veh/h	711	1047	13	584
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	104.1	46.2	14.0	0.9
Approach LOS	F	E	B	A

Lane	Left	Left	Left	Left	Bypass
Designated Moves	LTR	LTR	LTR	LT	R
Assumed Moves	LTR	LTR	LTR	LT	R
RT Channelized					Free
Lane Util	1.000	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	4.976	399
Entry Flow, veh/h	1519	762	13	61	1995
Cap Entry Lane, veh/h	1289	796	277	664	0.952
Entry HV Adj Factor	0.974	0.946	0.988	0.983	380
Flow Entry, veh/h	1480	721	13	60	1900
Cap Entry, veh/h	1256	754	274	653	0.200
V/C Ratio	1.179	0.957	0.047	0.092	0.0
Control Delay, s/veh	104.1	46.2	14.0	6.5	A
LOS	F	E	B	A	1
95th %tile Queue, veh	41	15	0	0	

HCM 6th Signalized Intersection Summary
5: 32nd St & SE Evergreen Hwy

01/05/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	319	36	152	223	20	30	284	368	16	167	15
Future Volume (veh/h)	176	319	36	152	223	20	30	284	368	16	167	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1870	1870	1870	1870	1870	1870	1856	1870
Adj Flow Rate, veh/h	200	362	41	173	253	23	34	323	0	18	190	17
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	3	2	2	2	2	2	2	3	2
Cap, veh/h	397	447	377	335	403	37	469	636		376	546	49
Arrive On Green	0.09	0.24	0.24	0.09	0.24	0.24	0.04	0.34	0.00	0.02	0.33	0.33
Sat Flow, veh/h	1781	1870	1578	1767	1688	153	1781	1870	1585	1781	1677	150
Grp Volume(v), veh/h	200	362	41	173	0	276	34	323	0	18	0	207
Grp Sat Flow(s),veh/h/ln	1781	1870	1578	1767	0	1842	1781	1870	1585	1781	0	1827
Q Serve(g_s), s	4.9	10.6	1.2	4.2	0.0	7.8	0.7	8.0	0.0	0.4	0.0	5.0
Cycle Q Clear(g_c), s	4.9	10.6	1.2	4.2	0.0	7.8	0.7	8.0	0.0	0.4	0.0	5.0
Prop In Lane	1.00		1.00	1.00		0.08	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	397	447	377	335	0	440	469	636		376	0	594
V/C Ratio(X)	0.50	0.81	0.11	0.52	0.00	0.63	0.07	0.51		0.05	0.00	0.35
Avail Cap(c_a), veh/h	397	586	494	335	0	577	558	636		492	0	594
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.4	20.8	17.2	15.7	0.0	19.7	12.2	15.2	0.0	12.9	0.0	14.8
Incr Delay (d2), s/veh	1.0	6.4	0.1	1.4	0.0	1.5	0.1	2.9	0.0	0.1	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	5.0	0.4	1.6	0.0	3.2	0.3	3.5	0.0	0.1	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.4	27.2	17.3	17.1	0.0	21.2	12.3	18.1	0.0	13.0	0.0	16.5
LnGrp LOS	B	C	B	B	A	C	B	B		B	A	B
Approach Vol, veh/h		603			449			357			225	
Approach Delay, s/veh		22.9			19.6			17.6			16.2	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	24.1	9.6	18.3	6.6	23.3	9.6	18.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	18.8	5.1	18.1	5.0	18.8	5.1	18.1
Max Q Clear Time (g_c+I1), s	2.4	10.0	6.2	12.6	2.7	7.0	6.9	9.8
Green Ext Time (p_c), s	0.0	1.2	0.0	1.1	0.0	0.8	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	19.9
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↑			↕	
Traffic Vol, veh/h	9	4	35	2	1	0	27	666	2	4	300	29
Future Vol, veh/h	9	4	35	2	1	0	27	666	2	4	300	29
Conflicting Peds, #/hr	1	0	0	0	0	1	1	0	4	4	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	14	2	2	2	15	2	2	25	5	2
Mvmt Flow	10	5	41	2	1	0	31	774	2	5	349	34

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1216	1219	367	1240	1235	780	384	0	0	780	0	0
Stage 1	377	377	-	841	841	-	-	-	-	-	-	-
Stage 2	839	842	-	399	394	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.34	7.12	6.52	6.22	4.25	-	-	4.35	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.426	3.518	4.018	3.318	2.335	-	-	2.425	-	-
Pot Cap-1 Maneuver	158	180	652	152	176	395	1107	-	-	744	-	-
Stage 1	644	616	-	359	380	-	-	-	-	-	-	-
Stage 2	360	380	-	627	605	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	152	172	651	135	169	393	1106	-	-	741	-	-
Mov Cap-2 Maneuver	152	172	-	135	169	-	-	-	-	-	-	-
Stage 1	625	610	-	348	368	-	-	-	-	-	-	-
Stage 2	348	368	-	578	599	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.1	30.4	0.3	0.1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1106	-	-	352	145	741	-	-
HCM Lane V/C Ratio	0.028	-	-	0.159	0.024	0.006	-	-
HCM Control Delay (s)	8.3	-	-	17.1	30.4	9.9	0	-
HCM Lane LOS	A	-	-	C	D	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1	36	12	3	42	12	627	17	37	292	5
Future Vol, veh/h	5	1	36	12	3	42	12	627	17	37	292	5
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	80	-	-	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	20	2	8	2	2	7	17	2	2	4	5	14
Mvmt Flow	6	1	43	14	4	51	14	755	20	45	352	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1268	1249	355	1261	1242	768	358	0	0	776	0	0
Stage 1	445	445	-	794	794	-	-	-	-	-	-	-
Stage 2	823	804	-	467	448	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.52	6.28	7.12	6.52	6.27	4.27	-	-	4.14	-	-
Critical Hdwy Stg 1	6.3	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.3	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.68	4.018	3.372	3.518	4.018	3.363	2.353	-	-	2.236	-	-
Pot Cap-1 Maneuver	133	173	676	147	175	394	1122	-	-	831	-	-
Stage 1	559	575	-	381	400	-	-	-	-	-	-	-
Stage 2	343	396	-	576	573	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	108	162	676	130	163	393	1122	-	-	830	-	-
Mov Cap-2 Maneuver	108	162	-	130	163	-	-	-	-	-	-	-
Stage 1	552	544	-	376	395	-	-	-	-	-	-	-
Stage 2	292	391	-	509	542	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.4	23.6	0.2	1.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1122	-	-	397	262	830	-	-
HCM Lane V/C Ratio	0.013	-	-	0.127	0.262	0.054	-	-
HCM Control Delay (s)	8.2	-	-	15.4	23.6	9.6	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	1	0.2	-	-

Intersection	
Intersection Delay, s/veh	9.0
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	2	1	1	1
Conflicting Circle Lanes	1	1	2	1
Adj Approach Flow, veh/h	1087	387	159	388
Demand Flow Rate, veh/h	1126	406	163	406
Vehicles Circulating, veh/h	31	831	1096	473
Vehicles Exiting, veh/h	471	428	61	764
Ped Vol Crossing Leg, #/h	0	1	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.1	22.7	10.7	0.3
Approach LOS	A	C	B	A

Lane	Left	Right	Left	Left	Left	Bypass
Designated Moves	L	TR	LTR	LTR	LT	R
Assumed Moves	L	TR	LTR	LTR	LT	R
RT Channelized						Free
Lane Util	0.625	0.375	1.000	1.000	1.000	
Follow-Up Headway, s	2.535	2.535	2.609	2.535	2.609	
Critical Headway, s	4.544	4.544	4.976	4.328	4.976	377
Entry Flow, veh/h	704	422	406	163	29	1995
Cap Entry Lane, veh/h	1381	1381	591	559	852	0.952
Entry HV Adj Factor	0.980	0.940	0.953	0.978	0.994	359
Flow Entry, veh/h	690	397	387	159	29	1900
Cap Entry, veh/h	1353	1298	563	547	847	0.189
V/C Ratio	0.510	0.306	0.687	0.291	0.034	0.0
Control Delay, s/veh	7.9	5.5	22.7	10.7	4.6	A
LOS	A	A	C	B	A	1
95th %tile Queue, veh	3	1	5	1	0	

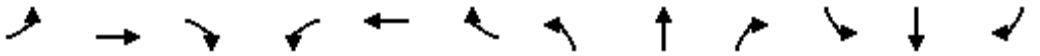
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	11	0	6	0	75	41	1	4	0
Future Vol, veh/h	0	0	0	11	0	6	0	75	41	1	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	12	0	7	0	82	45	1	4	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	114	133	4	111	111	105	4	0	0	127	0	0
Stage 1	6	6	-	105	105	-	-	-	-	-	-	-
Stage 2	108	127	-	6	6	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	863	758	1080	867	779	949	1618	-	-	1459	-	-
Stage 1	1016	891	-	901	808	-	-	-	-	-	-	-
Stage 2	897	791	-	1016	891	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	856	757	1080	866	778	949	1618	-	-	1459	-	-
Mov Cap-2 Maneuver	856	757	-	866	778	-	-	-	-	-	-	-
Stage 1	1016	890	-	901	808	-	-	-	-	-	-	-
Stage 2	891	791	-	1015	890	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.1	0	1.5
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1618	-	-	-	894	1459	-	-
HCM Lane V/C Ratio	-	-	-	-	0.021	0.001	-	-
HCM Control Delay (s)	0	-	-	0	9.1	7.5	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	469	90	93	362	144	129	312	172	134	211	37
Future Volume (veh/h)	94	469	90	93	362	144	129	312	172	134	211	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1811	1870	1856	1811	1870	1870	1841	1826	1870
Adj Flow Rate, veh/h	98	489	94	97	377	157	134	325	179	140	220	39
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.92	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	6	2	3	6	2	2	4	5	2
Cap, veh/h	219	515	99	193	421	175	443	396	218	258	506	90
Arrive On Green	0.05	0.34	0.34	0.05	0.34	0.34	0.07	0.35	0.35	0.06	0.34	0.34
Sat Flow, veh/h	1781	1524	293	1725	1245	518	1725	1129	622	1753	1501	266
Grp Volume(v), veh/h	98	0	583	97	0	534	134	0	504	140	0	259
Grp Sat Flow(s),veh/h/ln	1781	0	1817	1725	0	1763	1725	0	1751	1753	0	1767
Q Serve(g_s), s	3.2	0.0	28.0	3.2	0.0	25.7	4.5	0.0	23.5	4.7	0.0	10.2
Cycle Q Clear(g_c), s	3.2	0.0	28.0	3.2	0.0	25.7	4.5	0.0	23.5	4.7	0.0	10.2
Prop In Lane	1.00		0.16	1.00		0.29	1.00		0.36	1.00		0.15
Lane Grp Cap(c), veh/h	219	0	614	193	0	597	443	0	613	258	0	596
V/C Ratio(X)	0.45	0.00	0.95	0.50	0.00	0.90	0.30	0.00	0.82	0.54	0.00	0.43
Avail Cap(c_a), veh/h	227	0	620	199	0	602	480	0	613	258	0	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.7	0.0	28.8	22.4	0.0	28.1	17.7	0.0	26.5	21.1	0.0	23.0
Incr Delay (d2), s/veh	1.4	0.0	24.3	2.0	0.0	15.9	0.4	0.0	11.8	2.3	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	15.8	1.4	0.0	13.0	1.8	0.0	11.5	2.0	0.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.1	0.0	53.1	24.4	0.0	43.9	18.1	0.0	38.3	23.4	0.0	25.3
LnGrp LOS	C	A	D	C	A	D	B	A	D	C	A	C
Approach Vol, veh/h		681			631			638			399	
Approach Delay, s/veh		48.8			40.9			34.0			24.7	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	35.8	9.3	34.7	10.8	34.6	9.2	34.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.1	31.3	5.1	30.5	8.2	28.2	5.1	30.5
Max Q Clear Time (g_c+I1), s	6.7	25.5	5.2	30.0	6.5	12.2	5.2	27.7
Green Ext Time (p_c), s	0.0	1.7	0.0	0.2	0.1	1.4	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	38.6
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	14	9	93	34	114	8	499	84	85	308	1
Future Volume (veh/h)	6	14	9	93	34	114	8	499	84	85	308	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1648	1870	1870	1841	1841	1856	1870	1856	1870	1870	1796	1870
Adj Flow Rate, veh/h	7	15	10	102	37	125	9	548	92	93	338	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	17	2	2	4	4	3	2	3	2	2	7	2
Cap, veh/h	147	238	127	231	79	172	632	848	142	408	981	3
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	180	1000	536	471	333	723	1041	1548	260	789	1790	5
Grp Volume(v), veh/h	32	0	0	264	0	0	9	0	640	93	0	339
Grp Sat Flow(s),veh/h/ln	1716	0	0	1527	0	0	1041	0	1808	789	0	1795
Q Serve(g_s), s	0.0	0.0	0.0	4.8	0.0	0.0	0.2	0.0	10.4	3.9	0.0	4.4
Cycle Q Clear(g_c), s	0.6	0.0	0.0	6.6	0.0	0.0	4.6	0.0	10.4	14.3	0.0	4.4
Prop In Lane	0.22		0.31	0.39		0.47	1.00		0.14	1.00		0.00
Lane Grp Cap(c), veh/h	512	0	0	482	0	0	632	0	991	408	0	984
V/C Ratio(X)	0.06	0.00	0.00	0.55	0.00	0.00	0.01	0.00	0.65	0.23	0.00	0.34
Avail Cap(c_a), veh/h	816	0	0	767	0	0	632	0	991	408	0	984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.4	0.0	0.0	14.6	0.0	0.0	6.6	0.0	6.6	11.7	0.0	5.3
Incr Delay (d2), s/veh	0.1	0.0	0.0	1.0	0.0	0.0	0.0	0.0	3.2	1.3	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	2.1	0.0	0.0	0.0	0.0	3.5	0.7	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.5	0.0	0.0	15.6	0.0	0.0	6.6	0.0	9.9	12.9	0.0	6.2
LnGrp LOS	B	A	A	B	A	A	A	A	A	B	A	A
Approach Vol, veh/h		32			264			649			432	
Approach Delay, s/veh		12.5			15.6			9.8			7.7	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	27.5	14.5	27.5	14.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	23.0	18.0	23.0	18.0
Max Q Clear Time (g_c+I1), s	12.4	2.6	16.3	8.6
Green Ext Time (p_c), s	3.4	0.1	1.5	1.1

Intersection Summary	
HCM 6th Ctrl Delay	10.3
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	66

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	11	12	218	14	68	9	461	174	40	300	7
Future Vol, veh/h	3	11	12	218	14	68	9	461	174	40	300	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	95	-	-	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	12	13	237	15	74	10	501	189	43	326	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1076	1126	330	1045	1036	596	334	0	0	690	0	0
Stage 1	416	416	-	616	616	-	-	-	-	-	-	-
Stage 2	660	710	-	429	420	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	197	205	712	~ 207	232	504	1225	-	-	905	-	-
Stage 1	614	592	-	478	482	-	-	-	-	-	-	-
Stage 2	452	437	-	604	589	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	152	194	712	~ 185	219	504	1225	-	-	905	-	-
Mov Cap-2 Maneuver	152	194	-	~ 185	219	-	-	-	-	-	-	-
Stage 1	609	564	-	474	478	-	-	-	-	-	-	-
Stage 2	370	434	-	553	561	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.8	286.6	0.1	1.1
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1225	-	-	152	313	218	905	-	-
HCM Lane V/C Ratio	0.008	-	-	0.021	0.08	1.496	0.048	-	-
HCM Control Delay (s)	8	-	-	29.2	17.5	286.6	9.2	-	-
HCM Lane LOS	A	-	-	D	C	F	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	19.7	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	146.2
Intersection LOS	F

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	1733	828	13	637
Demand Flow Rate, veh/h	1778	875	13	667
Vehicles Circulating, veh/h	73	698	1838	824
Vehicles Exiting, veh/h	818	1153	13	749
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	192.3	163.5	18.6	0.8
Approach LOS	F	F	C	A

Lane	Left	Left	Left	Left	Bypass
Designated Moves	LTR	LTR	LTR	LT	R
Assumed Moves	LTR	LTR	LTR	LT	R
RT Channelized					Free
Lane Util	1.000	1.000	1.000	1.000	
Follow-Up Headway, s	2.609	2.609	2.609	2.609	
Critical Headway, s	4.976	4.976	4.976	4.976	600
Entry Flow, veh/h	1778	875	13	67	1995
Cap Entry Lane, veh/h	1281	677	212	595	0.952
Entry HV Adj Factor	0.975	0.946	0.988	0.984	571
Flow Entry, veh/h	1733	828	13	66	1900
Cap Entry, veh/h	1249	641	209	586	0.301
V/C Ratio	1.388	1.292	0.061	0.113	0.0
Control Delay, s/veh	192.3	163.5	18.6	7.5	A
LOS	F	F	C	A	1
95th %tile Queue, veh	70	33	0	0	

HCM 6th Signalized Intersection Summary
5: 32nd St & SE Evergreen Hwy

01/05/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	319	36	162	223	20	30	330	379	16	204	15
Future Volume (veh/h)	176	319	36	162	223	20	30	330	379	16	204	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1870	1870	1870	1870	1870	1870	1856	1870
Adj Flow Rate, veh/h	200	362	41	184	253	23	34	375	0	18	232	17
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	3	2	2	2	2	2	2	3	2
Cap, veh/h	405	446	376	346	414	38	428	625		331	545	40
Arrive On Green	0.09	0.24	0.24	0.09	0.25	0.25	0.04	0.33	0.00	0.02	0.32	0.32
Sat Flow, veh/h	1781	1870	1578	1767	1688	153	1781	1870	1585	1781	1707	125
Grp Volume(v), veh/h	200	362	41	184	0	276	34	375	0	18	0	249
Grp Sat Flow(s),veh/h/ln	1781	1870	1578	1767	0	1842	1781	1870	1585	1781	0	1832
Q Serve(g_s), s	4.9	10.6	1.2	4.5	0.0	7.7	0.7	9.7	0.0	0.4	0.0	6.2
Cycle Q Clear(g_c), s	4.9	10.6	1.2	4.5	0.0	7.7	0.7	9.7	0.0	0.4	0.0	6.2
Prop In Lane	1.00		1.00	1.00		0.08	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	405	446	376	346	0	452	428	625		331	0	585
V/C Ratio(X)	0.49	0.81	0.11	0.53	0.00	0.61	0.08	0.60		0.05	0.00	0.43
Avail Cap(c_a), veh/h	405	581	491	346	0	585	517	625		446	0	585
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.4	20.8	17.2	15.6	0.0	19.4	12.6	16.1	0.0	13.4	0.0	15.5
Incr Delay (d2), s/veh	0.9	6.6	0.1	1.6	0.0	1.3	0.1	4.2	0.0	0.1	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	5.0	0.4	1.7	0.0	3.2	0.3	4.4	0.0	0.1	0.0	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	27.4	17.4	17.1	0.0	20.7	12.7	20.3	0.0	13.5	0.0	17.8
LnGrp LOS	B	C	B	B	A	C	B	C		B	A	B
Approach Vol, veh/h		603			460			409			267	
Approach Delay, s/veh		23.0			19.3			19.7			17.5	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	23.8	10.0	18.3	6.6	23.0	9.6	18.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	18.5	5.5	18.0	5.0	18.5	5.1	18.4
Max Q Clear Time (g_c+I1), s	2.4	11.7	6.5	12.6	2.7	8.2	6.9	9.7
Green Ext Time (p_c), s	0.0	1.2	0.0	1.1	0.0	1.0	0.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	48	0	35	0	0	0	27	684	0	0	318	59
Future Vol, veh/h	48	0	35	0	0	0	27	684	0	0	318	59
Conflicting Peds, #/hr	1	0	0	0	0	1	1	0	4	4	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	14	2	2	2	15	2	2	25	5	2
Mvmt Flow	56	0	41	0	0	0	31	795	0	0	370	69

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1264	1267	406	1286	1301	800	440	0	0	799	0	0
Stage 1	406	406	-	861	861	-	-	-	-	-	-	-
Stage 2	858	861	-	425	440	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.34	7.12	6.52	6.22	4.25	-	-	4.35	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.426	3.518	4.018	3.318	2.335	-	-	2.425	-	-
Pot Cap-1 Maneuver	146	169	620	141	161	385	1054	-	-	731	-	-
Stage 1	622	598	-	350	372	-	-	-	-	-	-	-
Stage 2	352	372	-	607	578	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	142	163	619	128	156	383	1053	-	-	728	-	-
Mov Cap-2 Maneuver	142	163	-	128	156	-	-	-	-	-	-	-
Stage 1	603	597	-	338	360	-	-	-	-	-	-	-
Stage 2	341	360	-	567	577	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	35.9	0	0.3	0
HCM LOS	E	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1053	-	-	210	-	728	-	-
HCM Lane V/C Ratio	0.03	-	-	0.46	-	-	-	-
HCM Control Delay (s)	8.5	-	-	35.9	0	0	-	-
HCM Lane LOS	A	-	-	E	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.2	-	0	-	-

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑		↰	↑	
Traffic Vol, veh/h	23	6	129	12	9	42	86	627	17	37	292	23
Future Vol, veh/h	23	6	129	12	9	42	86	627	17	37	292	23
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	80	-	-	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	20	2	8	2	2	7	17	2	2	4	5	14
Mvmt Flow	28	7	155	14	11	51	104	755	20	45	352	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1462	1440	366	1511	1444	768	380	0	0	776	0	0
Stage 1	456	456	-	974	974	-	-	-	-	-	-	-
Stage 2	1006	984	-	537	470	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.52	6.28	7.12	6.52	6.27	4.27	-	-	4.14	-	-
Critical Hdwy Stg 1	6.3	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.3	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.68	4.018	3.372	3.518	4.018	3.363	2.353	-	-	2.236	-	-
Pot Cap-1 Maneuver	97	133	666	99	132	394	1101	-	-	831	-	-
Stage 1	551	568	-	303	330	-	-	-	-	-	-	-
Stage 2	269	327	-	528	560	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	70	114	666	64	113	393	1101	-	-	830	-	-
Mov Cap-2 Maneuver	70	114	-	64	113	-	-	-	-	-	-	-
Stage 1	499	537	-	274	299	-	-	-	-	-	-	-
Stage 2	204	296	-	378	530	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	43	43	1	1
HCM LOS	E	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1101	-	-	275	168	830	-	-
HCM Lane V/C Ratio	0.094	-	-	0.692	0.452	0.054	-	-
HCM Control Delay (s)	8.6	-	-	43	43	9.6	-	-
HCM Lane LOS	A	-	-	E	E	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	4.7	2.1	0.2	-	-

Intersection	
Intersection Delay, s/veh	11.7
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	2	1	1	1
Conflicting Circle Lanes	1	1	2	1
Adj Approach Flow, veh/h	1198	416	188	493
Demand Flow Rate, veh/h	1250	436	192	516
Vehicles Circulating, veh/h	59	924	1194	510
Vehicles Exiting, veh/h	503	462	115	850
Ped Vol Crossing Leg, #/h	0	1	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.1	34.6	13.2	0.5
Approach LOS	A	D	B	A

Lane	Left	Right	Left	Left	Left	Bypass
Designated Moves	L	TR	LTR	LTR	LT	R
Assumed Moves	L	TR	LTR	LTR	LT	R
RT Channelized						Free
Lane Util	0.617	0.383	1.000	1.000	1.000	
Follow-Up Headway, s	2.535	2.535	2.609	2.535	2.609	
Critical Headway, s	4.544	4.544	4.976	4.328	4.976	464
Entry Flow, veh/h	771	479	436	192	52	1995
Cap Entry Lane, veh/h	1346	1346	538	515	820	0.952
Entry HV Adj Factor	0.981	0.924	0.953	0.981	0.977	442
Flow Entry, veh/h	756	442	416	188	51	1900
Cap Entry, veh/h	1320	1243	513	505	802	0.233
V/C Ratio	0.573	0.356	0.811	0.373	0.063	0.0
Control Delay, s/veh	9.2	6.3	34.6	13.2	5.1	A
LOS	A	A	D	B	A	1
95th %tile Queue, veh	4	2	8	2	0	

Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	33	119	2	16	97	16	1	91	45	13	27	26
Future Vol, veh/h	33	119	2	16	97	16	1	91	45	13	27	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	129	2	17	105	17	1	99	49	14	29	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	258	221	43	263	211	124	57	0	0	148	0	0
Stage 1	71	71	-	126	126	-	-	-	-	-	-	-
Stage 2	187	150	-	137	85	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	695	678	1027	690	686	927	1547	-	-	1434	-	-
Stage 1	939	836	-	878	792	-	-	-	-	-	-	-
Stage 2	815	773	-	866	824	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	596	671	1027	582	678	927	1547	-	-	1434	-	-
Mov Cap-2 Maneuver	596	671	-	582	678	-	-	-	-	-	-	-
Stage 1	938	828	-	877	791	-	-	-	-	-	-	-
Stage 2	692	772	-	722	816	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.4	11.6	0.1	1.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1547	-	-	656	687	1434	-	-
HCM Lane V/C Ratio	0.001	-	-	0.255	0.204	0.01	-	-
HCM Control Delay (s)	7.3	0	-	12.4	11.6	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1	0.8	0	-	-

Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	6	12	122	8	49	9	456	96	25	294	7
Future Vol, veh/h	3	6	12	122	8	49	9	456	96	25	294	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	95	-	-	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	7	13	133	9	53	10	496	104	27	320	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	977	998	324	956	950	548	328	0	0	600	0	0
Stage 1	378	378	-	568	568	-	-	-	-	-	-	-
Stage 2	599	620	-	388	382	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	230	244	717	238	260	536	1232	-	-	977	-	-
Stage 1	644	615	-	508	506	-	-	-	-	-	-	-
Stage 2	488	480	-	636	613	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	196	235	717	223	251	536	1232	-	-	977	-	-
Mov Cap-2 Maneuver	196	235	-	223	251	-	-	-	-	-	-	-
Stage 1	639	598	-	504	502	-	-	-	-	-	-	-
Stage 2	428	476	-	601	596	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.3	47.7	0.1	0.7
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1232	-	-	196	426	267	977	-	-
HCM Lane V/C Ratio	0.008	-	-	0.017	0.046	0.729	0.028	-	-
HCM Control Delay (s)	7.9	-	-	23.7	13.9	47.7	8.8	-	-
HCM Lane LOS	A	-	-	C	B	E	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	5.1	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	11	12	218	14	68	9	461	174	40	300	7
Future Volume (veh/h)	3	11	12	218	14	68	9	461	174	40	300	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	12	13	237	15	74	10	501	189	43	326	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	577	233	252	442	30	93	578	636	240	308	893	22
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1308	821	889	1011	105	328	1046	1294	488	753	1818	45
Grp Volume(v), veh/h	3	0	25	326	0	0	10	0	690	43	0	334
Grp Sat Flow(s),veh/h/ln	1308	0	1710	1443	0	0	1046	0	1782	753	0	1862
Q Serve(g_s), s	0.0	0.0	0.4	7.9	0.0	0.0	0.2	0.0	12.9	2.0	0.0	4.4
Cycle Q Clear(g_c), s	0.1	0.0	0.4	8.4	0.0	0.0	4.7	0.0	12.9	14.9	0.0	4.4
Prop In Lane	1.00		0.52	0.73		0.23	1.00		0.27	1.00		0.02
Lane Grp Cap(c), veh/h	577	0	485	565	0	0	578	0	876	308	0	915
V/C Ratio(X)	0.01	0.00	0.05	0.58	0.00	0.00	0.02	0.00	0.79	0.14	0.00	0.37
Avail Cap(c_a), veh/h	810	0	791	823	0	0	913	0	1448	550	0	1513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.3	0.0	10.4	13.3	0.0	0.0	7.8	0.0	8.4	14.6	0.0	6.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	1.6	0.2	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	2.3	0.0	0.0	0.0	0.0	3.5	0.3	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.3	0.0	10.5	14.2	0.0	0.0	7.8	0.0	10.1	14.8	0.0	6.6
LnGrp LOS	B	A	B	B	A	A	A	A	B	B	A	A
Approach Vol, veh/h		28			326			700			377	
Approach Delay, s/veh		10.4			14.2			10.0			7.5	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	24.2		15.9		24.2		15.9					
Change Period (Y+Rc), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	32.5		18.5		32.5		18.5					
Max Q Clear Time (g_c+I1), s	14.9		2.4		16.9		10.4					
Green Ext Time (p_c), s	4.8		0.1		2.0		1.2					

Intersection Summary		
HCM 6th Ctrl Delay		10.3
HCM 6th LOS		B

Intersection	
Intersection Delay, s/veh	14.3
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	2	2	1	2
Conflicting Circle Lanes	1	1	2	2
Adj Approach Flow, veh/h	1733	828	13	637
Demand Flow Rate, veh/h	1778	875	13	667
Vehicles Circulating, veh/h	73	698	1838	824
Vehicles Exiting, veh/h	1418	1153	13	749
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	14.4	14.9	13.0	13.6
Approach LOS	B	B	B	B

Lane	Left	Right	Left	Right	Left	Left	Right
Designated Moves	L	TR	LT	TR	LTR	LTR	R
Assumed Moves	L	TR	LT	TR	LTR	LTR	R
RT Channelized							
Lane Util	0.385	0.615	0.470	0.530	1.000	0.469	0.531
Follow-Up Headway, s	2.535	2.535	2.535	2.535	2.535	2.667	2.535
Critical Headway, s	4.544	4.544	4.544	4.544	4.328	4.645	4.328
Entry Flow, veh/h	685	1093	411	464	13	313	354
Cap Entry Lane, veh/h	1329	1329	752	752	298	633	705
Entry HV Adj Factor	0.981	0.971	0.947	0.946	0.988	0.956	0.954
Flow Entry, veh/h	672	1061	389	439	13	299	338
Cap Entry, veh/h	1304	1290	712	712	294	605	672
V/C Ratio	0.515	0.823	0.546	0.617	0.044	0.495	0.502
Control Delay, s/veh	8.2	18.2	13.7	15.9	13.0	14.1	13.1
LOS	A	C	B	C	B	B	B
95th %tile Queue, veh	3	10	3	4	0	3	3

ATTACHMENT F

PRIOR ANALYSES

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING
610 SW Alder Street, Suite 700, Portland, OR 97205 P 503.228.5230 F 503.273.8169

MEMORANDUM

Date: April 12, 2013

Project #: 13458

To: Port of Camas-Washougal
David Ripp
24 South A Street
Washougal, WA 98671

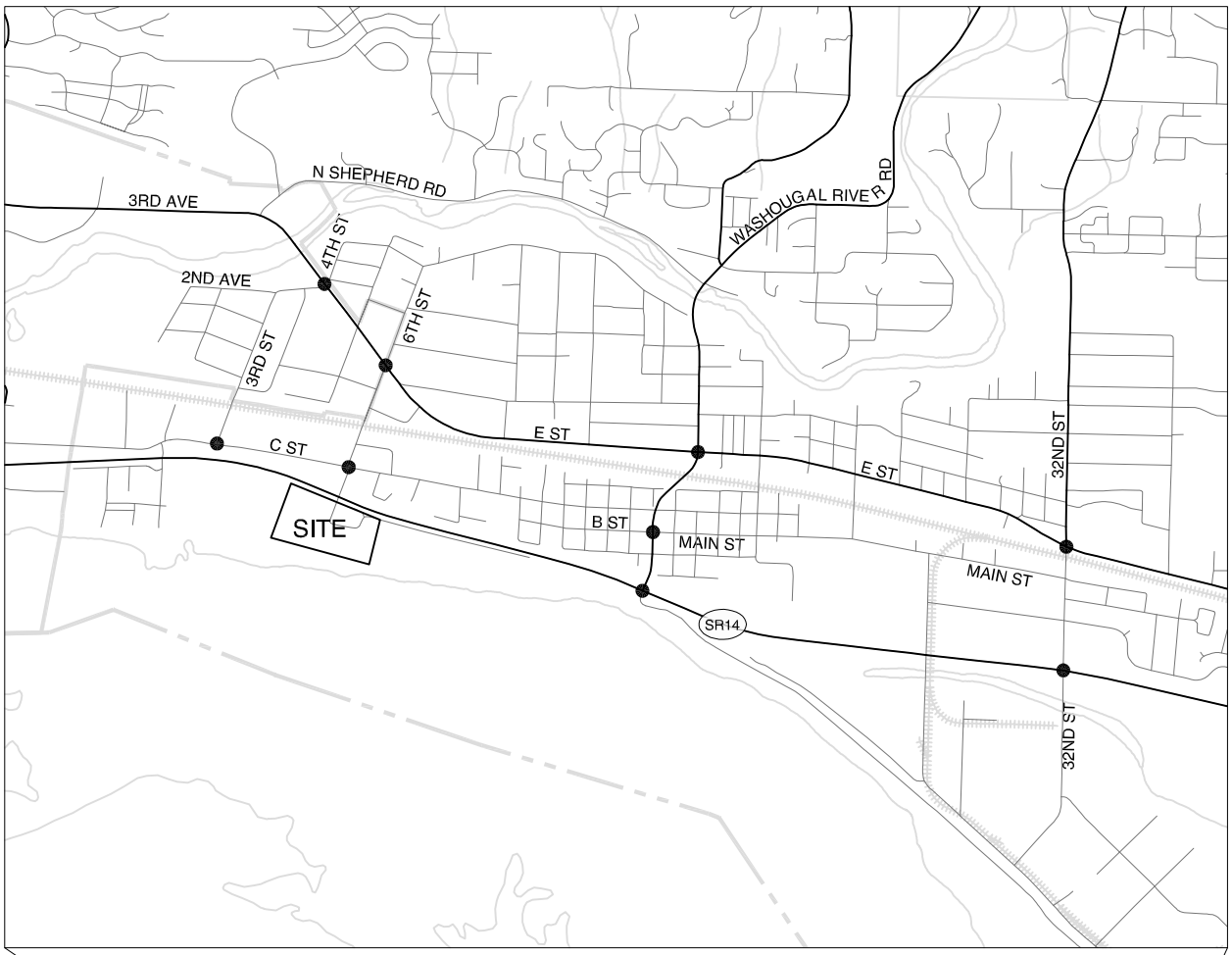
From: Anais Malinge, and Chris Brehmer, P.E.

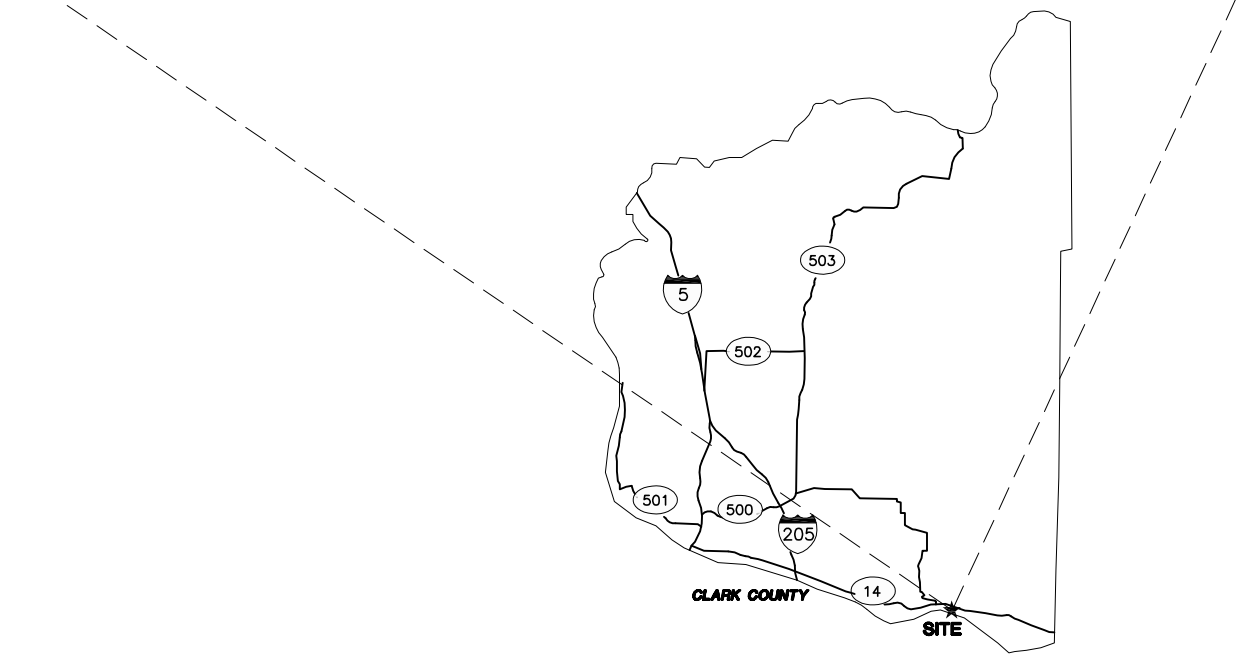
Subject: 6th Street Project Transportation Impact Analysis

This memorandum documents the results of the transportation impact analysis prepared by Kittelson & Associates, Inc. (KAI) for master planning of the Port of Camas-Washougal 6th Street Project located south of SR 14 and 6th Street in Washougal, Washington. This study concludes that the 6th Street Project can be developed while maintaining acceptable traffic operations and safety at the study intersections. The methodology of our analysis, pertinent findings, and our recommendations are documented herein.

INTRODUCTION

This transportation impact analysis was completed to inform the contents of a development agreement between the City of Washougal and the Port of Camas-Washougal. Development of the site is expected to be phased over the next several years and will be guided by the development agreement. At a conceptual level, this traffic study assumes that the proposed 6th Street Project will develop to include up to 110,000 square-feet of retail space, 60,000 square-feet of general office space, and 75 apartment units. Access is expected to be provided via one or more driveways, located south of the SR 14 interchange along 2nd Street and one located south of the site. Figure 1 illustrates the site vicinity.





LEGEND

● - STUDY INTERSECTIONS

SITE VICINITY MAP
WASHOUGAL, WASHINGTON

FIGURE 1

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SCOPE OF THE REPORT

This analysis identifies the transportation-related impacts associated with the proposed development of the 6th Street Project site and was prepared in accordance with City of Washougal transportation impact analysis requirements. The study scope and overall study area for this project were selected based on a review of the local transportation system and previous direction provided by the City of Washougal and Washington State Department of Transportation (WSDOT) staff for the adjacent and larger Parker's Landing development.

As required under Washougal Municipal Code 18.90.040 (Transportation Impact Analysis), a transportation impact study was prepared to address the following transportation issues:

- Year 2013 existing land use and transportation system conditions within the site vicinity;
- Planned developments and transportation improvements in the study area;
- Forecast year 2020 background traffic conditions during the weekday a.m. and p.m. peak hours;
- Trip generation and distribution estimates for the proposed development;
- Forecast year 2020 total traffic conditions with full build-out of the site during the weekday a.m. and p.m. peak hours;
- Level of service analyses for the study intersections;
- Conclusions and recommendations.

Operational analyses were performed at the following intersections:

- 3rd Street (Whitney Street)/C Street
- 4th Street-3rd Avenue/E Street
- 6th Street/C Street
- 6th Street/E Street
- B Street-Main Street/Washougal River Road
- E Street/Washougal River Road
- E Street/32nd Street
- SR 14/32nd Street
- SR 14/Washougal River Road

Site Conditions and Adjacent Land Uses

Residential development currently occupies part of the proposed development site. The site is bordered by 2nd Street and SR 14 to the north, the Columbia River to the south, residential

development to the east, and the proposed Parker's Landing development site to the west. Other Port of Camas-Washougal facilities, an automobile dealership, and a hotel are located further to the west.

TRANSPORTATION FACILITIES

Table 1 provides a summary of key transportation facilities in the site vicinity.

Table 1: Existing Transportation Facilities and Roadway Designations

Roadway	Classification[1]	Cross Section	Speed Limit (mph)	Side-walks?	Bicycle Lanes?	Raised Median?	On-Street Parking?
3rd Street	Collector Arterial	2-lane	25	Partial	None	No	None
6th Street	Collector Arterial	2-lane	25	Partial	None	No	None
32nd Street	Collector Arterial	3-lane	25	Partial	None	No	None
"E" Street	Collector Arterial	3-lane	30	Partial	None	No	None
"C" Street	3-Lane Urban Collector	2-lane	25	North Side	None	No	South Side (2 hr.)
Main Street (east of 15th Street)	Secondary Arterial	2-lane	25	Partial	None	No	Partial
Main Street (west of 15th Street)	Collector Arterial	2-lane	25	Partial	None	No	Partial
SR 14	Major Arterial	3-5 lane	55	None	None	Partial	None
Washougal River Road	Secondary Arterial	2-lane	25	Partial	Partial	No	None

[1]Washougal Municipal Code (Chapter 10.26, Reference 1)

Pedestrian and Bicycle Facilities

Sidewalks and bike lanes are not currently provided along the site frontage. Sidewalks are provided within the WSDOT interchange area that will link the site with C Street to the north.

Transit Facilities

C-Tran provides local transit service through two bus routes operating along 6th Avenue and 3rd Avenue, as follows (Reference 2):

- Route #41 – Camas/Washougal Limited, provides transit service from Washougal to Vancouver to downtown Portland. The route has a bus stop within the site vicinity at 3rd Avenue and 6th Avenue, and operates twice daily (morning and evening) on weekdays.
- Route #92 – Camas/Washougal, provides transit service between Fisher's Landing Transit Center to Gibbon Creek Mobile Estates in Washougal, providing intermediate service to Camas and downtown Washougal. The route has three stops, and 30-minute headways on weekdays.

Collision Analysis

The collision histories of the respective study intersections were reviewed in an effort to identify potential intersection safety issues. Collision records were obtained from the Washington State Department of Transportation (WSDOT) for the most recent five-year period from August 2007 through July 2012. A summary of the collision data is provided in Table 2.

Table 2: Intersection Collision Histories

Intersection	Number of Collisions	Collision Type				Collision Severity	
		Rear-End	Turning	Angle	Other	PDO[1]	Injury
3rd Street (Whitney Street)/C Street	5	2	1	0	2	3	2
4th Street/3rd Avenue/E Street	1	1	0	0	0	1	0
6th Street/C Street	6	1	1	1	3	4	2
6th Street/ E Street	2	0	1	0	1	0	2
B Street-Main Street/Washougal River Road	2	1	0	1	0	2	0
E Street/ 32nd Street	28	7	6	10	5	20	8
E Street/Washougal River Road	11	3	4	3	1	7	4
SR 14/32nd Street	22	1	2	13	6	12	10
SR 14/Washougal River Road	13	9	0	2	2	8	5

[1]PDO: Property Damage Only

No safety-based mitigation measures are recommended based on review of the collision data at the study intersections.

Attachment "A" contains the collision data obtained from WSDOT.

PROPOSED DEVELOPMENT TRIP GENERATION ESTIMATE

Trip generation estimates were developed based on trip rates found in the standard reference manual *Trip Generation, 9th Edition* published by the Institute of Transportation Engineers (ITE) (Reference 3). The internal and pass-by trip rates applied to each land use were determined based on information provided in ITE's *Trip Generation Manual* (Reference 4). Table 3 summarizes the daily, weekday a.m., and weekday p.m. peak hour trips for the assumed development. Table 3 shows the daily trips rounded to the nearest ten and peak hour trips rounded to the nearest five. Note that the land use assumptions shown in Table 3 represent a reasonable "worst case" development scenario. Actual future site development may differ from the assumed uses but this study should remain valid so long as the actual site uses have trip generation less than or equivalent to the total trips shown in Table 3.

Attachment "B" shows the methodology for estimating internal trips.

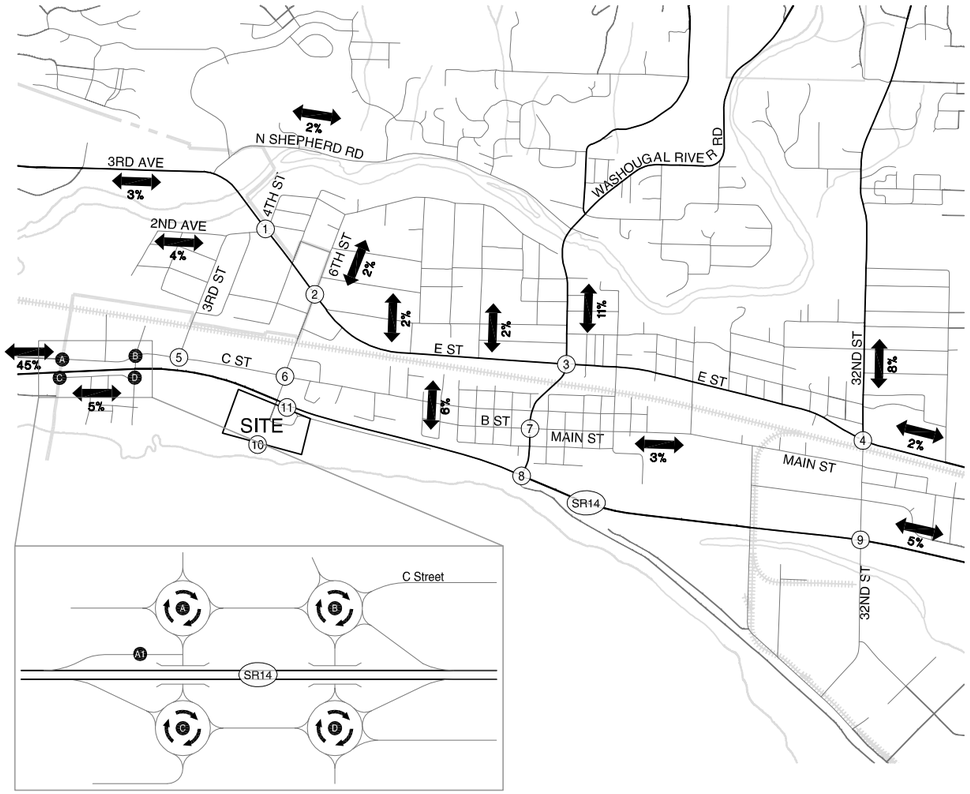
Table 3: Trip Generation Estimate

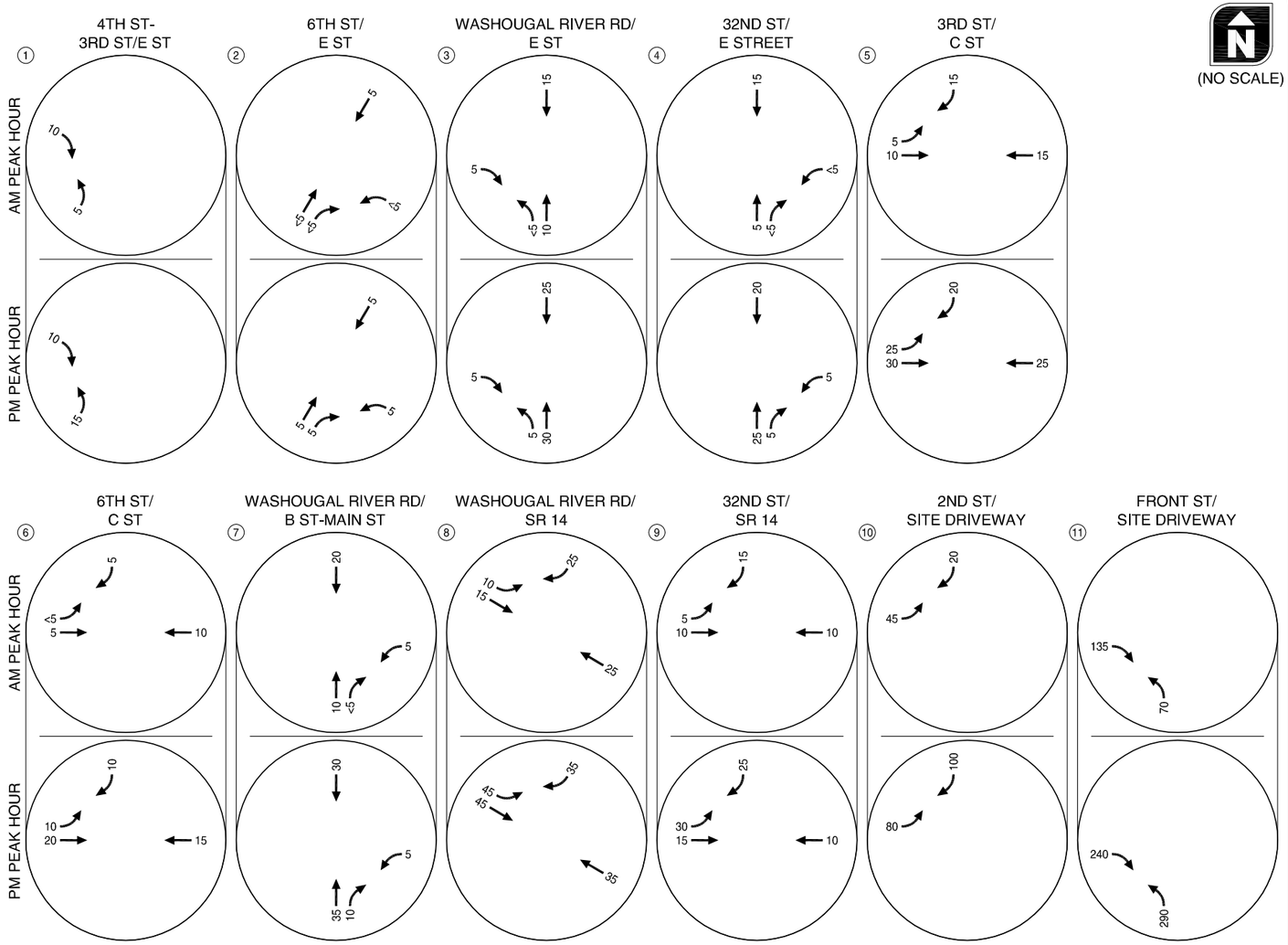
Land Use	ITE Code	Size (SF)/Units	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
				Total	In	Out	Total	In	Out
Shopping Center	820	110,000	7,230	165	100	65	640	310	330
General Office	710	60,000	660	95	85	10	90	15	75
Apartments	220	75	500	40	10	30	50	30	20
Total New Trips			8,390	300	195	105	780	355	425
Internal Trip Reduction (Per ITE)			*(610)*	*(30)*	*(15)*	*(15)*	*(70)*	*(35)*	*(35)*
Total Pass-by Trips			*(2,360)*	*(50)*	*(25)*	*(25)*	*(200)*	*(100)*	*(100)*
Net New Trips			5,420	220	155	65	510	220	290

TRIP DISTRIBUTION

The estimated trip distribution pattern was developed based on a review of a select zone assignment provided by the Southwest Washington Regional Transportation Center (RTC) and consideration of both existing land-uses and the location of major trip origins and destinations within Washougal and Clark County. Figure 2 illustrates the estimated trip distribution pattern and site-generated trips during the weekday a.m. and p.m. peak hours. Figure 2 also illustrates the estimated distribution of trips along the four roundabouts that serve 2nd Street, Union Street, and SR 14.

Attachment "C" shows the disaggregated pass-by trip distribution.





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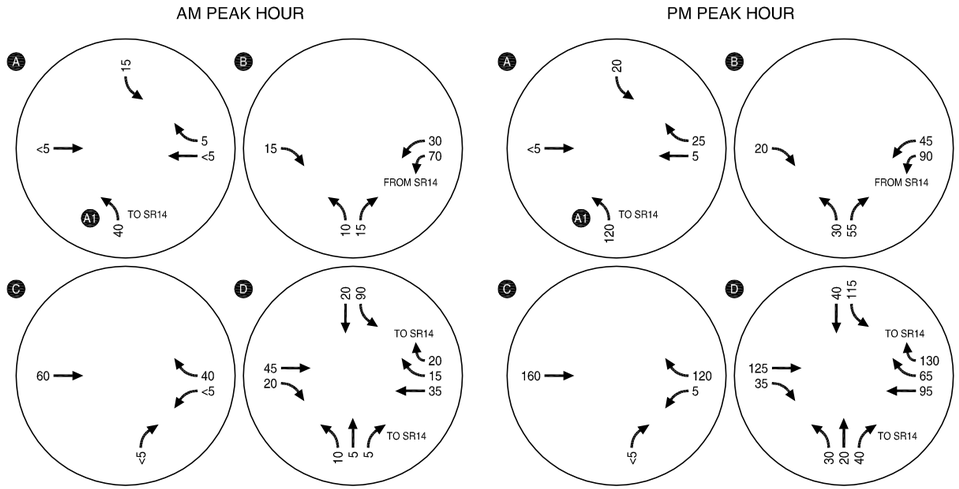

ESTIMATED TRIP DISTRIBUTION PATTERN & NET NEW/ PASS-BY SITE-GENERATED TRIPS
WEEKDAY AM & PM PEAK HOUR
WASHOUGAL, WASHINGTON

FIGURE 2

KITTELSON & ASSOCIATES, INC.
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TRAFFIC OPERATIONAL ANALYSIS STANDARDS

All level of service analyses described in this report were performed in accordance with the procedures stated in the *2000 Highway Capacity Manual* (Reference 5). A description of level of service and the criteria by which they are determined is presented in Attachment "D". Attachment "D" also indicates how level of service is measured and what is generally considered the acceptable range of level of service. The level of service analyses were completed using the Synchro 7 analysis software package.

To ensure that this analysis was based on a reasonable worst-case scenario, the peak 15-minute flow rate during the weekday a.m. and p.m. peak hour was used in the evaluation of all intersection levels of service. For this reason, the analyses reflect conditions that are only likely to occur for 15 minutes out of each average peak hour. Traffic conditions during all other weekday hours will likely operate under better conditions than those described in this report.

City of Camas, City of Washougal, and WSDOT level of service standards were reviewed to ensure traffic operation compliance at the study intersections, as follows:

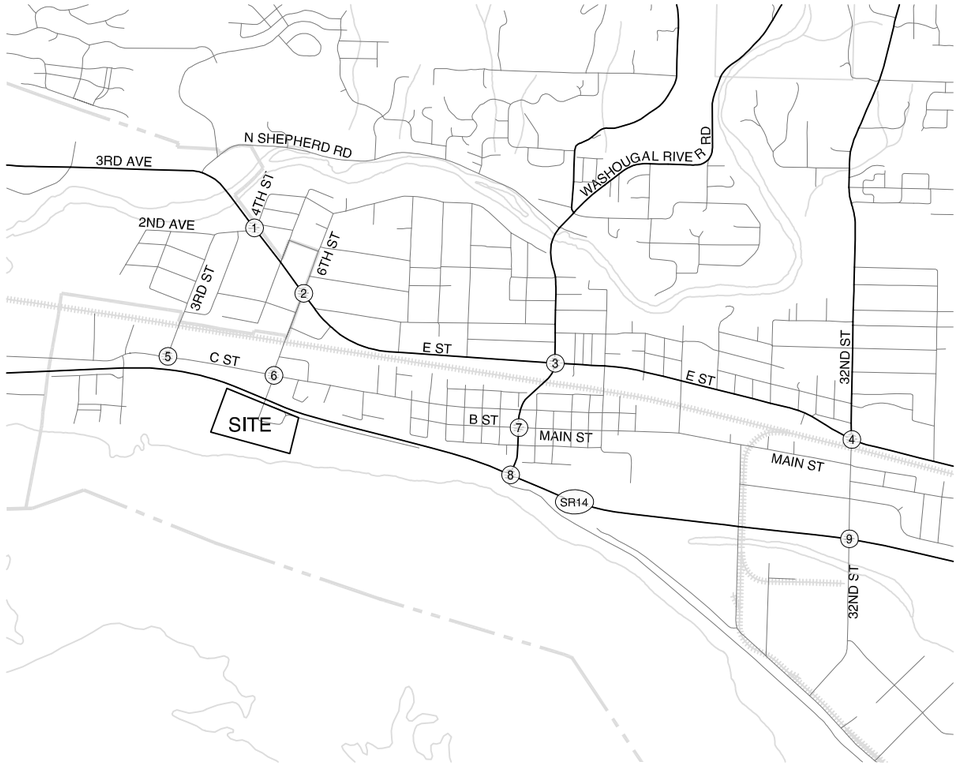
- City of Camas: *"A minimum level of service of C on minor and local streets, and D on collector/arterials or better should be maintained for traffic operations"* (Reference 6).
- City of Washougal: "*The level of service standard for signalized intersections is level of service D or better, with all approaches operating with a volume-to-capacity (v/c) ratio of less than one. For unsignalized intersections, the critical movement on the stop-controlled approach shall operate at level of service E or better"* (Reference 1).
- WSDOT: The level of service standard for state highways of statewide significance (HSS) in urban settings for Clark County, such as SR 14, is level of service D (Reference 7).

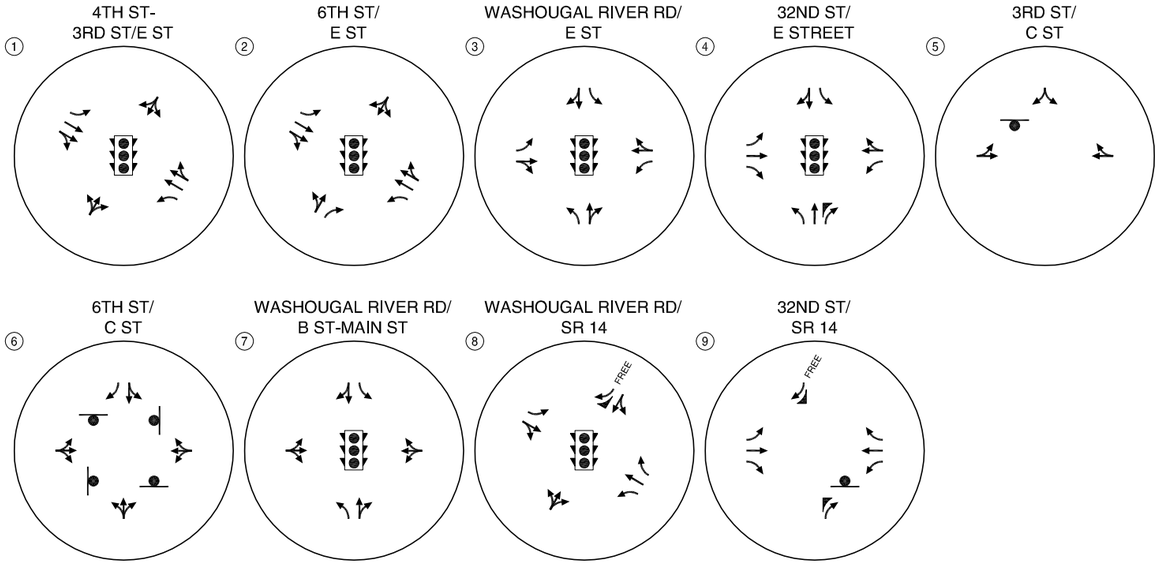
STUDY INTERSECTION TRAFFIC OPERATIONS REVIEW

This section provides an overview of operations at the study intersections under existing, forecast background, and total traffic conditions. Figure 3 illustrates the existing lane configurations and traffic control devices. Figures 4, 5, and 6 summarize existing traffic conditions, forecast year 2020 background, and total traffic conditions at the study intersections during the weekday a.m. and p.m. peak hours, respectively.

As shown in Figures 4, 5, and 6, the study intersections are forecast to operate acceptably under both the existing and forecast future analysis periods. The derivation of the conditions illustrated in Figures 4, 5, and 6 are summarized below.

Attachment "E" contains the traffic analysis worksheets.





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LEGEND

- STOP SIGN
- TRAFFIC SIGNAL

EXISTING LANE CONFIGURATIONS & TRAFFIC CONTROL DEVICES
WASHOUGAL, WASHINGTON

FIGURE 3

KITTELSON & ASSOCIATES, INC.
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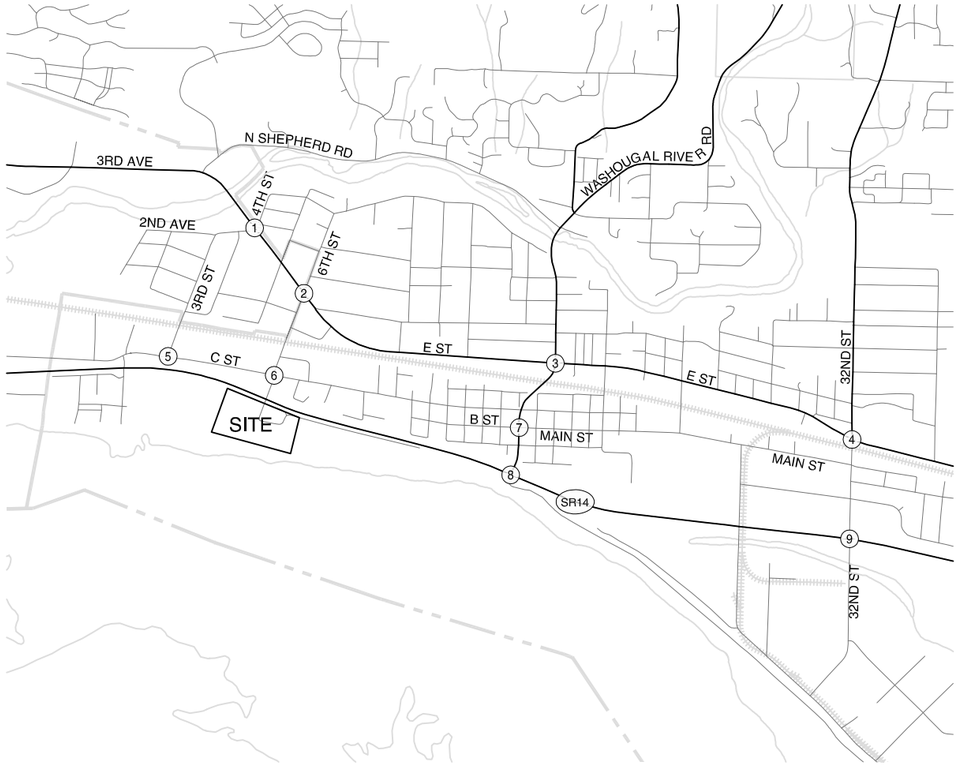
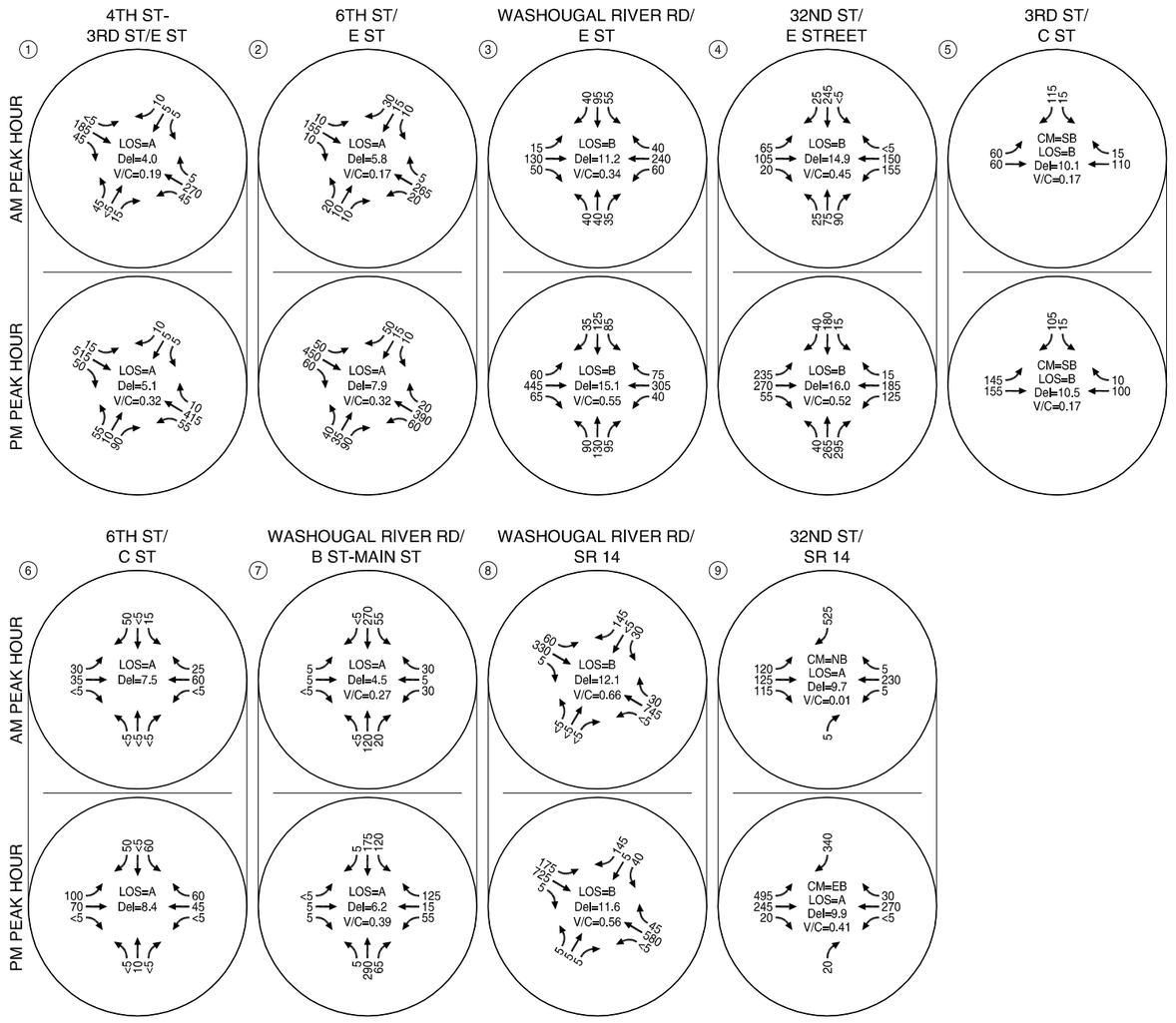




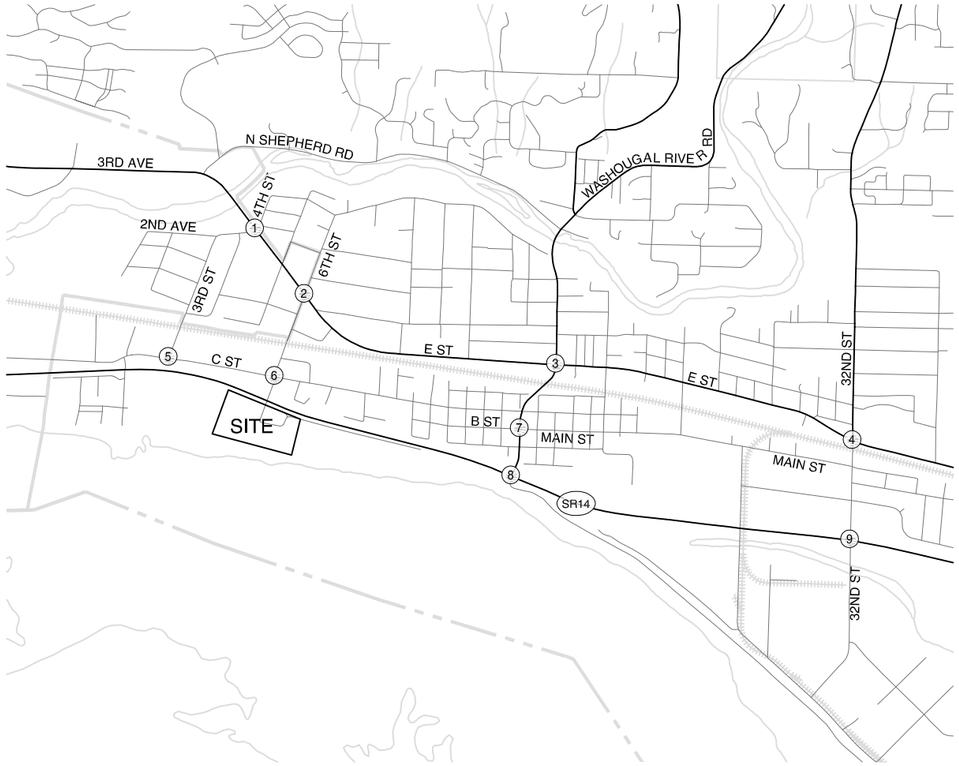
(NO SCALE)

LEGEND

CM = CRITICAL MOVEMENT (UNSIGNALIZED)
LOS = INTERSECTION LEVEL OF SERVICE (SIGNALIZED)/CRITICAL MOVEMENT LEVEL OF SERVICE (UNSIGNALIZED)
Del = INTERSECTION AVERAGE CONTROL DELAY (SIGNALIZED)/CRITICAL MOVEMENT CONTROL DELAY (UNSIGNALIZED)
V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

EXISTING TRAFFIC CONDITIONS
WEEKDAY AM & PM PEAK HOURS
WASHOUGAL, WASHINGTON

FIGURE **4**



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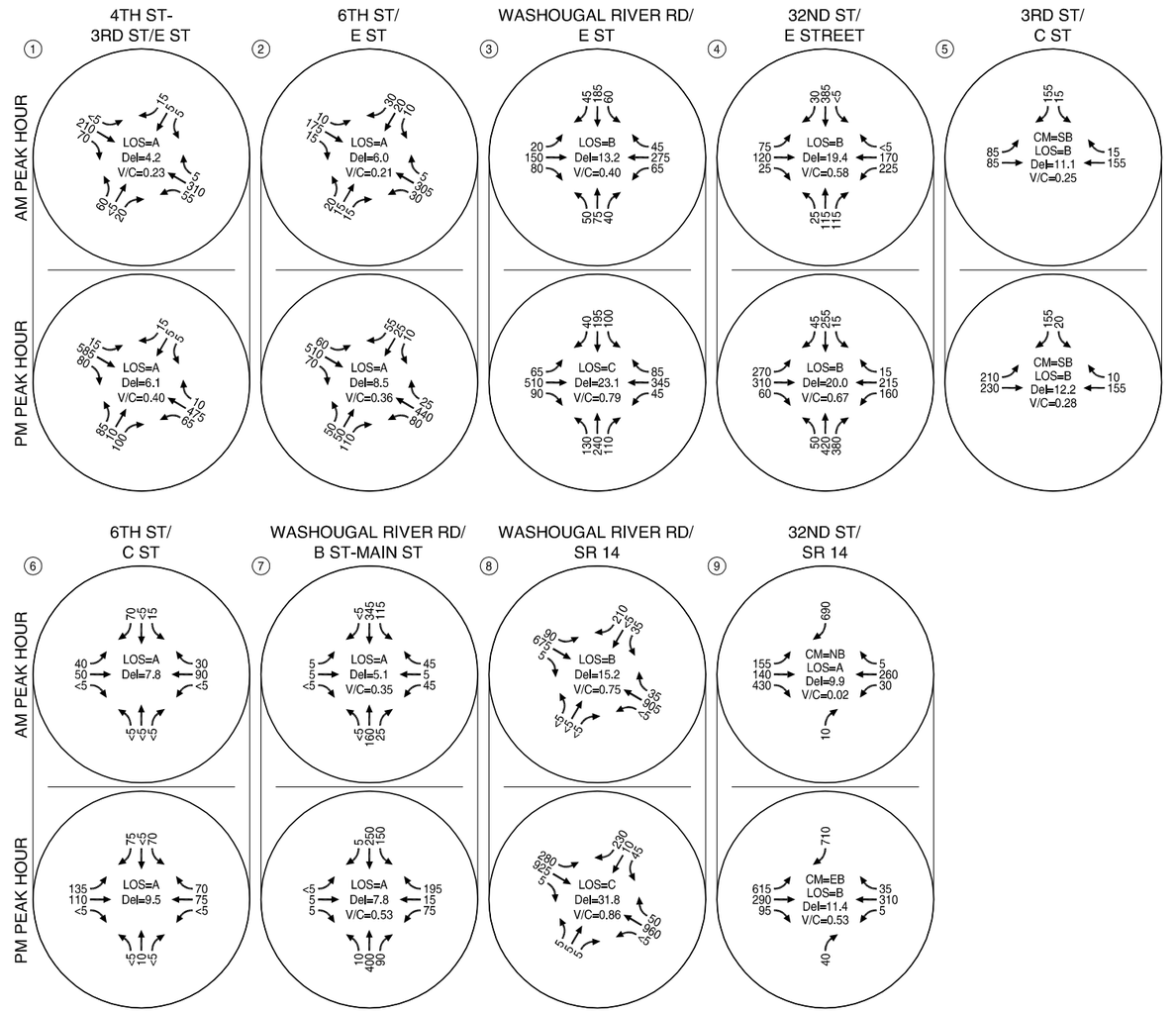

LEGEND

CM = CRITICAL MOVEMENT (UNSIGNALIZED)
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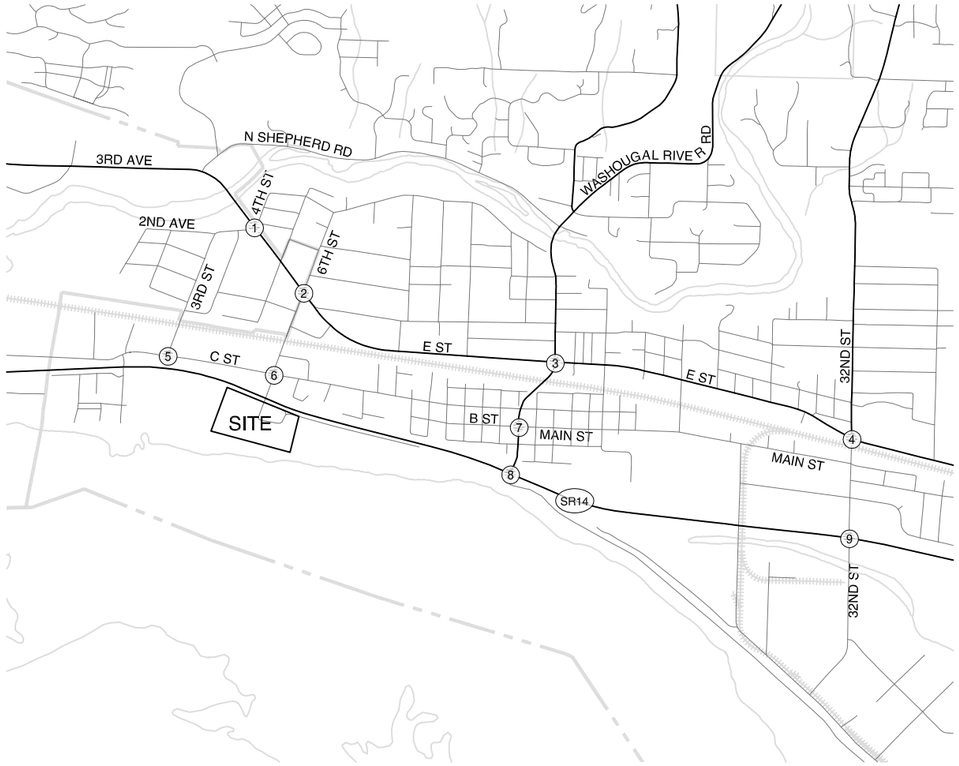
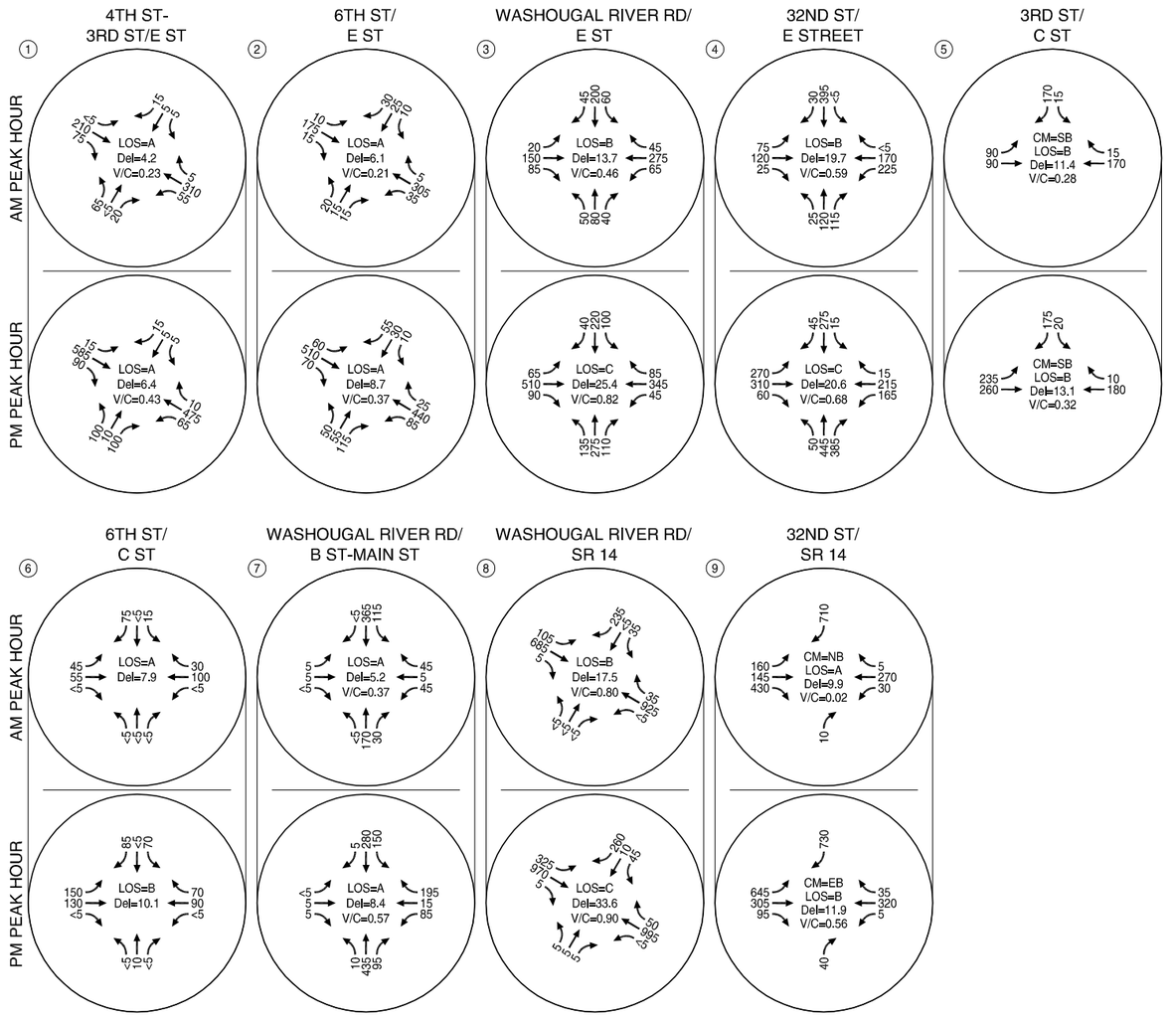
V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

YEAR 2020 BACKGROUND TRAFFIC CONDITIONS
WEEKDAY AM & PM PEAK HOUR
WASHOUGAL, WASHINGTON

FIGURE **5**





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YEAR 2020 TOTAL TRAFFIC CONDITIONS
WEEKDAY AM & PM PEAK HOURS
WASHOUGAL, WASHINGTON

FIGURE 6

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING

Existing Conditions

Weekday a.m. and p.m. peak hour turning movement counts were conducted at the study intersections on midweek days between 7:00 and 9:00 a.m. and 4:00 and 6:00 p.m.[1]

All intersections were found to operate acceptably as shown in Figure 4.

Attachment "F" contains the traffic count sheets used in this study.

2020 Background Traffic Conditions

The 2020 background traffic analysis identifies how the study area's transportation system will operate in 2020 assuming the proposed development has been fully completed. This analysis includes traffic growth due to development within the study area and from general growth in the region, but does not include traffic from the proposed development.

A two percent annual growth rate was applied to the existing 2013 traffic volumes on city streets and a one percent growth rate was assumed along SR 14 to account for near-term regional growth in the area. The annual growth rates were developed based on analysis performed using RTC data and are consistent with the regional growth rate assumed in surrounding jurisdictions. In-process trips associated with previously approved development activities were added to the adjusted traffic volumes to estimate background traffic conditions upon site build-out. The trips associated with the Steigerwald Commerce Center and Parker's Landing developments are the in-process trips accounted for in the analysis.

All of the study intersections were found to operate acceptably as shown in Figure 5.

Attachment "G" contains the in-process trips.

2020 Total Traffic Conditions

The year 2020 total traffic analysis forecasts how the study area's transportation system will operate with the addition of traffic from the proposed development. The year 2020 background traffic volumes for the weekday a.m. and p.m. peak hours were added to the site-generated traffic to arrive at the total traffic volumes.

All of the study intersections were found to operate acceptably as indicated in Figure 6.

[1] A combination of 2012 and 2013 traffic counts were used in this study. A growth rate of 3.5% was applied to the volumes collected in 2012 to reflect 2013 volumes.

Site Driveway Operations and Design

Review of site driveway operations and design should be completed in conjunction with site plan application. Additional details of the site plan configuration and massing will be available at that time and will allow for further assessment of turn lane, traffic control, and sight distance considerations at the site driveways.

FINDINGS AND RECOMMENDATIONS

Based on the results of the transportation impact analysis, the 6th Street Project site can be developed while maintaining acceptable levels of service and safety at the study intersections. The primary findings and recommendations of this study are summarized below.

Findings

Existing Conditions

- All of the study intersections currently satisfy acceptable operating standards during the weekday a.m. and p.m. peak hours.

Year 2020 Background Traffic Conditions

- Year 2020 background conditions were estimated assuming continued local and regional growth. Operational analyses indicate that the study intersections are forecast to continue to operate acceptably under year 2020 background traffic conditions.

Proposed Development Activities

- The proposed development of the 6th Street Project site is estimated to generate approximately 5,240 net new weekday trips, 220 net new a.m. peak hour trips (155 in and 65 out), and 510 net new p.m. peak hour trips (220 in and 290 out).

Year 2020 Total Traffic Conditions

- Year 2020 total traffic conditions were estimated assuming continued local and regional growth plus the proposed site traffic. Operational analyses indicate that the study intersections are forecast to continue to operate acceptably without triggering any transportation improvement measures.

We trust this letter adequately addresses the traffic impacts associated with the proposed 6th Street Project. Please contact us if you have any questions or comments regarding the contents of this report or the analysis completed.

REFERENCES

1. City of Washougal. Municipal Code.
2. C-Tran. http://www.c-tran.com. March 2013.
3. Institute of Transportation Engineers. *Trip Generation, Ninth Edition.* 2012.
4. Institute of Transportation Engineers. *Trip Generation Handbook, Second Edition*. 2012.
5. Transportation Research Board *2000. Highway Capacity Manual.* 2000.
6. City of Camas. *Design Standard Manual*. 2007.
7. WSDOT. *Level of service Standards for Washington State Highways*. 2010.

ATTACHMENTS

Attachment A: Collision Data

Attachment B: Trip Generation

Attachment C: Pass-By Trip Distribution

Attachment D: Description of Level of Service Methods and Criteria

Attachment E: Traffic Operations Worksheets

Attachment F: Existing Traffic Counts

Attachment G: In-process Traffic

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING
610 SW Alder Street, Suite 700, Portland, OR 97205 P 503.228.5230 F 503.273.8169

MEMORANDUM

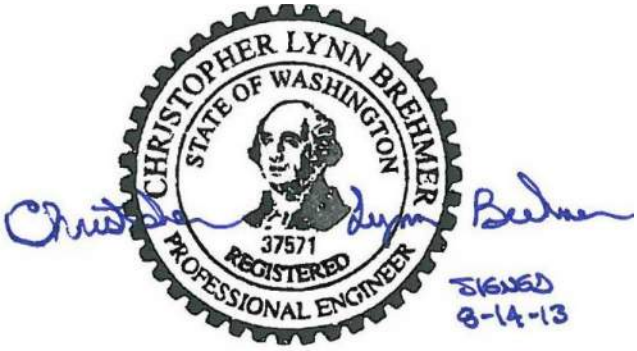
Date: August 14, 2013

Project #: 12170

To: Todd Mobley, P.E.
Lancaster Engineering
321 SW 4th Avenue, Suite 400
Portland, OR 97204

From: Chris Brehmer, P.E.

Subject: Parker's Landing TIA & 6th Street Project TIA
Supplemental Information



As requested, this memorandum provides an analysis of future conditions at the study intersections during the horizon year 2028 assuming completion of both the proposed Parker's Landing development and the Port of Camas-Washougal 6th Street development. Although not typically required, we have prepared the 15-year analysis per staff direction.

This 15-year conditions analysis assumes continued regional growth and supplements the March 28, 2013 *Parker's Landing Traffic Impact Analysis* (March TIA) and the April 12, 2013 *6th Street Project Transportation Impact Analysis* (April TIA) prepared by Kittelson & Associates, Inc. As summarized below, analysis of future 2028 conditions determined that the study intersections will continue to operate acceptably and that no additional mitigation measures are required to accommodate full buildout of both developments.

2028 FUTURE CONDITIONS

Future horizon year 2028 conditions were analyzed in support of development agreements proposed for both properties that would vest trips for 15 years. Key aspects of the future 2028 conditions include:

- The 2028 background volumes were developed assuming a two percent annual growth rate applied to the existing 2013 traffic volumes on city streets and a one percent growth rate applied along SR 14 to account for long-term regional growth in the area (consistent with the two prior TIAs).

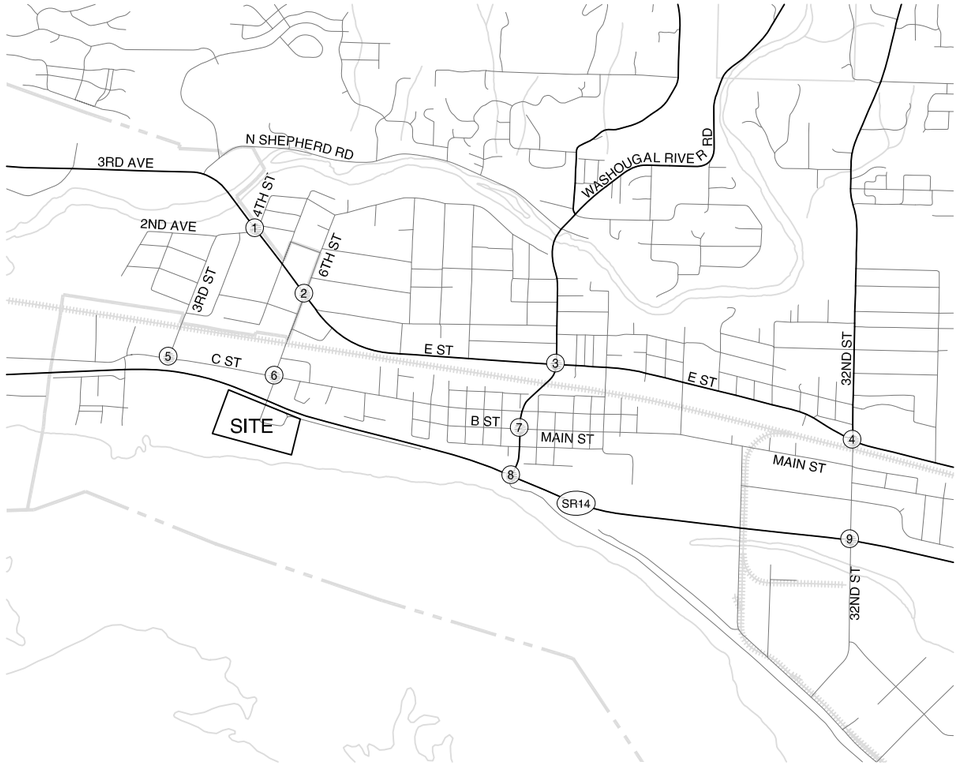
- Trips associated with the Steigerwald Commerce Center development (located south of SR-14 and east of 32nd Street) were assumed as in-process and were accounted for in the analysis.
- Consistent with the April TIA, site-generated trips from the proposed Parker's Landing development were accounted for as in-process trips in 2028.
- 2028 total traffic conditions reflect the addition of site-generated trips associated with the 6th Street Project to the 2028 background traffic volumes.

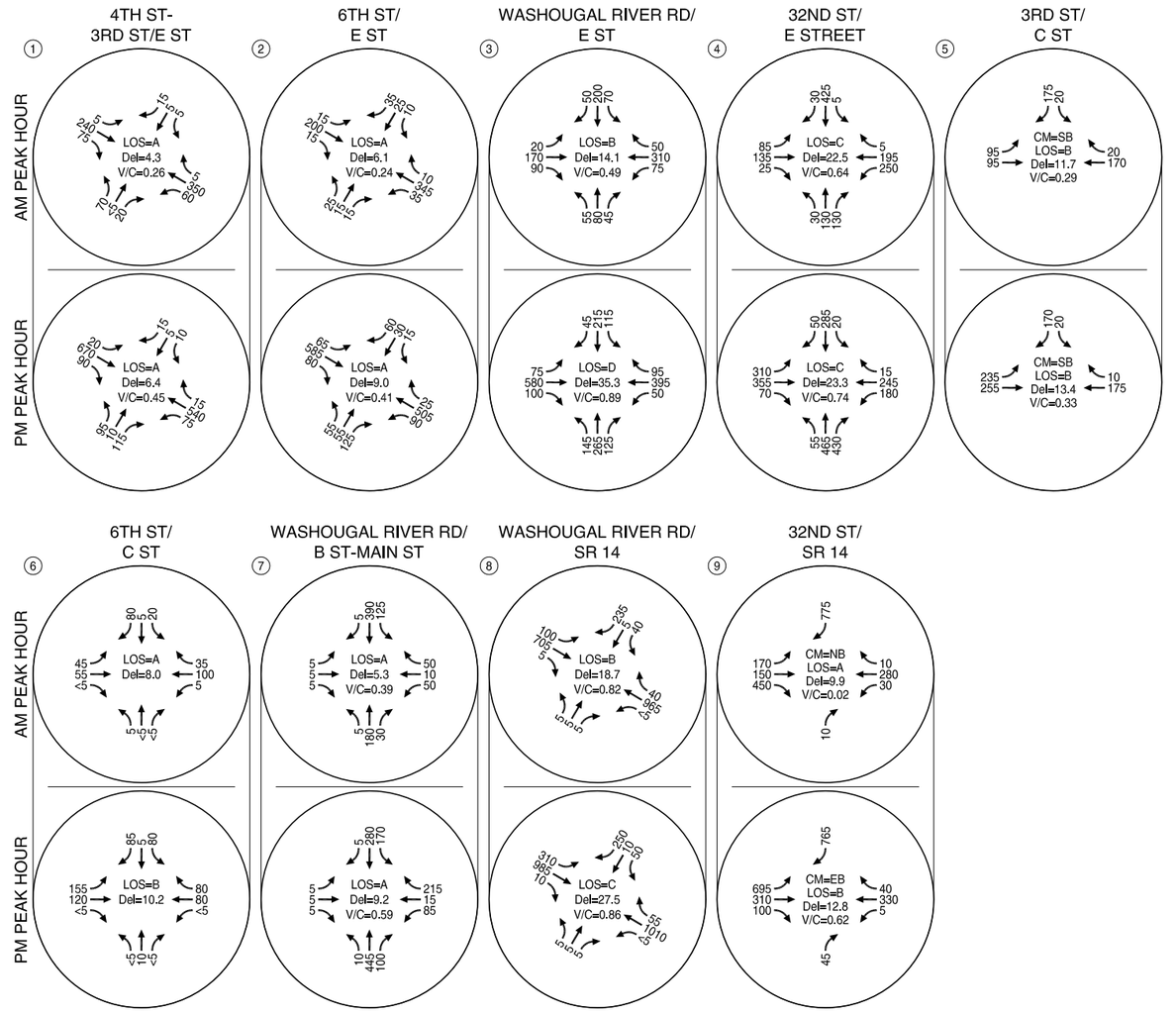
The attached Figures 7 and 8 summarize the background and total traffic conditions. As shown in the two respective figures, all of the study intersections were found to continue to operate acceptably. Accordingly, no additional mitigation measures should be required beyond the recommendations of the March TIA and the April TIA. The Synchro worksheets associated with the 2028 analysis are attached for your review and use.

Please let us know if you have any questions or if you need additional information.

Attachments:

Figure 7, Figure 8, Synchro Worksheets





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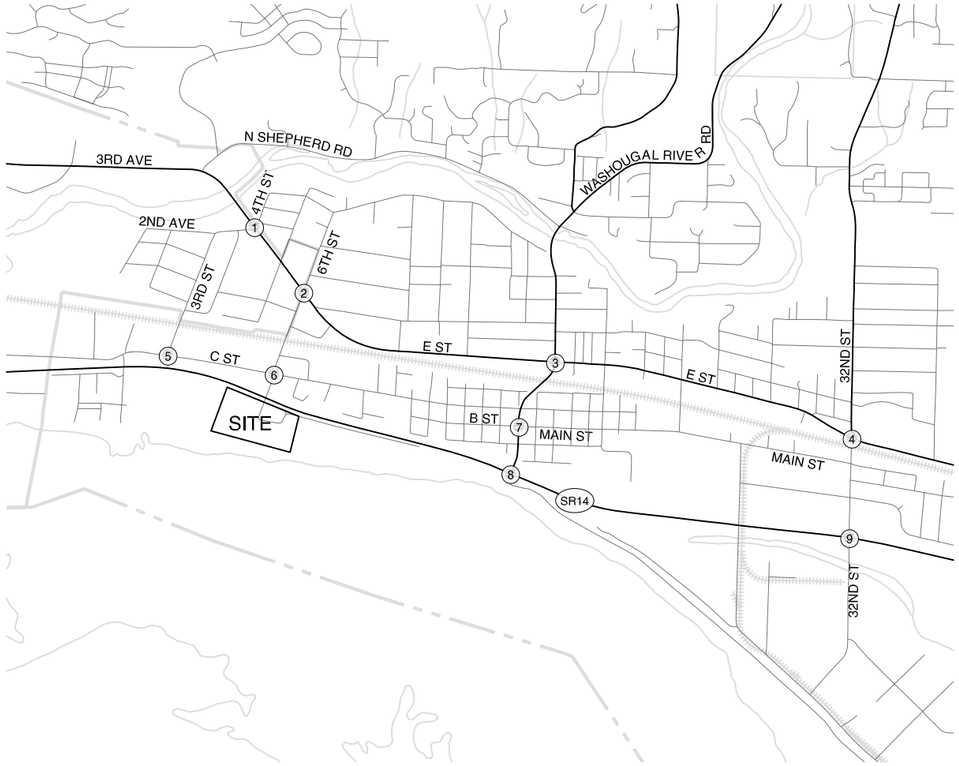
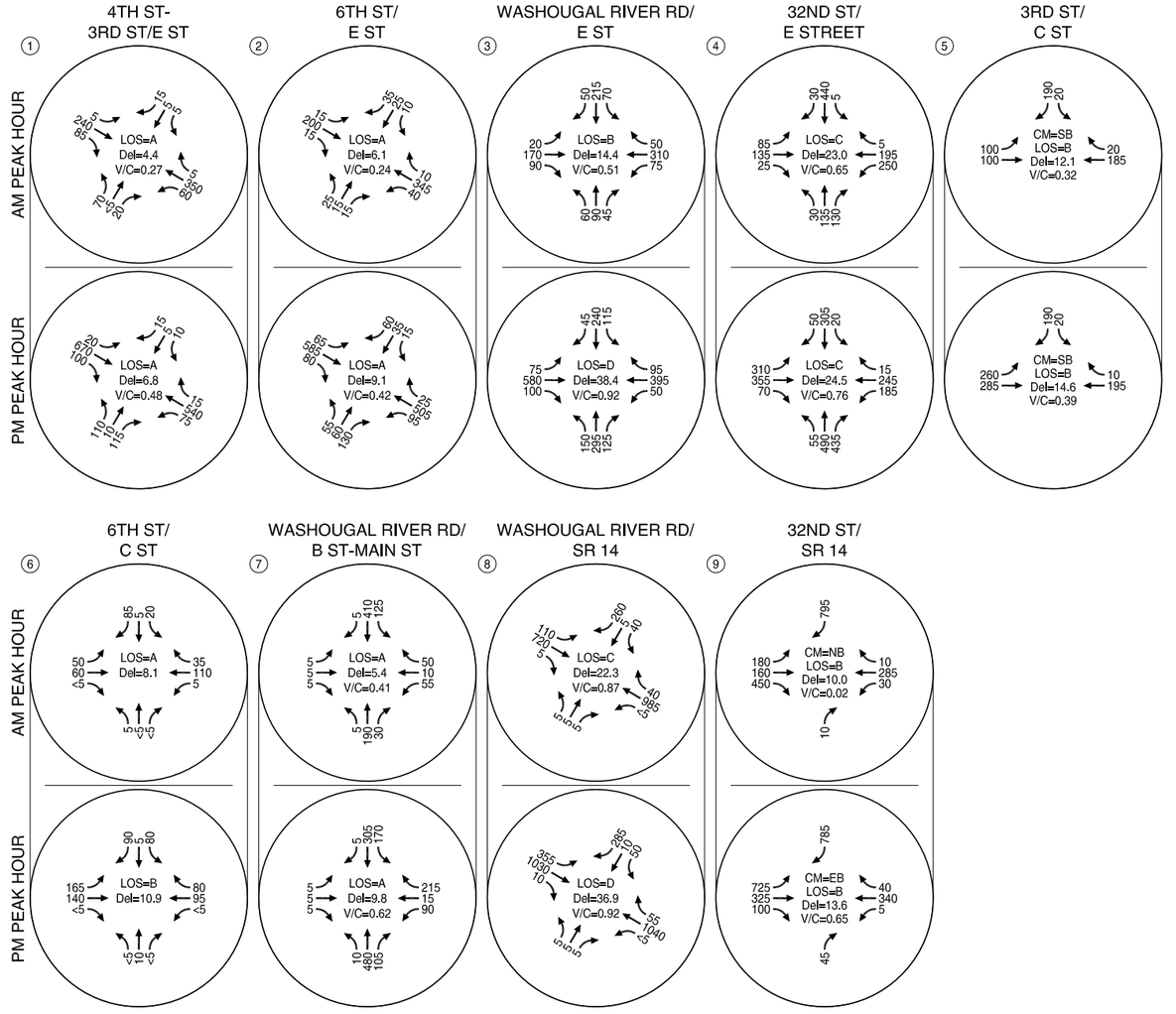
YEAR 2028 BACKGROUND TRAFFIC CONDITIONS
WEEKDAY AM & PM PEAK HOUR
WASHOUGAL, WASHINGTON

FIGURE 7





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YEAR 2028 TOTAL TRAFFIC CONDITIONS
WEEKDAY AM & PM PEAK HOURS
WASHOUGAL, WASHINGTON

FIGURE 8

DRAFT MEMORANDUM

DATE: August 18, 2017

TO: Rob Charles, City of Washougal

FROM: Dana Beckwith, PE, PTOE
Monica Leal, PE

SUBJECT: Washougal Town Center District Traffic Impact Analysis P16-086-000

This memorandum summarizes the traffic impact analysis conducted for key roadway streets and intersections to be impacted by proposed changes in land use densities within the Town Center District in Washougal, Washington. The analysis identifies impacts that these changes in land use densities will have on the existing and proposed transportation network through the horizon year 2035. It also identifies potential improvements required to adequately serve the Town Center District based on performance standards established by the City of Washougal. This analysis is a part of the Washougal Town Center District (TCD) Infrastructure Planning Study.

This memorandum includes the following:

- Project Description
- Inventory and Existing Conditions
- Future Conditions
  - Traffic Impact Analysis
  - Turn Lane Warrant Analysis
  - Traffic Signal Warrant Analysis
- Results and Recommendations

PROJECT DESCRIPTION

The City of Washougal is anticipating changes in land use density within the Town Center District. Modification to the existing roadway network will need to be implemented to accommodate the anticipated traffic growth that goes along with these land use density changes. To evaluate the Town Center transportation system, this study considers planned and reasonable funded roadway improvements, increases in vehicle trip generation and changes in trip distribution for peak traffic periods. For the purposes of this study, the analyses evaluated traffic conditions during the PM peak period, which was considered to be the predominant peak traffic period for the District.

INVENTORY AND EXISTING CONDITIONS

An inventory and evaluation of existing transportation conditions were conducted for key street facilities and intersections that will be impacted by changes in land use density in the Town Center District. The following key intersections were selected for analysis (See Figure 1: Vicinity Map):

1. Main Street/“B” Street/Washougal River Road
2. “A” Street/Washougal River Road
3. Main Street/32nd Street
4. Addy Street/32nd Street

Figure 1: Vicinity Map

All modes of travel including pedestrian, bicycles, transit, and motor vehicles within the study area were evaluated. The existing conditions inventory and data collection includes the following:

- Roadway characteristics within Study Area (See Table 1)
  - Street functional classification
  - Posted speed limits
  - Pedestrian and bicycle facility characteristics
  - Lane geometry
  - On-street parking
  - Transit route information
- Intersection traffic control and signal system operations
- Year 2017 traffic volumes
- Intersection Performance
- Crash data at study intersections (most recent three years)

Table 1: Existing Conditions Within Study Area

Roadway	Functional Classification (1)	Posted Speed Limit	Sidewalks	Bike Lanes	Lane Geometry (Approx. Lane Widths)	On-Street Parking	Transit Routes
Washougal River Rd	Principal Arterial	25 mph	Partial	Yes	One 10.5'-11.5' lane in each direction with NB & SB turn lanes at major intersections	No	Route 92 - Camas (North of "C" St
SE 32nd St	Minor Arterial	25 mph	Partial	No	One 14'-15' lane in each direction. NB & SB turn lanes at major intersections	No	Route 92 - Camas
Main St	Minor Arterial	25 mph	Partial	No	One 12' -13' lane in each direction	Yes	Route 92 - Camas
"B" St	Local Road	25 mph	Yes	No	One 15.5' lane in each direction including parking.	Yes	No
"A" St	Local Roads	25 mph	Partial	No	One 12'-15' lanes in each direction	Partial	No
Addy St	Local Roads	25 mph	Partial	No	One 18' lane in each direction	No	No

Notes:
(1) Functional Classification based on the Final Transportation Capital Facilities Plan, Adopted December 5, 2005. Update Adopted March 14, 2016.

Intersection Traffic Control and Signal System Operations

Figure 2 shows the existing lane configuration and traffic control at the study intersections. Existing signal timing and signal system operations data for the Main Street/"B" Street /Washougal River Road intersection was provided by Clack County[1] for use in developing the existing conditions intersection performance (operational) analysis. The complete existing signal operations data is included in Appendix A.

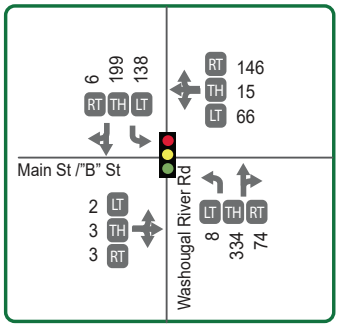
Existing Year 2017 Traffic Volumes

Traffic volumes for the study intersections were developed based on available historical and new turn movement counts within the study area and an annual growth of 3.79%[2]. The following available turn movement counts were used to developed year 2017 turn movement traffic volumes for the four study intersections:

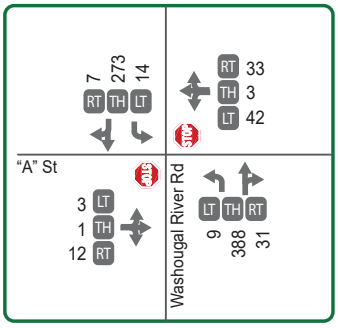
- Main Street/ "B" street/ Washougal River Road: PM Peak Hour traffic counts collected on February 12, 2013
- "A" Street/Washougal River Road: PM Peak Hour traffic counts collected on May 2, 2017
- Main Street/32nd Street: PM Peak Hour traffic counts collected on June 3, 2010
- Addy Street/32nd Street: PM Peak Hour traffic counts collected on July 24, 2012

Figure 2 shows the 2017 PM peak hour turn movement traffic volumes for the four study intersections. The complete traffic count data can be found in Appendix B.

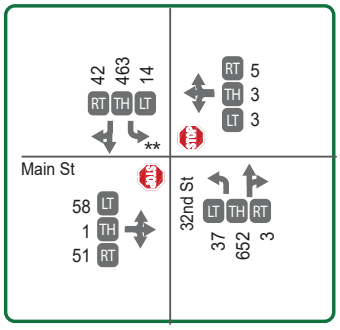
[1] Signal timings provided by the Clark County on April 17, 2017.
[2] Growth rate based on 2010 and 2035 downtown select link information provided by the Regional Transportation Council (RTC) on April 21, 2017.



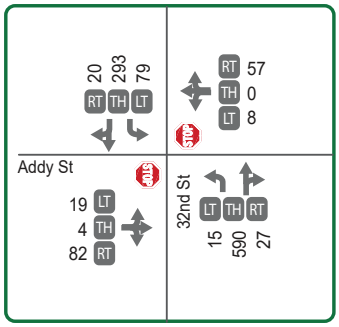
1 Main St / Washougal River Rd *



2 "A" St / Washougal River Rd



3 Main St / 32nd St



4 Addy St / 32nd St

NOTES:

*** Trucks are not allowed on Main St/"B" St east of Washougal River Rd**
**** Short left turn lane storage without left turn lane striping**

GLOBAL Transportation Engineering

XX = PM Peak Hour Traffic Volumes
= Lane Configuration
LT TH RT = Left / Through / Right
(X) = Intersection

Figure 2:
Existing Year 2017
PM Peak Hour Traffic Volumes

The Steigerwald Commerce Center traffic study dated January 2013 was reviewed as part of the future traffic volume development. The study indicated a 40% build out of its overall trip generation by the year 2018 which includes 257 PM peak hour trips. Based on discussion with City Staff, the level of build-out is lower than the study forecasted for 2018. Steigerwald Commerce Center generated trips based on the 2013 study where therefore not added to the historical count data used in development of the year 2017 traffic volumes.

Existing Intersection Performance

The "Existing Year 2017 Traffic Volumes" data was used to evaluate PM peak period traffic operations at the study intersections for existing year 2017 conditions. The City of Washougal utilizes level of service D or better to evaluate whether signalized intersections will operate adequately and a level of service E or better for the critical movement at unsignalized intersections[3] (See Appendix C). The level of service for the study intersections was determined using the 2010 Highway Capacity Manual (HCM)[4] methodology for calculating intersection operations. Table 2 shows a summary of the results and complete Synchro results can be found in Appendix D. All the study intersections meet the City of Washougal mobility standards during the existing conditions scenario, except for the Main Street/32nd Street intersection that is operating at level of service E.

Table 2: Existing Year 2017 Intersection Performance Summary, PM Peak Hour

Int #	Intersection	PM Peak Hour	
		LOS[1]	Average Delay (Sec/Veh)[1]
Signalized Intersections			
1	Main Street/"B" Street/Washougal River Road	A	7.1
Unsignalized Intersections[2]			
2	"A" Street/Washougal River Road	B (EB)	12.1 (EB)
3	Main Street/32nd Street	E (EB)	48.3 (EB)
4	Addy Street/32nd Street	C (EB)	18.2 (EB)

Notes:
[1] LOS and Average Delay is based on the 2010 Highway Capacity Manual (HCM).
[2] Delay (sec/vehicle) and Level of Service (LOS) reported for the worst stop controlled approach
XX = Intersection operates below City of Washougal Mobility Standards

Crash Analysis

Historical crash data was analyzed for the study intersections. Crash data was obtained from WSDOT[5] for the years 2014 through 2016 and is summarized in Table 3. During this three-year period, there were 11 crashes and 8 injuries (injuries occurred during 5 of the 11 crashes) reported at the study intersections. No fatalities, pedestrian or bicycle crashes were reported. A review of the accident data identified no specific collision patterns. All the crashes were related to the following driver behavior:

- Inattention
- Following too close

[3] Level of Service Standards, Washougal Municipal Code, Title 18.90.050 Levels of service standard and analysis.
[4] 2010 Highway Capacity Manual, Transportation Research Board, 2010.
[5] Crash data provided by WSDOT on September 22, 2016.

- Improper backing
- Driver didn't grant ROW to another vehicle

Detailed historical crash data for years 2014 through 2016 can be found in Appendix E.

Table 3: Study Intersection Crash Data (2014 – 2016)

Crash Type	Study Intersection Data by Year											
	Int 1: Main St/"B" St/Washougal River Rd			Int 2: A St/Washougal River Rd			Int 3: Main St/32nd St			Int 4: Addy St/32nd St		
YEAR	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
Angle	0(0)	0(0)	0(0)	0(0)	0(0)	1(1) [4]	0(0)	1(1) [4]	0(0)	2(3) [1]	1(2) [4]	1(0)
Rear End	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	1(1) [1, 3]	1(0) [3]	0(0)
Turning	2(0) [2]	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Improper Backing	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	1(0)	0(0)	0(0)
Subtotal	2(0)	0(0)	0(0)	0(0)	0(0)	1(1)	0(0)	1(1)	0(0)	4(4)	2(2)	1(0)
Total	2(0)			1(1)			1(1)			7(6)		

xx(xx)= number of accidents (number of injuries)
Notes:
[1] Accident due to driver's inattention.
[2] One crash due to inattention and the other did not grant ROW to another vehicle
[3] Driver was following too closely
[4] Driver did not grant ROW to another vehicle

FUTURE CONDITIONS

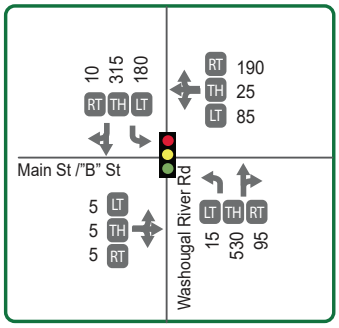
Future transportation conditions were evaluated for the key street intersections. The changes in land use density in the Town Center Area will change the level of traffic utilizing city streets. The analysis included the addition of the "A" Street/Addy Street connection from 20th Street to 27th Street (See Appendix F). The future conditions analysis includes the following:

- Year 2035 Traffic Volumes
- Traffic Impact Analysis
- Turn Lane Warrant Analysis
- Traffic Signal Warrant Analysis

Year 2035 Traffic Volumes

An annual growth of 3.79%[6] was applied to the existing year 2017 traffic volumes to determine future year 2035 traffic volumes. Seasonal adjustment factors were not applied to the existing traffic counts. Figure 3 shows the year 2035 PM peak hour turn movement traffic volumes.

[6]Based on 2010 and 2035 downtown in/out link information provided by the Regional Transportation Council (RTC) on April 21, 2017.



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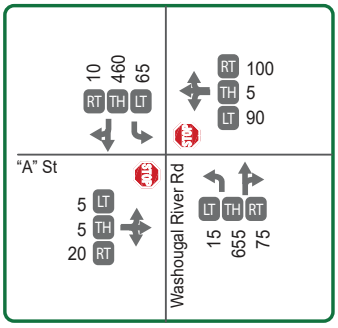
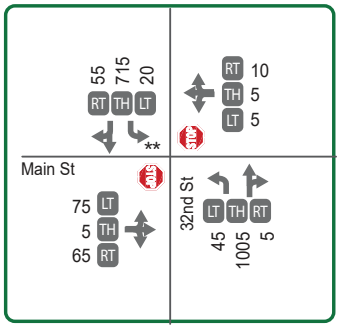
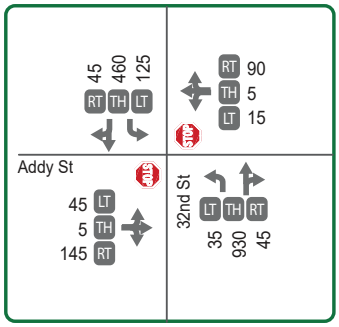


2 "A" St / Washougal River Rd



3 Main St / 32nd St



4 Addy St / 32nd St

NOTES:

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GLOBAL Transportation Engineering

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Figure 3:
Year 2035
PM Peak Hour Traffic Volumes

TRAFFIC IMPACT ANALYSIS

To identify operational concerns with changes in the land use density in the Town Center District, a traffic impact analysis was conducted for future year 2035 study intersection performance. The Synchro/Sim Traffic operations software was used to evaluate the intersection performance and identify operational issues due to geometric and traffic control (i.e. traffic signal and stop control) constraints.

As part of the traffic impact analysis, turn lane and traffic signal warrants were evaluated at the study intersections to identify improvements that will facilitate traffic flow and safety. Future intersection improvements (mitigations) were identified for those intersections that operationally fall below the City of Washougal mobility standard, level of service D for signalized intersections and level of service E for the critical movement at unsignalized intersections. A queuing analysis was also conducted to identify storage lane lengths at the study intersections for the year 2035 mitigated condition.

2035 Intersection Performance

Future year 2035 traffic volume data was used to evaluate traffic operations at the study intersections during the PM peak period under existing geometric conditions. Table 4 shows a summary of the results and complete Synchro results can be found in Appendix G. The three unsignalized intersections will operate below City of Washougal mobility standards under the year 2035 scenario. These intersections include:

- "A" Street/Washougal River Road
- Main Street/32nd Street
- Addy Street/32nd Street

The Main Street/"B" Street/Washougal River Road will meet City of Washougal mobility standards.

Table 4: Year 2035 Intersection Performance Summary, PM Peak Hour

Int #	Intersection	PM Peak Hour	
		LOS[1]	Average Delay (Sec/Veh)[1]
Signalized Intersections			
1	Main Street/"B" Street/Washougal River Road	B	11.7
Unsignalized Intersections[2]			
2	"A" Street/Washougal River Road	F (WB)	>50 (WB)
3	Main Street/32nd Street	F (EB/WB)	>50 (EB/WB)
4	Addy Street/32nd Street	F (EB/WB)	>50 (EB/WB)

Notes: [1] LOS and Average Delay is based on the 2010 Highway Capacity Manual (HCM).
[2] Delay (sec/vehicle) and Level of Service (LOS) reported for the worst stop controlled approach
XX = Intersection operates below City of Washougal Mobility Standards

Future Improvements

Future improvements were evaluated to increase safety and to address operational issues at each of the study intersections for the year 2035. Turn lanes at unsignalized intersections provide safety benefits and improve traffic flow by allowing turning vehicles to move out of the through traffic lanes. Changes in traffic control and

intersection geometry provide for operational improvements where increases in traffic volume, travel patterns, and travel modes occur. With this in mind, turn lane warrants, traffic signal warrants, and a mitigation analysis to improve operational deficiencies were conducted.

Left and Right Turn Lane Warrant Analysis

Left and right turn warrants were evaluated for the unsignalized study intersections. Left turn warrants were analyzed using the *Highway Research Board Report 211* and the *National Cooperative Highway Research Program Report 279* was utilized for right turn lanes warrants. Table 5 shows a summary of the left and right turn lane warrant analysis results under the year 2035 scenario. The detailed turn lane warrant analysis calculations can be found in Appendix H.

Table 5: Year 2035 Turn Lane Warrant Analysis, PM Peak Hour

Int. #	Unsignalized Intersection	Movement	PM Peak Hour	
			Left Turn HRB Warrant Met?	Right Turn NCHRP WarrantMet?
2	"A" Street/Washougal River Road	NB SB EB WB	Yes (Existing) Yes (Existing) No No	Yes No No No
3	Main Street/32nd Street	NB SB EB WB	Yes (Existing) [1] Yes[2] No No	No Yes No No
4	Addy Street/32nd Street	NB SB EB WB	Yes (Existing) Yes (Existing) [1] No No	Yes No Yes No

Notes: [1] Existing two-way left turn lane
[2] Short left turn lane storage without striping. The BNSF railroad tracks are located about 220 ft. north of the intersection.

As shown in Table 5, the unsignalized intersections warrant the addition of turn lanes. The warranted left turn lanes already exist except for a SB left turn lane at the Main Street/32nd Street intersection where a short vehicle storage lane exists today. The location of the existing BNSF railroad tracks approximately 220 feet north of the Main Street/32nd Street intersection and the northbound left turn lane at the E Street/32nd Street intersection needs to be taken into account when considering the addition of the warranted SB left turn lane. None of the warranted right turn lanes exist today.

Traffic Signal Warrant Analysis

The *Manual on Uniform Traffic Control Devices* methodology was used to evaluate PM Peak Period Traffic Signal Warrants (Warrant 3) at all the unsignalized study intersections. Table 6 summarizes the traffic signal warrant analysis results for the year 2035. Detailed traffic signal warrant calculations can be found in Appendix I. The three unsignalized intersections meet signal warrants under the year 2035.

Table 6: Year 2035 Traffic Signal Warrant Analysis for the PM Peak Period

Int #	Unsignalized Intersections	Year 2035 Conditions
		PM
2	"A" Street/Washougal River Road	Yes
3	Main Street/32nd Street	Yes
4	Addy Street/32nd Street	Yes

Mitigation Measures

Year 2035 traffic volume data was used to evaluate mitigation measures for the study intersections during the PM peak period. No intersection operations or safety issues were identified at the Main Street/Washougal River Road signalized intersection. The evaluation of the remaining study intersections included the following mitigations:

- The addition of turn lanes for intersections when turn lane warrants are met.
- Traffic signal control where traffic signal warrants are met.

Figure 4 summarizes the proposed mitigation measures identified for each intersection. Table 5 shows a summary of the intersection performance results. The complete year 2035 mitigated Synchro results can be found in Appendix J.

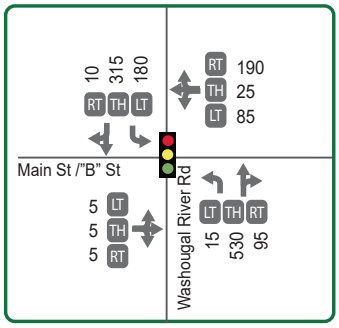
Table 5: Mitigated Intersection Performance Summary, PM Peak Hour

Int #	Intersection	PM Peak Hour	
		LOS[1]	Average Delay (Sec/Veh)[1]
Ex. Unsignalized Intersections – Analyzed as Signalized Intersections with Warranted Turn Lanes[1]			
2	"A" Street/Washougal River Road	A	7.5
3	Main Street/32nd Street	A	8.5
4	Addy Street/32nd Street	A	9.8
Notes:[1] LOS and Average Delay is based on the 2010 Highway Capacity Manual (HCM).			

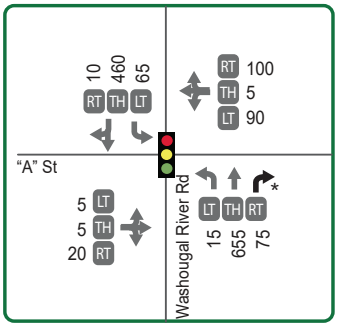
The addition of traffic signal control and turn lanes for the intersections allows the three unsignalized intersections to operate at an acceptable level of service A in the year 2035.

Based on the Steigerwald Commerce Center traffic analysis report dated January 2013, reviewed as part of this traffic analysis, a traffic signal is recommended in conjunction with the proposed development when the generated trips reach 260 AM peak hour trips and 257 PM peak hour trips (approximately 40% of the development capacity). The Steigerwald Commerce Center traffic analysis report also recommends adding a separate eastbound right turn lane on Addy Street[7].

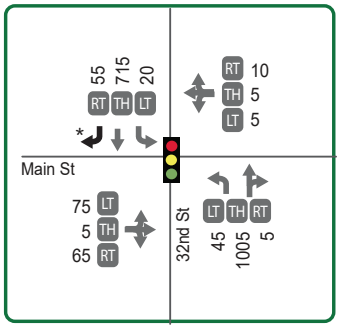
[7] Based on additional analysis done as part of this study, the EB right turn lane on Abby Street was recommended. Memorandum dated March 8, 2013 (Appendix).



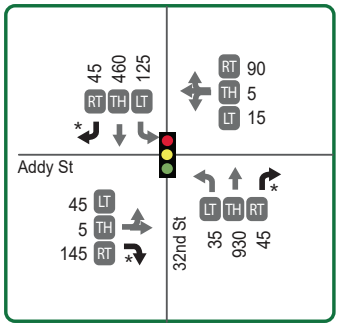
1 Main St / Washougal River Rd



2 "A" St / Washougal River Rd



3 Main St / 32nd St



4 Addy St / 32nd St

NOTES:

*** New turn lane**

GLOBAL Transportation Engineering

XX = PM Peak Hour Traffic Volumes

= Lane Configuration

LT TH RT = Left / Through / Right

(X) = Intersection

Figure 4:

Year 2035 with Mitigation Measures

Mitigated Condition Queuing Analysis

The 95th percentile queue lengths anticipated to occur for storage associated with turn lanes at study intersections under the year 2035 mitigate conditions were estimated. Table 6 shows the 95th percentile queue lengths and recommended storage lengths to accommodate those queues. The detailed queuing analysis calculations can be found in Appendix K.

Table 6: 95th Percentile Vehicle Queue for year 2035 Mitigated Conditions

Int #	Intersection	Movement	Existing Storage Length (ft)	Estimated 95th Percentile Vehicle Queue Length (ft)	Recommended Storage Length (ft)
Signalized Intersections					
1	Main Street/"B" Street/Washougal River Road	NB Lt SB Lt	60 65	50 103	60 100
2	"A" Street/Washougal River Road	NB Lt SB Lt NB Rt	60 65 -	48 83 97	60 100 100
3	Main Street/32nd Street	NB Lt SB Lt SB Rt	Two-Way Lt * -	263 50 85	275 50* 100
4	Addy Street/32nd Street	NB Lt SB Lt NB Rt EB Rt	80 Two-Way Lt - -	78 385 92 103	80 400 100 100

Notes: * Short left turn lane storage without striping exists at the intersection. The BNSF railroad tracks are located about 220 ft. north of the intersection as well as the northbound left turn lane for the 32nd Street/"E" Street intersection. Storage lengths are estimated based on a 25-foot vehicle length.

RESULTS AND RECOMMENDATIONS

A traffic impact analysis was conducted for key street facilities and intersections selected by the City of Washougal as part of the Washougal Town Center District (TCD) Infrastructure Planning Study. This analysis identified the impacts that changes in land use density within the downtown area will have on the existing and proposed transportation system through the horizon year 2035. The Main Street/"B" Street/Washougal River Road, "A" Street/Washougal River Road, Main Street/32nd Street, and Addy Street/32nd Street intersections were included in this analysis.

Existing Conditions

Year 2017 Traffic operations at the study intersections were evaluated during the PM peak period. All the study intersections meet the City of Washougal mobility standards during the existing conditions scenario, except for the Main Street/32nd Street intersection that is operating at level of service E.

Historical crash data was analyzed at the study intersections for the years 2014 through 2016. During this three-year period, there were 11 crashes and 8 injuries (injuries occurred during 5 of the 11 crashes) reported at the study intersections. No fatalities, pedestrian or bicycle crashes were reported. A review of the accident data identified no specific collision patterns.

Future Conditions

Year 2035 Traffic operations were evaluated at the study intersections during the PM peak period. The three unsignalized intersections will operate below City of Washougal mobility standards under the year 2035 scenario. These intersections include the "A" Street/Washougal River Road, Main Street/32nd Street and Addy Street/32nd Street intersections. The Main Street/"B" Street/Washougal River Road will meet City of Washougal mobility standards under the year 2035 scenario.

Left and right turn lanes are warranted at each of the unsignalized study intersections. The warranted left turn lanes exist today except for a SB left turn lane at the Main Street/32nd Street intersection where a short vehicle storage lane exists today. The location of the existing BNSF railroad tracks approximately 220 feet to the north and the northbound left turn lane at the 32nd Street/"E" Street intersection needs to be considered for the addition of the warranted SB left turn lane at the Main Street/32nd Street intersection. None of the warranted right turn lanes exist today. The warranted left and right turn lanes include the following:

- Main Street/"B" Street/Washougal River Road:
  - NB Left - Existing
  - SB Left – Extend lane to 100 ft.
- "A" Street/Washougal River Road:
  - NB Left - Existing
  - SB Left – Extend lane to 100 ft.
  - NB Right – Add a 100 ft. lane
- Main Street/32nd Street:
  - NB Left – Add a 275 ft. lane (a two-way left turn lane exists today)
  - SB Left – Add a 50 ft. lane (A short non-striped left turn lane exists today)
  - SB Right – Add a 100 ft. lane
- Addy Street/32nd Street:
  - NB Left – Existing
  - SB Left - Add a 400 ft. lane (a two-way left turn lane exists today)
  - EB/NB Right – Add a 100 ft. lane

The *Manual on Uniform Traffic Control Devices* methodology was used to evaluate PM Peak Period Traffic Signal Warrants (Warrant 3) at all the unsignalized study intersections. The three unsignalized intersections meet signal warrants under the year 2035 scenarios. These intersections include the following:

- "A" Street/Washougal River Road
- Main Street/32nd Street
- Addy Street/32nd Street

Mitigation

The addition of traffic signal control and turn lanes for the intersections allows the three unsignalized intersections to operate at an acceptable level of service A in the year 2035. No mitigated measurements were evaluated at the signalized Main Street/"B" Street/Washougal River Road intersection since intersection operations/safety issues were not identified.

Based on the Steigerwald Commerce Center traffic analysis report dated January 2013, a traffic signal is recommended in conjunction with the proposed development when the generated trips reach 260 AM peak hour trips and 257 PM peak hour trips (approximately 40% of the development capacity). The Steigerwald Commerce Center traffic analysis report also recommends adding a separate eastbound right turn lane on Addy Street.

E STREET MIXED-USE
TRAFFIC IMPACT STUDY

Prepared for:

Tom Leaptrott
Columbia Forge and Machine Works
3825 Grant St.
Washougal WA, 98671

Prepared by:

H. Lee & Associates, PLLC
P.O. Box 1849
Vancouver, WA 98668
(360) 727-3119

February 22, 2023

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SECTION I
STUDY SUMMARY

INTRODUCTION

This traffic impact analysis has been prepared to assess transportation impacts related to the proposed E Street Mixed-Use development in Washougal, Washington. The project site is located at 1800 E Street in Washougal, Washington and is comprised of the following eight tax lots: 75320000, 75330001, 75330000, 75340000, 75350000, 71861000, 71862000, and 71396000. Figure 1 shows the project vicinity.

Project Description

The proposed project is a mixed-use development comprised of an 8,153 square foot fabrication shop, 7,474 square feet of retail use, and 45 residential apartment units. Access to the site will be from connections to the existing E. Street/18th Street and E. Street/19th Street intersections as well as a connection to 20th Street. Figure 2 shows the project site plan.

Scope of Traffic Impact Study

The scope of the traffic impact study was developed from known City of Washougal traffic study requirements. From these requirements, the following intersections were analyzed:

- E Street/Washougal River Road
- C Street/Washougal River Road
- E Street/18th Street/Project Access
- E Street/19th Street/Project Access
- E Street/20th Street/Project Access
- 20th Street/Project Access

The remainder of this report presents the following analysis:

- Existing traffic conditions in the project study area.
- 2028 "Without Project" condition to establish the baseline condition by which the project impacts are determined.
- Trip generation estimates for the proposed development.
- 2028 "With Project" condition to determine project traffic impacts.

SUMMARY OF FINDINGS

Findings

The following are the findings from the traffic analysis:

- The proposed development is expected to generate 591 daily, 36 A.M. peak hour (17 in, 19 out), and 67 P.M. peak hour (34 in, 33 out) net new trips.

- All of the study area intersections are projected to meet the City of Washougal's level of service standards in the 2028 "Without Project" and 2028 "With Project" conditions.

- All of the AASHTO corner sight distance requirements can be met at all project access intersections as long as the sight distance triangles are properly maintained by trimming any vegetation within the sight distance triangles so it doesn't obscure the motorist's view and no obstructions are placed within the sight distance triangles that obscure the motorist's view. The corner sight distances should be reconfirmed at the final engineering/construction stage of development to assure that any design/construction element does not preclude the necessary corner sight distance requirement.

- Turn lane warrants at the existing E Street/18th Street/Project Access and E Street/19th Street/Project Access intersections were not conducted because a two-way center left turn lane already exists along E Street. Turn lane warrants at the proposed 20th Street/Project Access intersection were not conducted due to low traffic volumes, acceptable levels of service, and acceptable accident rates.

Recommendations

- Based on the traffic impact analysis documented in this report, no off-site mitigation would be needed with the build out of the proposed project.

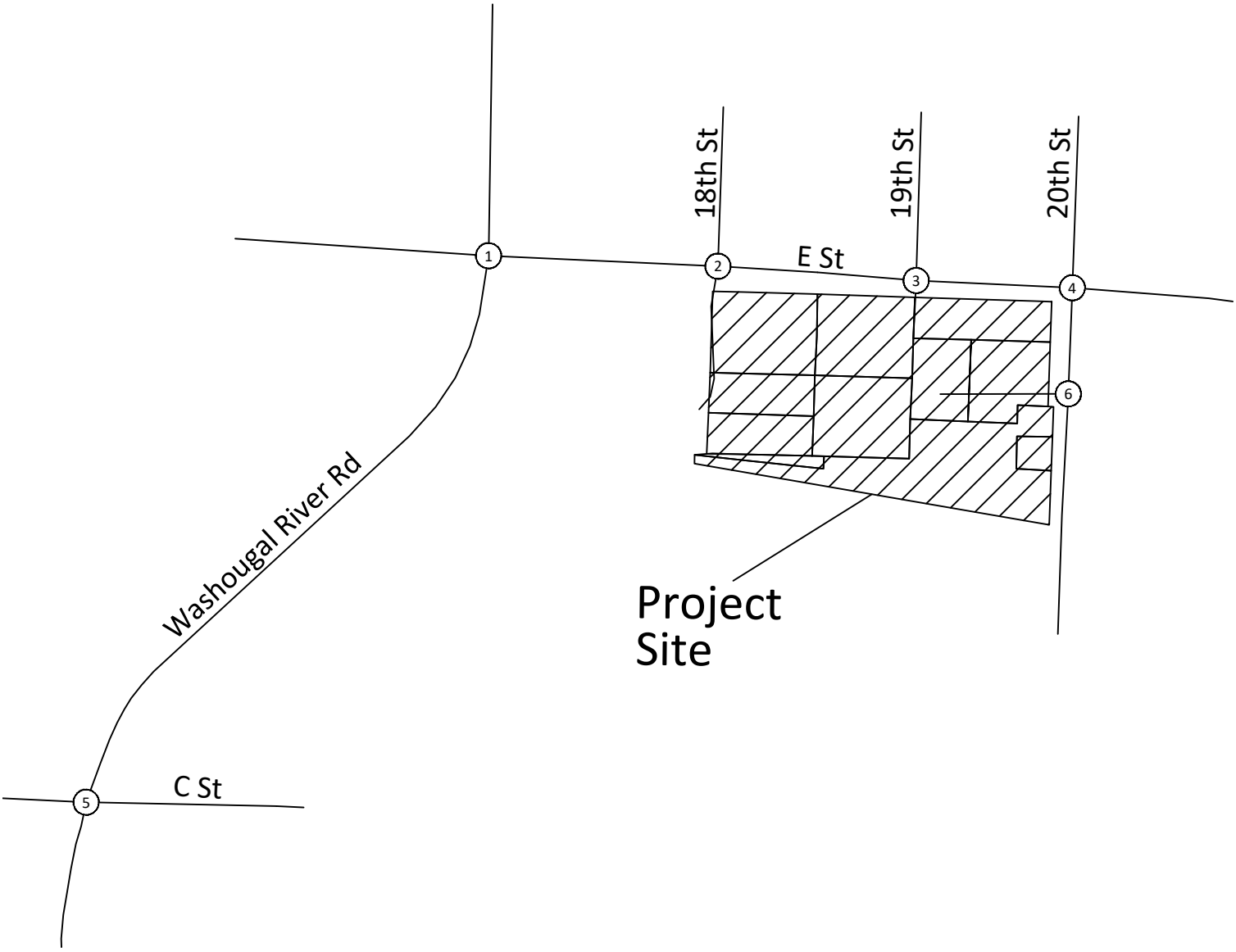

FIGURE 1
Site Vicinity Map

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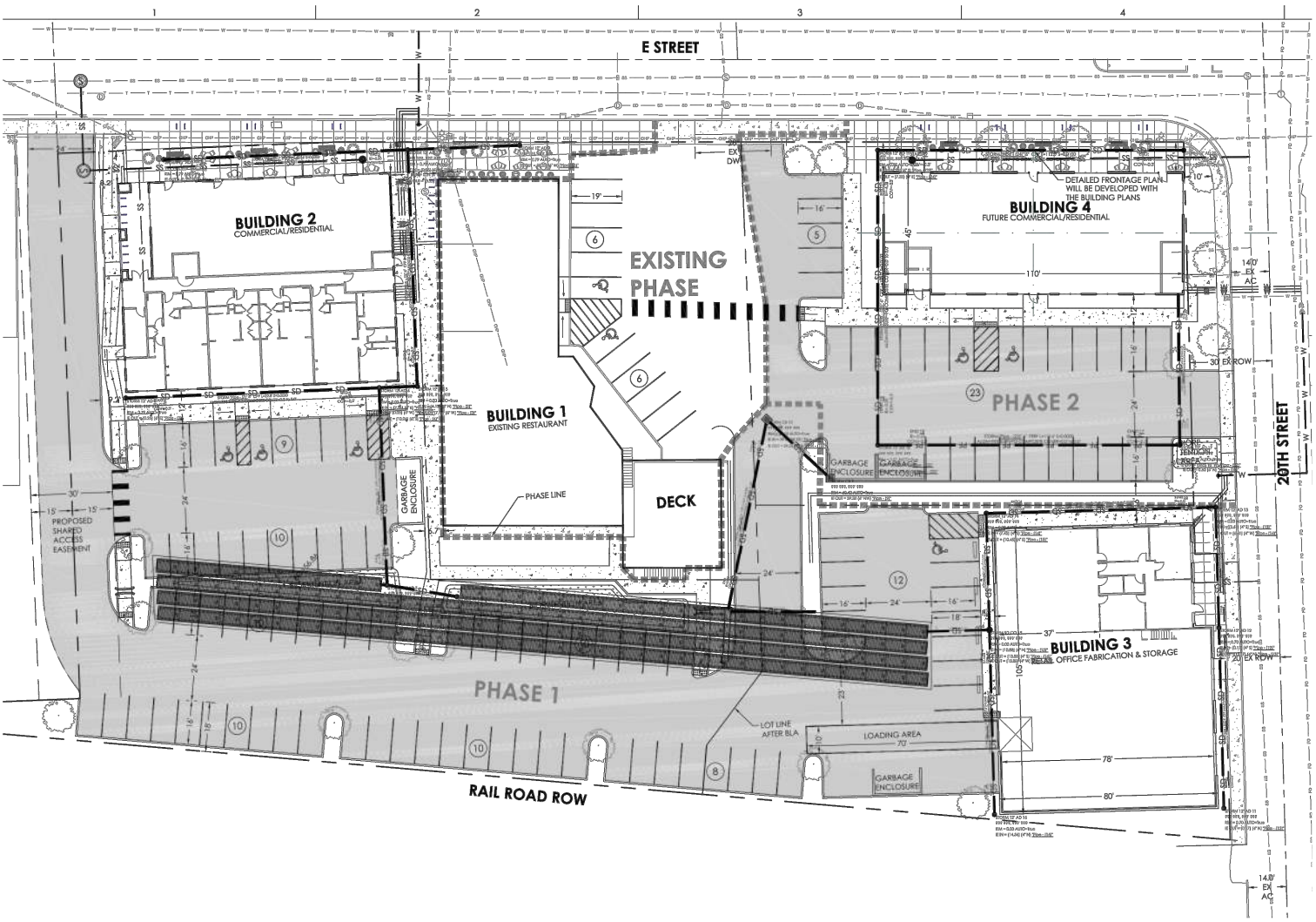

FIGURE 2
Site Plan

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SECTION II
EXISTING CONDITIONS

SITE CONDITION AND ADJACENT LAND USE

Three buildings on-site will be demolished upon the construction of the proposed development. These buildings include a single-family detached home, an accessory building to the home, and the building containing Twin City Transmission. The Washougal Times restaurant also exists on site and will be retained. Vacant land and railroad right-of-way and tracks exist immediately to the south. Residential and commercial uses surround the remainder of the project site.

TRANSPORTATION FACILITIES

The following provides a description of the existing street system in the study area.

C Street: C Street is a two-lane urban collector roadway west of Washougal River Road. C Street is a two-lane local roadway west of Washougal River Road. Sidewalks exist along the north side of the roadway and intermittently along the south side of the roadway. The posted speed limit is 25 mph.

E Street: E Street is a three-lane principal arterial roadway with a two-way center turn lane west of Washougal River Road. E Street is a three-lane minor arterial roadway with a two-way center turn lane east of Washougal River Road. Sidewalks and bike lanes exist along both sides of the roadway. The posted speed limit is 30 mph.

Washougal River Road: Washougal River Road is a two-lane minor arterial roadway with additional turn lanes at major intersections north of E Street. Washougal River Road is a two-lane principal arterial roadway with additional turn lanes at major intersections south of E Street. Sidewalks exist along both sides of the roadway in the project vicinity. The posted speed limit is 25 mph.

18th Street: 18th Street is a two-lane local roadway. Sidewalks exist along both sides of the roadway north of E Street. The posted speed limit is 25 mph.

19th Street: 19th Street is a two-lane local roadway. The posted speed limit is 25 mph.

20th Street: 20th Street is a two-lane local roadway. Sidewalks exist along both sides of the roadway north of E Street. South of E Street sidewalks exist along the west side of roadway and intermittently along the east side of the roadway. The posted speed limit is 25 mph.

As part of this study, levels of service analyses were performed for the following intersections:

- E Street/Washougal River Road
- C Street/Washougal River Road
- E Street/18th Street/Project Access

- E Street/19th Street/Project Access
- E Street/20th Street/Project Access
- 20th Street/Project Access

The E. Street/Washougal River Road intersection is a signalized intersection. All of the remaining study area intersections are unsignalized and stop sign controlled. Figure 3 shows the existing lane configurations and traffic control at these intersections.

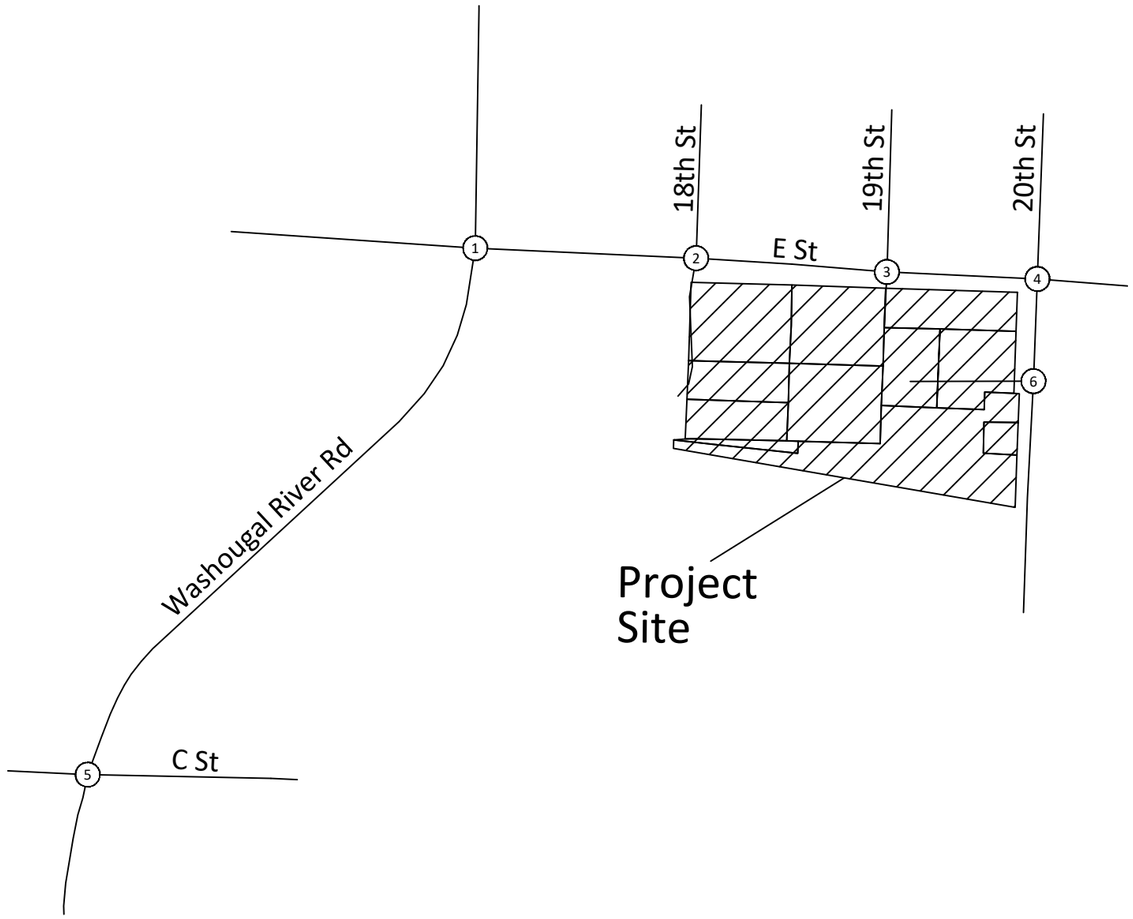
EXISTING TRAFFIC VOLUMES

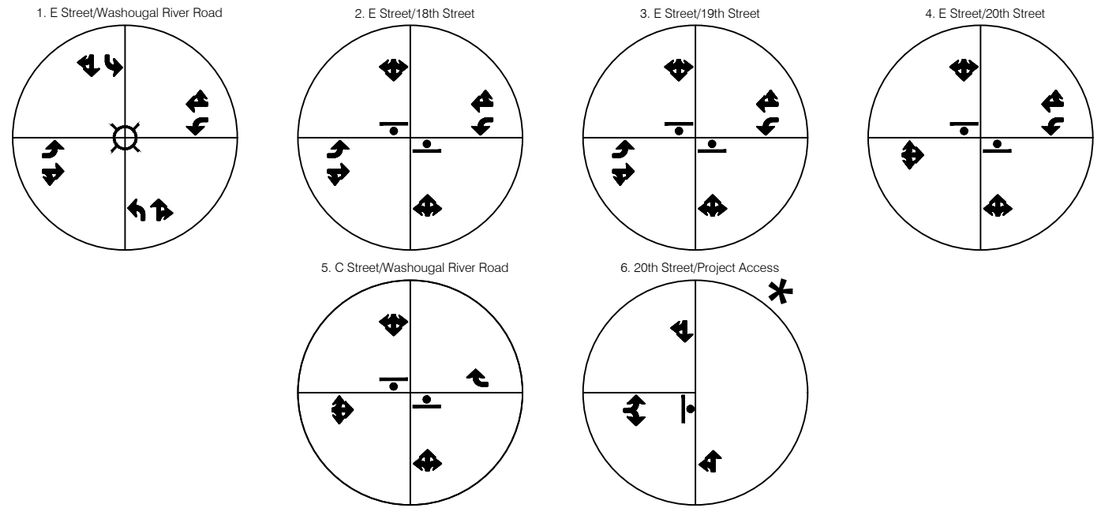
A.M. and P.M. peak hour traffic counts were obtained at the study area intersections by H. Lee & Associates, PLLC (HLA) in June 2022. Per the Highway Capacity Manual (HCM) 7th Edition, peak 15-minute traffic volumes were multiplied by four (4) to arrive at the peak hour traffic volumes. With this methodology of developing peak hour traffic volumes, the peak hour factor (PHF) is set to 1.00 because the peaking has already occurred by multiplying the peak 15-minute traffic volume by four (4). The existing condition traffic volumes are presented in Figure 4. The existing traffic counts can be referenced in Appendix A.

EXISTING LEVEL OF SERVICE

Based on the traffic volumes in Figure 4 and the existing lane configurations presented in Figure 3, peak hour traffic operations were analyzed at the study area intersections using the methodologies outlined in the Highway Capacity Manual (HCM) 7th Edition. According to the HCM, there are six levels of service (LOS) by which the operational performance of an intersection may be described. These levels of service range between LOS "A" which indicates a relatively free-flowing condition and LOS "F" which indicates operational breakdown.

WMC 18.90.050. defines the City of Washougal's level of service standard. For signalized intersections, LOS D is the level of service standard. For unsignalized intersections, LOS E is the level of service standard.





LEGEND

Lane Usage

Traffic Signal

Stop Sign

* 2027 "With Project" Lane Configuration

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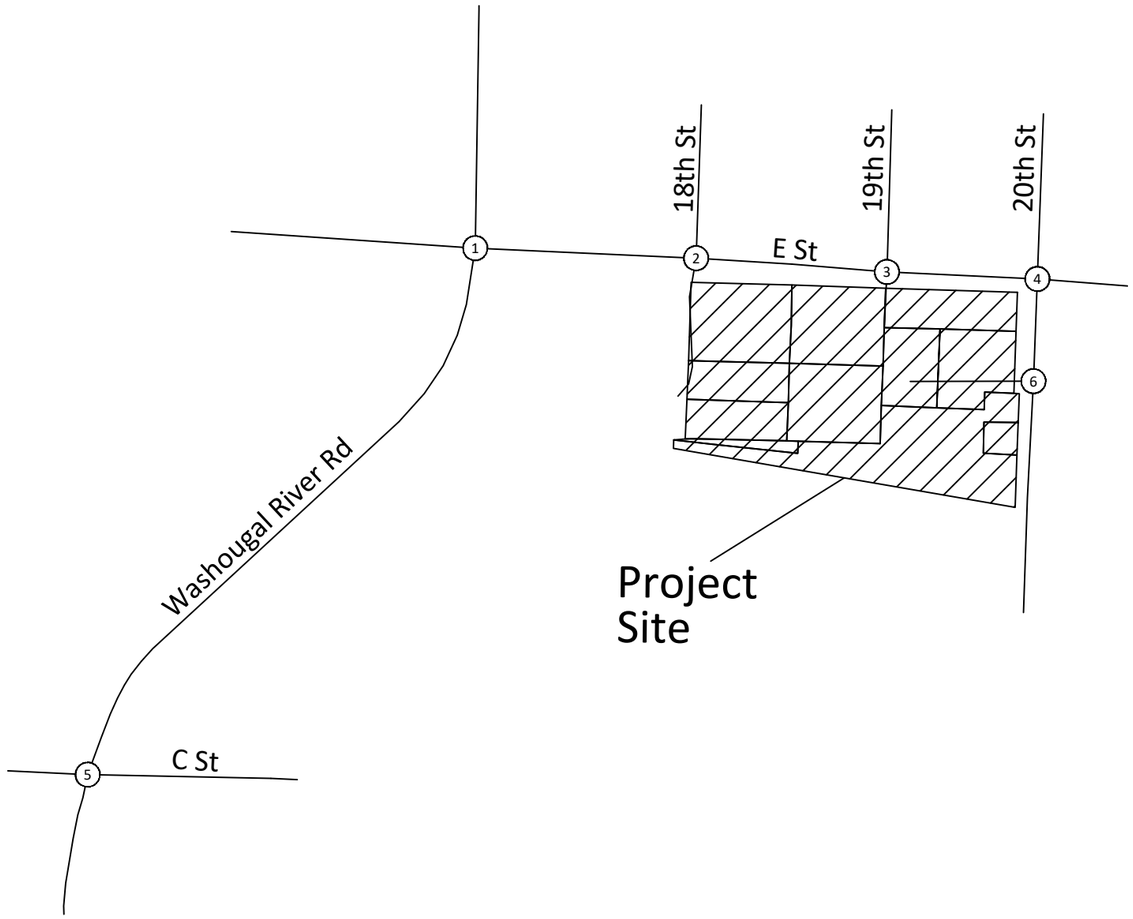
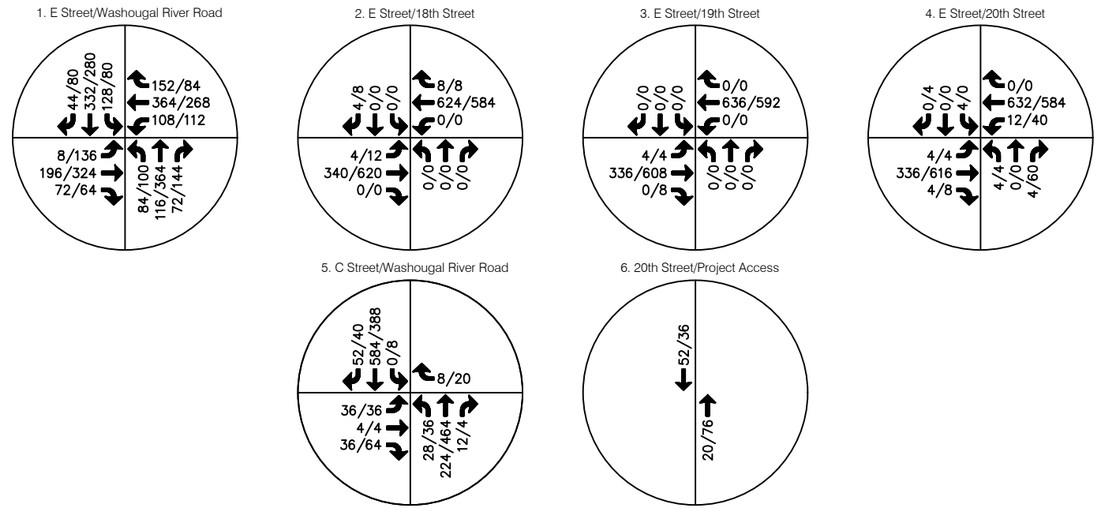
FIGURE 3
Existing Lane Configuration and Traffic Control





LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

NOT TO SCALE

FIGURE 4
Existing A.M. and P.M.
Peak Hour Traffic Volumes

Existing levels of service were calculated at the study area intersections with the existing traffic volumes shown in Figure 4 and the existing lane configurations shown in Figure 3. The results of the analysis are shown in Table 1 for the study area intersections. As shown in Table 1, all of the study area intersections are currently operating at acceptable levels of service of LOS C or better in the existing condition. Appendix B contains the level of service worksheets for the existing condition.

Table 1. Existing Levels of Service

	A.M. Peak Hour		P.M. Peak Hour	
Signalized Intersection	LOS	Average Delay (sec)	LOS	Average Delay (sec)
E Street/Washougal River Road	B	10.8	B	14.2
Unsignalized Intersection				
E Street/18th Street				
Northbound Approach	A	0.0	A	0.0
Southbound Approach	B	12.5	B	12.1
Eastbound Left	A	8.9	A	8.7
Westbound Left	A	0.0	A	0.0
E Street/19th Street				
Northbound Approach	A	0.0	A	0.0
Southbound Approach	A	0.0	A	0.0
Eastbound Left	A	8.9	A	8.7
Westbound Left	A	0.0	A	0.0
E Street/20th Street				
Northbound Approach	C	16.0	C	15.1
Southbound Approach	C	15.8	B	12.0
Westbound Left	A	8.9	A	8.7
Eastbound Approach	A	8.0	A	8.9
C Street/Washougal River Road				
Northbound Left	A	8.9	A	8.2
Southbound Left	A	0.0	A	8.3
Eastbound Approach	C	18.2	C	18.5
Westbound Right	B	10.2	B	11.2

ACCIDENT HISTORY

Accident data was obtained from the Washington State Department of Transportation (WSDOT) for the five-year, six-month, and twenty-five day period between January 1, 2018 and January 26, 2023. The data includes total accidents and accidents by severity (i.e. fatal, injury or property damage only). This accident data is summarized in Table 2. Appendix C contains the accident data.

Generally, an accident rate of less than 1.00 accidents per million entering vehicles is considered acceptable and no further analysis is necessary. As shown in Table 2, all of the accident rates at the study area intersections are below 1.00 accidents per million entering vehicles, so no further analysis was conducted.

Table 2. Summary of Traffic Accident History in Study Area

Intersection	Average Annual Accidents				acc/mev[2]
	PDO[1]	Injury	Fatal	Total	
E Street/Washougal River Road	2.2	1.6	0.0	3.8	0.41
E Street/18th Street	0.6	0.0	0.0	0.6	0.11
E Street/19th Street	0.0	0.0	0.0	0.0	0.00
E Street/20th Street	0.4	1.2	0.0	1.6	0.27
C Street/Washougal River Road	0.6	0.4	0.0	1.0	0.21
20th Street/Project Access	0.0	0.0	0.0	0.0	0.00

[1] PDO = property damage only
[2] acc/mev = accidents per million entering vehicles

EXISTING PUBLIC TRANSIT SERVICE

C-Tran provides public transit service in the City of Washougal. Currently Route #92 (Camas/Washougal) provides service adjacent to the project site.

Route #92 provides service to and from Fisher's Landing Transit Center, Safeway, and Washougal High School. The route provides service along the following roadways: SE Cascade Park Drive, SE 164th Avenue, SR-14, NW 6th Avenue, NE Adams Street, NE 3rd Avenue, E Street, Washougal River Road, Evergreen Way, 39th Street, J Street, 34th Street, Addy Street, 32nd Street, Main Street, 20th Street, and C Street. NE Fourth Plain Boulevard, NE 117th Avenue (SR 503), SW Scotton Way, SW 20th Avenue, W. and E. Main Street, SE Grace Avenue, SE Rasmussen Boulevard, and N. Parkway Avenue. During the weekdays, Route #92 runs from 5:30 A.M. to 9:18 P.M. on approximately 60 minute headways. Weekends and holiday service is provided from 7:00 A.M. to 8:48 P.M. on approximately 60 minute headways.

NON-MOTORIZED TRANSPORTATION

Sidewalks and bike lanes exist along both sides of E Street directly adjacent to the project site. Sidewalks exist along the west side of the 20th Street directly adjacent to the project site.

PLANNED TRANSPORTATION IMPROVEMENTS

There is one known transportation improvement projects planned by the City of Washougal in the immediate project vicinity based on the City of Washougal's Transportation Capital Facilities Plan (CFP), March 14, 2016 which is summarized below:

C Street Improvements – 6th Street to Washougal River Road

This project includes constructing sidewalks and bike lanes along the existing roadway. The total estimated project cost $2,097,080.

SECTION III
TRAFFIC IMPACT ANALYSIS

ANALYSIS METHODOLOGY

The traffic impacts generated by the proposed E Street Mixed-Use development during the A.M. and P.M. peak hour were analyzed as follows:

- The 2028 "Without Project" traffic volumes were established as the future baseline condition for the traffic analysis and to define a baseline by which project impacts are determined. The 2028 "Without Project" condition traffic volumes were derived by using a 2.0 percent compounded annual growth factor and adding traffic generated by "in process" developments. The "in-process" traffic volumes were obtained from City of Washougal staff.

- A.M., P.M., and daily trip generation were estimated for the proposed development using the rates in "Trip Generation, 11th Edition," (Institute of Transportation Engineers, 2021).

- Trip distribution of site-generated traffic was developed from existing count information, previous traffic studies, locations of major employment centers, locations of major residential areas, and logical travel paths to and from major travel corridors.

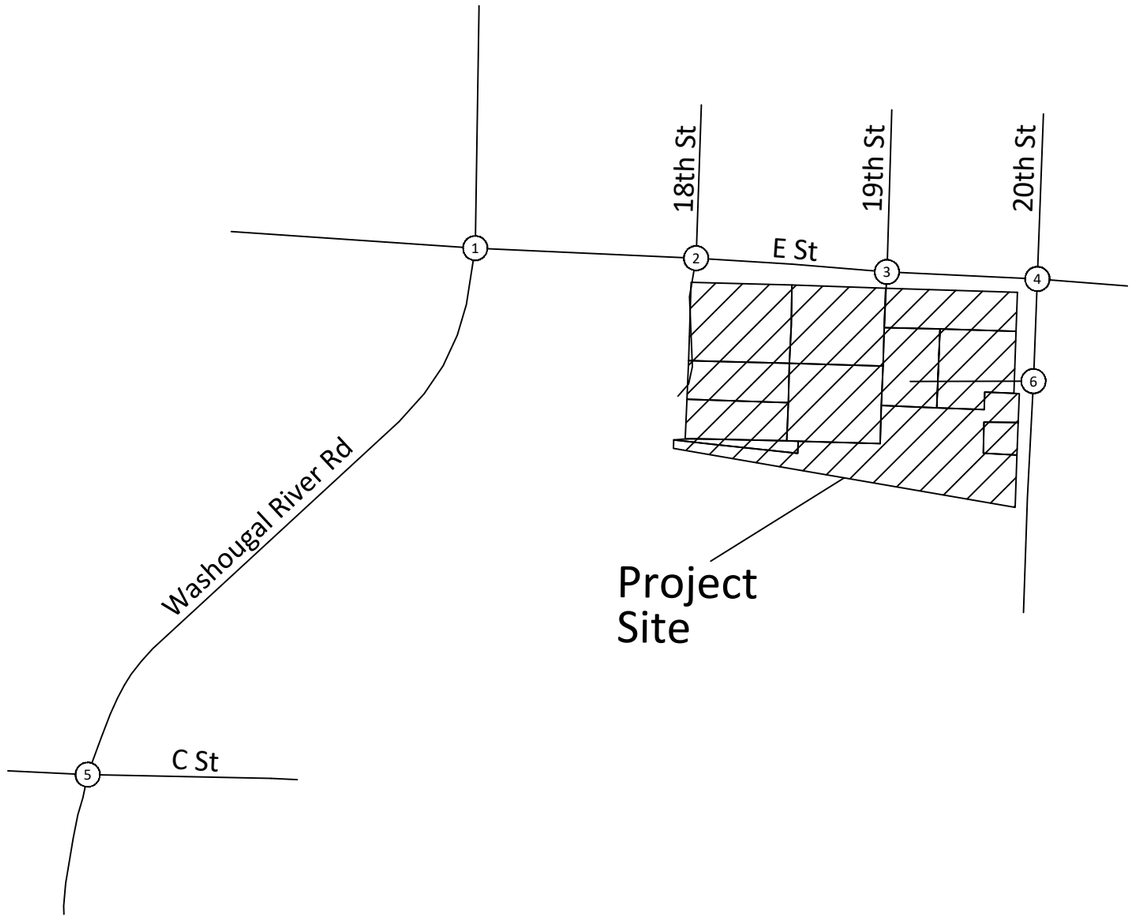
- Predicted A.M. and P.M. peak hour site-generated traffic from the proposed development was assigned to the roadway network and added to the 2028 "Without Project" traffic volumes to develop the 2028 "With Project" traffic volumes.

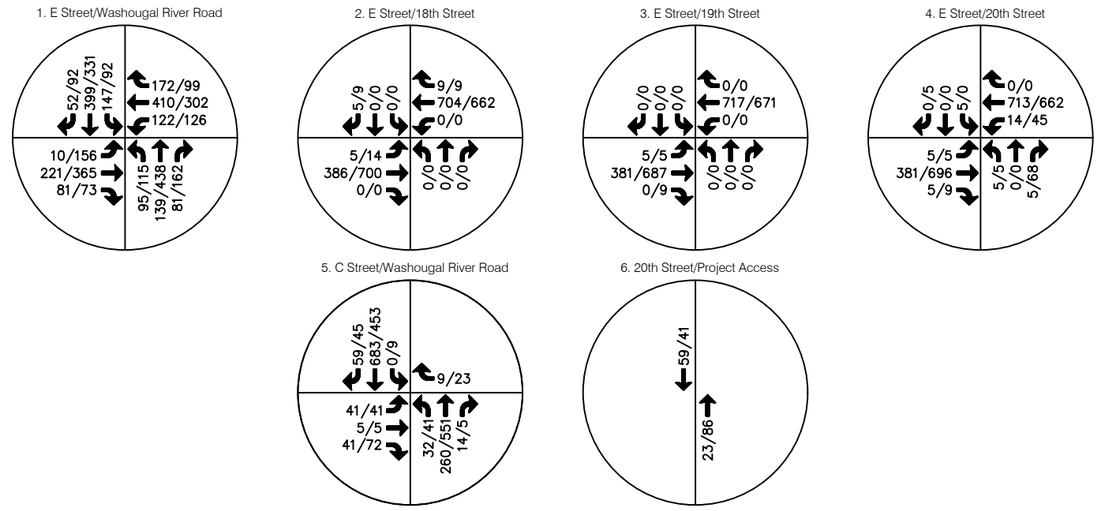
A detailed discussion of the methodology summarized above and the analysis results are contained in the remainder of this section.

2028 "WITHOUT PROJECT" TRAFFIC VOLUMES AND LEVELS OF SERVICE

The 2028 "Without Project" condition was analyzed to establish the baseline for the concurrency analysis and to define a baseline by which project impacts could be determined.

The 2028 "Without Project" traffic volumes for the City of Washougal study area intersections were derived by using a two (2) percent compounded annual growth factor and adding traffic generated by "in-process" developments. The "in-process" traffic volumes were obtained from City of Washougal staff. Appendix D contains the "in-process" traffic volumes obtained from the city. Figure 5 shows the 2028 "Without Project" traffic volumes for all the study area intersections.





LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

NOT TO SCALE

FIGURE 5
2028 "Without Project"
A.M. and P.M. Peak Hour Traffic Volumes

Levels of service were calculated at the study area intersections with the 2028 "Without Project" traffic volumes shown in Figure 5 and the lane configurations shown earlier in Figure 3. The results of the analysis are shown in Table 3 for the study area intersections. Appendix E contains the level of service worksheets for the 2028 "Without Project" condition.

As shown in Table 3, all of the study area intersections are projected to operate at acceptable levels of service of LOS C or better in the 2028 "Without Project" condition.

Table 3. 2028 "Without Project" Levels of Service

	A.M. Peak Hour		P.M. Peak Hour	
Signalized Intersection	LOS	Average Delay (sec)	LOS	Average Delay (sec)
E Street/Washougal River Road	B	15.0	C	21.0
Unsignalized Intersection				
E Street/18th Street				
Northbound Approach	A	0.0	A	0.0
Southbound Approach	B	13.3	B	12.9
Eastbound Left	A	9.2	A	9.0
Westbound Left	A	0.0	A	0.0
E Street/19th Street				
Northbound Approach	A	0.0	A	0.0
Southbound Approach	A	0.0	A	0.0
Eastbound Left	A	9.2	A	9.9
Westbound Left	A	0.0	A	0.0
E Street/20th Street				
Northbound Approach	C	18.4	C	17.7
Southbound Approach	C	17.4	B	12.8
Westbound Left	A	9.1	A	8.9
Eastbound Left	A	8.1	A	9.2
C Street/Washougal River Road				
Northbound Left	A	9.3	A	8.4
Southbound Left	A	0.0	A	8.5
Eastbound Approach	C	24.8	C	25.0
Westbound Right	B	10.5	B	12.0

DEVELOPMENT PLANS

As previously stated, the proposed project is a mixed-use development 8,153 square foot fabrication shop, 7,474 square feet of retail use, and 45 residential apartment units. Access to the site will be from connections to the existing E. Street/18th Street and E. Street/19th Street intersections as well as a connection to 20th Street. As previously shown, Figure 2 shows the project site plan.

TRIP GENERATION

Estimates of daily, A.M. peak hour, and P.M. peak hour trips generated by the proposed project were developed from rates published in "Trip Generation, 11th Edition" (Institute of Transportation Engineers, 2021). The proposed development is expected to generate 591 daily, 36 A.M. peak hour (17 in, 19 out), and 67 P.M. peak hour (34 in, 33 out) net new trips. Table 4 summarizes the trip generation for the proposed E Street Mixed-Use development.

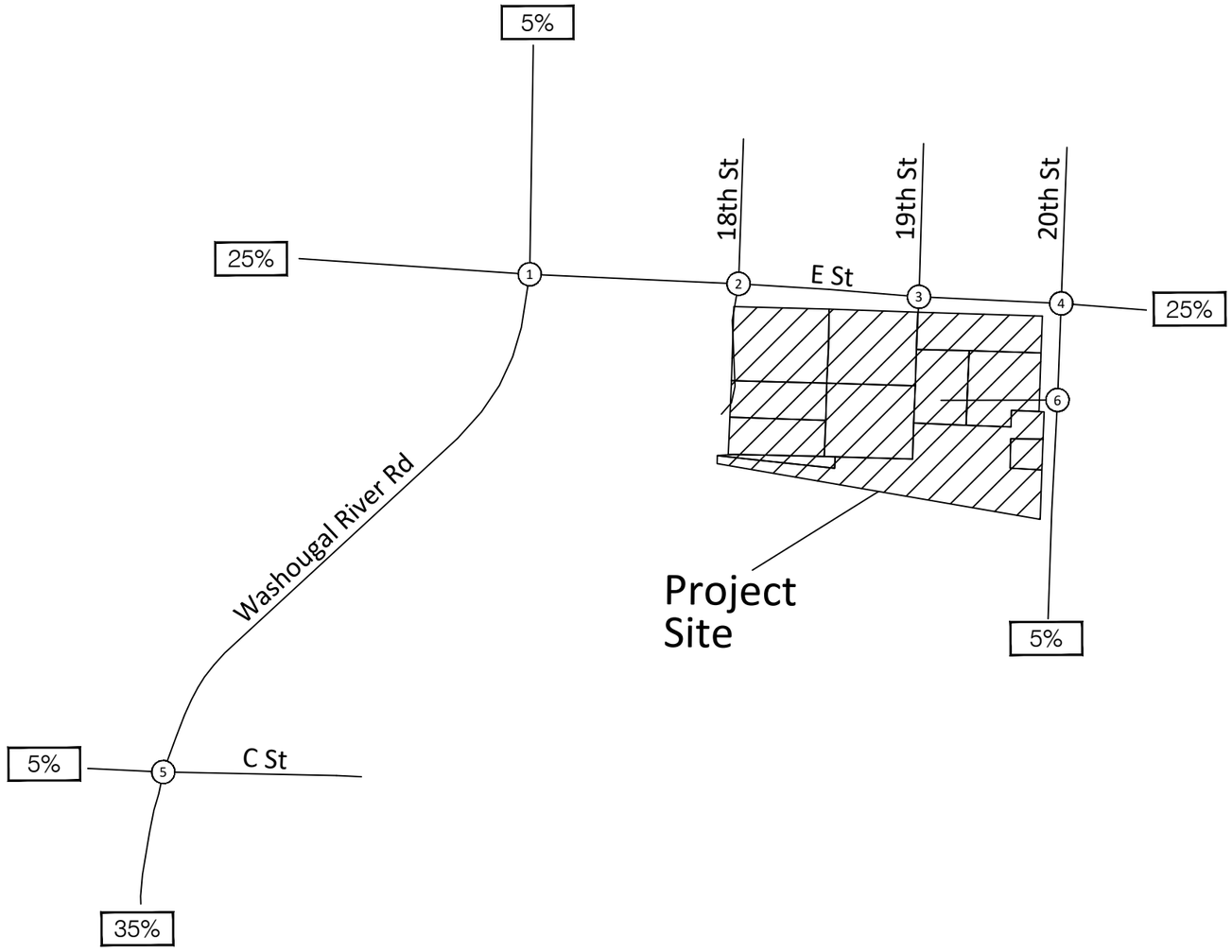
Table 4. Trip Generation for E Street Mixed-Use

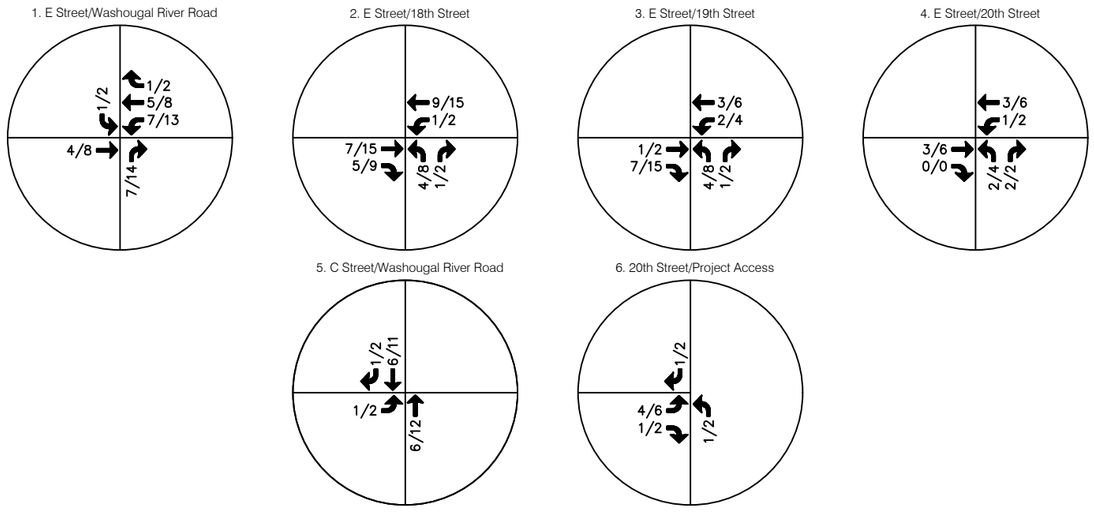
Land Use	Amount	Average Daily	A.M. Peak			P.M. Peak		
			In	Out	Total	In	Out	Total
Manufacturing – ITE Code 140								
Rate per 1,000 square feet (ksf)		4.75	0.52	0.16	0.68	0.23	0.51	0.74
Trips	8.153 ksf	39	5	1	6	2	4	6
Multifamily Housing (Low-Rise) – ITE Code 221								
Rate per dwelling unit		4.54	0.09	0.28	0.37	0.24	0.15	0.39
Trips	45 units	204	4	13	17	11	7	18
Strip Retail Plaza (<40k sf) – ITE Code 822								
Rate per 1,000 square feet		54.45	1.42	0.94	2.36	3.29	3.30	6.59
Trips	7.474 ksf	407	11	7	18	24	25	49
Existing Single-Family Detached Housing – ITE Code 210 (Trip Credit)								
Rate per dwelling unit		9.43	0.18	0.52	0.70	0.59	0.35	0.94
Trips	1 unit	(9)	-	(1)	(1)	(1)	-	(1)
Existing Automobile Care Center – ITE Code 942 (Trip Credit)								
Rate per 1,000 square feet		31.10[1]	1.48	0.77	2.25	1.49	1.62	3.11
Trips	1.620 ksf	(50)	(3)	(1)	(4)	(2)	(3)	(5)
Gross Site Trips		650	20	21	41	37	36	73
Trip Credits		(59)	(3)	(2)	(5)	(3)	(3)	(6)
Net Site Trips		**591**	**17**	**19**	**36**	**34**	**33**	**67**

[1]There is no average daily trip generation rate in the "Trip Generation, 11th Edition" (Institute of Transportation Engineers, 2021) manual for the automobile care center use (ITE Code 942). Per conversations with City of Washougal staff, to extrapolate an average daily trip generation rate, the P.M. peak hour rate was multiplied by 10.

TRIP DISTRIBUTION AND ASSIGNMENT

A generalized trip distribution for the A.M. and P.M. peak hour was developed from the existing traffic counts, previous traffic studies, locations of major employment centers, locations of major residential areas, and logical travel paths to and from major travel corridors. Figure 6 shows the resulting trip distribution pattern and assignment of project-generated trips.





LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

10% Peak Hour Trip Distribution

NOT TO SCALE

FIGURE 6
Trip Distribution and Assignment
Traffic Volumes

21020_Figures.Dwg

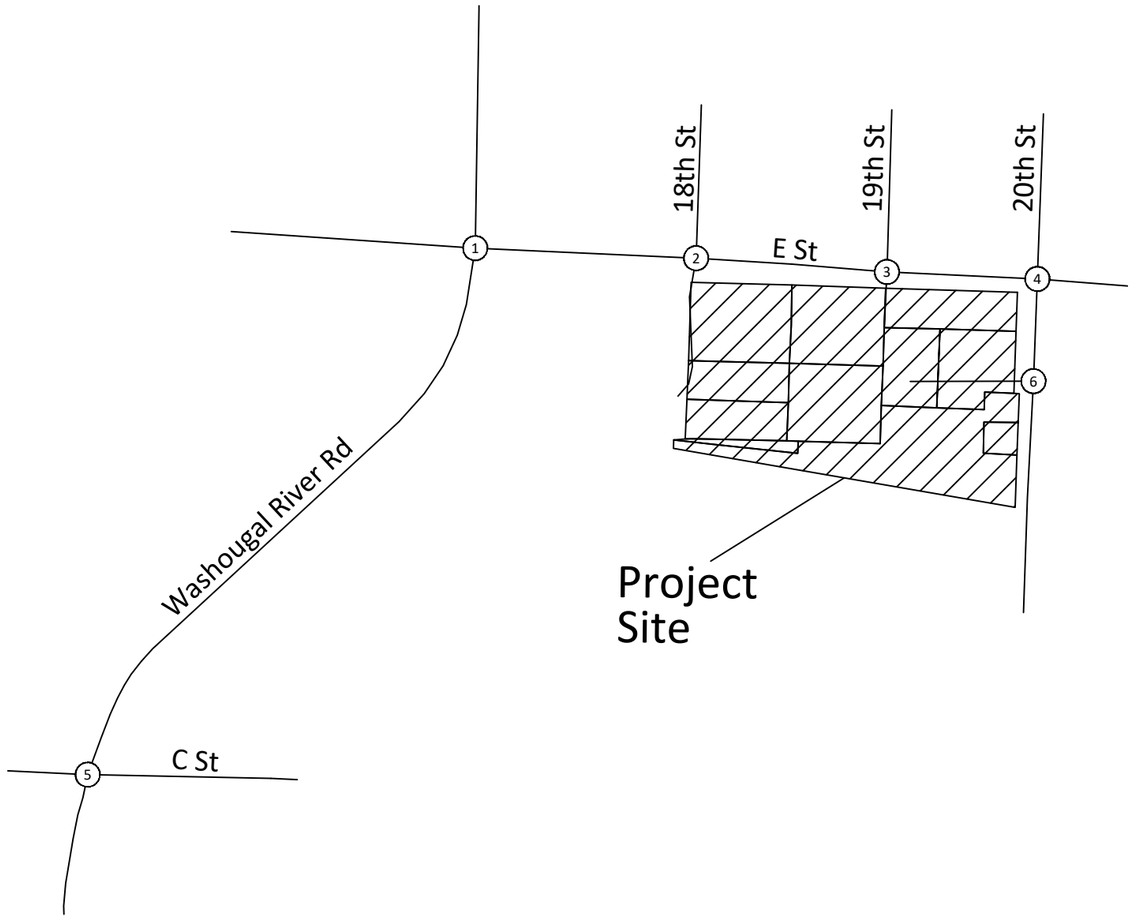
2028 "WITH PROJECT" TRAFFIC VOLUMES AND LEVELS OF SERVICE

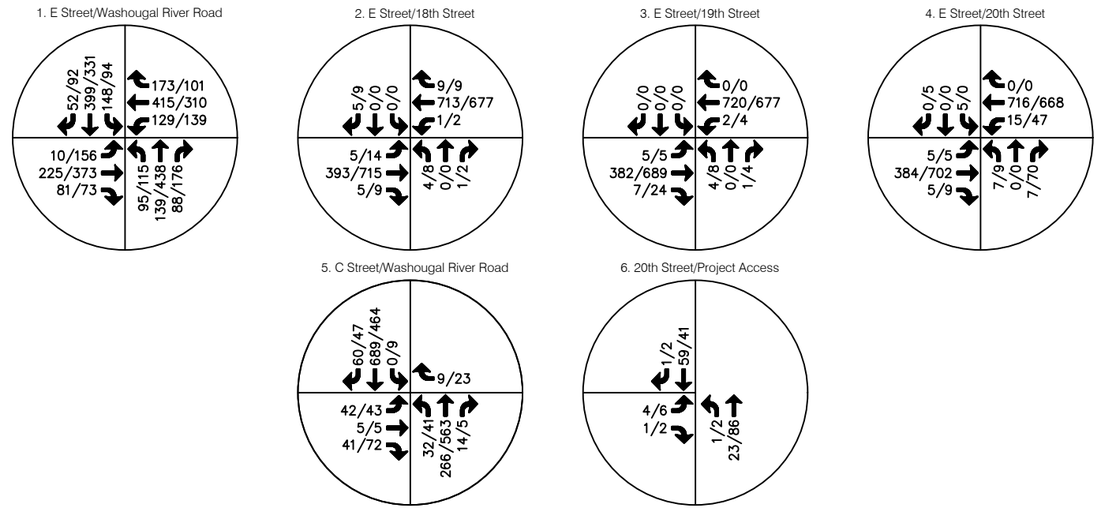
The traffic volumes shown in Figures 5 and 6 were combined to arrive at the 2028 "With Project" A.M. and P.M. peak hour traffic volumes. Figure 7 shows these traffic volumes. Levels of service were calculated for the 2028 "With Project" condition based on the traffic volumes shown in Figure 7 and the existing lane configurations previously shown in Figure 3. The results of the analysis are shown in Table 5 for the study area intersections. Appendix F contains the level of service worksheets for the 2028 "With Project" condition.

As shown in Table 5, all of the study area intersections are projected to operate at acceptable levels of service of LOS D or better in the 2028 "With Project" condition.

Table 5. 2028 "With Project" Levels of Service at Study Area Intersections

	A.M. Peak Hour		P.M. Peak Hour	
Signalized Intersection	LOS	Average Delay (sec)	LOS	Average Delay (sec)
E Street/Washougal River Road	B	15.3	C	21.8
Unsignalized Intersection				
E Street/18th Street/Project Access				
Northbound Approach	C	15.8	C	19.6
Southbound Approach	B	13.4	B	13.1
Eastbound Left	A	9.2	A	9.1
Westbound Left	A	8.1	A	9.1
E Street/19th Street/Project Access				
Northbound Approach	C	15.6	C	17.9
Southbound Approach	A	0.0	A	0.0
Eastbound Left	A	9.2	A	9.0
Westbound Left	A	8.1	A	9.1
E Street/20th Street				
Northbound Approach	C	18.9	C	20.6
Southbound Approach	C	17.5	B	12.9
Westbound Left	A	9.1	A	8.9
Eastbound Left	A	8.1	A	9.3
C Street/Washougal River Road				
Northbound Left	A	9.3	A	8.4
Southbound Left	A	0.0	A	8.6
Eastbound Approach	D	25.5	D	26.8
Westbound Right	B	10.5	B	12.1
20th Street/Project Access				
Northbound Left	A	7.3	A	7.3
Eastbound Approach	A	8.9	A	9.1





LEGEND

128/200 A.M./P.M. Peak Hour Traffic Volume

NOT TO SCALE

FIGURE 7
2028 "With Project"
A.M. and P.M. Peak Hour Traffic Volumes

CORNER SIGHT DISTANCE

The minimum corner sight distance required for the existing E Street/18th Street/Project Access and E Street/19th Street/Project Access intersections and the proposed 20th Street/Project Access intersection are based on the City of Washougal Engineering Standards (COWES). Per the COWES public and private streets must comply with the sight distance requirements contained in the current "A Policy on Geometric Design on Highways and Streets," published by AASHTO (American Association of State Highway and Transportation Officials." The most recent edition of this reference is the 2018 – 7th Edition.

From AASHTO, the following intersection sight distances are relevant to the project's site accesses:

- Case B1 – left turn from minor road
- Case B2 – right turn from minor road
- Case F – left from major road

The required sight distance for Case B1 based on a posted speed limit of 30 mph along E Street is 335 feet. This requirement can be found in Table 9-7 of the "A Policy on Geometric Design on Highways and Streets," page 9-46.

The required sight distance for Case B1 based on a posted speed limit of 25 mph along 20th Street is 280 feet. This requirement can be found in Table 9-7 of the "A Policy on Geometric Design on Highways and Streets," page 9-46.

The required sight distance for Case B2 based on a posted speed limit of 30 mph along E Street is 290 feet. This requirement can be found in Table 9-9 of the "A Policy on Geometric Design on Highways and Streets," page 9-48.

The required sight distance for Case B2 based on a posted speed limit of 25 mph along 20th Street is 240 feet. This requirement can be found in Table 9-9 of the "A Policy on Geometric Design on Highways and Streets," page 9-48.

The required sight distance for Case F based on a posted speed limit 30 mph along E Street is 245 feet. This requirement can be found in Table 9-17 of the "A Policy on Geometric Design on Highways and Streets," page 9-57.

The required sight distance for Case F based on a posted speed limit 25 mph along 20th Street is 205 feet. This requirement can be found in Table 9-17 of the "A Policy on Geometric Design on Highways and Streets," page 9-57.

Based on field measurements conducted by H. Lee & Associates, PLLC (HLA), the existing E Street/18th Street/Project Access and E Street/19th Street/Project Access intersections and the proposed 20th Street/Project Access intersection should be able to meet the sight distance requirements as long as any vegetation within the sight distance triangles are properly maintained and no obstructions are placed within the sight distance triangles that could impede a driver's vision. The sight distance triangles should be maintained in such a manner that any vegetation within the sight distance triangles does not encumber the sight lines. Also, any physical objects placed within the sight distance triangles should not encumber the sight lines of the motorist at the existing and proposed project access intersections. The corner sight distances should be reconfirmed at the final engineering/construction stage of development to assure that any design/construction element does not preclude the necessary corner sight distance requirement.

LANE WARRANT ANALYSIS

Turn lane warrants at the existing E Street/18th Street/Project Access and E Street/19th Street/Project Access intersections were not conducted because a two-way center left turn lane already exists along E Street. Turn lane warrants at the proposed 20th Street/Project Access intersection were not conducted due to low traffic volumes, acceptable levels of service, and acceptable accident rates.

CONCLUSIONS

Findings

The following are the findings from the traffic analysis:

- The proposed development is expected to generate 656 daily, 45 A.M. peak hour (23 in, 22 out), and 80 P.M. peak hour (39 in, 41 out) net new trips.

- All of the study area intersections are projected to meet the City of Washougal's level of service standards in the 2028 "Without Project" and 2028 "With Project" conditions.

- All of the AASHTO corner sight distance requirements can be met at all project access intersections as long as the sight distance triangles are properly maintained by trimming any vegetation within the sight distance triangles so it doesn't obscure the motorist's view and no obstructions are placed within the sight distance triangles that obscure the motorist's view. The corner sight distances should be reconfirmed at the final engineering/construction stage of development to assure that any design/construction element does not preclude the necessary corner sight distance requirement.

- Turn lane warrants at the existing E Street/18th Street/Project Access and E Street/19th Street/Project Access intersections were not conducted because a two-way center left turn lane already exists along E Street. Turn lane warrants at the proposed 20th Street/Project Access intersection were not conducted due to low traffic volumes, acceptable levels of service, and acceptable accident rates.

Recommendations

- Based on the traffic impact analysis documented in this report, no off-site mitigation would be needed with the build out of the proposed project.

APPENDIX A

EXISTING TRAFFIC COUNTS

Intersection: E Street/Washougal River Road Date: 06/01/22

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	6	58	15	3	9	42	21	5	12	24	10	6	13	16	3	1	229
7:15 - 7:30 AM	7	93	28	4	12	32	45	4	15	28	13	4	15	25	3	2	316
7:30 - 7:45 AM	8	92	45	3	14	57	45	3	17	29	20	5	19	37	5	4	388
7:45 - 8:00 AM	11	83	32	1	38	91	27	4	18	29	21	3	18	49	2	3	419
8:00 - 8:15 AM	9	81	21	1	24	75	22	4	17	25	14	6	22	43	6	7	359
8:15 - 8:30 AM	9	62	20	5	17	51	20	4	14	33	15	3	28	48	6	4	323
8:30 - 8:45 AM	11	52	18	2	13	56	22	6	25	32	17	5	17	62	15	6	340
8:45 - 9:00 AM	16	80	36	1	16	55	35	8	33	21	15	10	20	64	4	5	395
															Peak 15 Total		419
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	32	326	120	11	73	222	138	16	62	110	64	18	65	127	13	10	1,352
7:15 - 8:15 AM	35	349	126	9	88	255	139	15	67	111	68	18	74	154	16	16	1,482
7:30 - 8:30 AM	37	318	118	10	93	274	114	15	66	116	70	17	87	177	19	18	1,489
7:45 - 8:45 AM	40	278	91	9	92	273	91	18	74	119	67	17	85	202	29	20	1,441
8:00 - 9:00 AM	45	275	95	9	70	237	99	22	89	111	61	24	87	217	31	22	1,417
Peak Hour 7:30 - 8:30 AM	37	318	118	10	93	274	114	15	66	116	70	17	87	177	19	18	1,489
Peak Hour Factor		0.82				0.77				0.93				0.86			0.89
Peak Hour % Trucks		2%				3%				7%				6%			
Peak 15 Min % Trucks		1%				3%				4%				4%			

Intersection: E Street/Washougal River Road Date: 06/01/22

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	16	55	31	0	26	84	13	3	31	73	24	5	25	100	23	2	501
4:15 - 4:30 PM	18	42	23	2	24	80	21	2	32	71	26	3	32	114	20	5	503
4:30 - 4:45 PM	12	65	25	2	31	81	20	3	28	62	25	3	22	95	18	1	484
4:45 - 5:00 PM	20	70	20	3	21	67	28	2	36	91	25	1	16	81	34	2	509
5:00 - 5:15 PM	12	41	21	2	28	76	36	4	26	51	12	1	27	132	19	2	481
5:15 - 5:30 PM	13	59	31	1	29	58	20	1	27	79	28	2	22	89	21	1	476
5:30 - 5:45 PM	14	53	24	2	29	81	32	2	26	67	21	2	17	107	15	1	486
5:45 - 6:00 PM	10	46	32	2	26	67	13	0	39	64	26	1	23	95	20	0	461
															Peak 15 Total		509
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	66	232	99	7	102	312	82	10	127	297	100	12	95	390	95	10	1,997
4:15 - 5:15 PM	62	218	89	9	104	304	105	11	122	275	88	8	97	422	91	10	1,977
4:30 - 5:30 PM	57	235	97	8	109	282	104	10	117	283	90	7	87	397	92	6	1,950
4:45 - 5:45 PM	59	223	96	8	107	282	116	9	115	288	86	6	82	409	89	6	1,952
5:00 - 6:00 PM	49	199	108	7	112	282	101	7	118	261	87	6	89	423	75	4	1,904
Peak Hour 4:00 - 5:00 PM	66	232	99	7	102	312	82	10	127	297	100	12	95	390	95	10	1,997
Peak Hour Factor		0.90				0.94				0.86				0.87			0.98
Peak Hour % Trucks		2%				2%				2%				2%			
Peak 15 Min % Trucks		3%				2%				1%				2%			

Intersection: E Street/18th Street Date: 06/01/22

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	0	0	0	0	0	61	0	1	0	0	0	0	0	58	0	2	119
7:15 - 7:30 AM	1	0	0	0	0	93	0	9	0	0	0	0	2	45	0	3	141
7:30 - 7:45 AM	0	0	0	0	0	109	0	3	0	0	0	0	0	75	0	6	184
7:45 - 8:00 AM	0	0	0	0	2	125	0	2	0	0	0	0	1	104	1	1	233
8:00 - 8:15 AM	1	0	0	0	2	156	0	1	0	0	0	0	0	85	1	4	245
8:15 - 8:30 AM	0	0	0	0	3	95	0	7	0	0	1	0	0	72	1	4	172
8:30 - 8:45 AM	0	0	0	0	0	78	0	7	0	0	0	0	0	81	1	9	160
8:45 - 9:00 AM	2	0	1	0	0	104	0	5	0	0	1	0	0	111	0	2	219
															Peak 15 Total		245
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	1	0	0	0	2	388	0	15	0	0	0	0	3	282	1	12	677
7:15 - 8:15 AM	2	0	0	0	4	483	0	15	0	0	0	0	3	309	2	14	803
7:30 - 8:30 AM	1	0	0	0	7	485	0	13	0	0	1	0	1	336	3	15	834
7:45 - 8:45 AM	1	0	0	0	7	454	0	17	0	0	1	0	1	342	4	18	810
8:00 - 9:00 AM	3	0	1	0	5	433	0	20	0	0	2	0	0	349	3	19	796
Peak Hour 7:30 - 8:30 AM	1	0	0	0	7	485	0	13	0	0	1	0	1	336	3	15	834
Peak Hour Factor		0.25				0.78				0.25				0.80			0.85
Peak Hour % Trucks		0%				3%				0%				4%			
Peak 15 Min % Trucks		0%				1%				0%				5%			

Intersection: E Street/18th Street Date: 06/01/22

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	2	0	0	0	0	119	0	6	0	0	0	0	1	156	6	5	284
4:15 - 4:30 PM	2	0	0	0	2	146	0	2	0	0	0	0	0	155	3	4	308
4:30 - 4:45 PM	2	0	1	0	1	141	0	3	0	0	1	0	1	154	6	5	307
4:45 - 5:00 PM	4	0	1	0	0	121	0	0	0	0	2	0	1	140	5	3	274
5:00 - 5:15 PM	1	0	1	0	2	110	0	0	0	0	0	0	1	141	1	5	257
5:15 - 5:30 PM	0	0	4	0	4	149	0	4	0	0	1	0	0	136	0	2	294
5:30 - 5:45 PM	0	0	1	0	4	130	0	5	0	0	0	0	0	148	4	3	287
5:45 - 6:00 PM	1	0	1	0	1	121	0	1	0	0	0	0	0	148	3	2	275
															Peak 15 Total		308
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	10	0	2	0	3	527	0	11	0	0	3	0	3	605	20	17	1,173
4:15 - 5:15 PM	9	0	3	0	5	518	0	5	0	0	3	0	3	590	15	17	1,146
4:30 - 5:30 PM	7	0	7	0	7	521	0	7	0	0	4	0	3	571	12	15	1,132
4:45 - 5:45 PM	5	0	7	0	10	510	0	9	0	0	3	0	2	565	10	13	1,112
5:00 - 6:00 PM	2	0	7	0	11	510	0	10	0	0	1	0	1	573	8	12	1,113
Peak Hour 4:00 - 5:00 PM	10	0	2	0	3	527	0	11	0	0	3	0	3	605	20	17	1,173
Peak Hour Factor		0.60				0.90				0.38				0.96			0.95
Peak Hour % Trucks		0%				2%				0%				3%			
Peak 15 Min % Trucks		0%				1%				0%				3%			

Intersection: E Street/19th Street Date: 06/01/22

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	0	0	0	0	2	59	0	2	0	0	0	0	0	58	0	2	119
7:15 - 7:30 AM	1	0	0	0	0	92	0	10	0	0	0	0	0	48	0	3	141
7:30 - 7:45 AM	0	0	0	0	0	111	0	5	1	0	0	0	0	74	0	6	186
7:45 - 8:00 AM	0	0	0	0	0	127	0	2	0	0	0	0	0	106	0	1	233
8:00 - 8:15 AM	0	0	0	0	0	159	0	1	0	0	0	0	0	84	1	4	244
8:15 - 8:30 AM	0	0	0	0	0	97	0	7	0	0	0	0	0	73	0	4	170
8:30 - 8:45 AM	0	0	1	0	0	78	0	7	0	0	0	0	0	81	1	9	161
8:45 - 9:00 AM	1	0	0	0	0	104	1	5	0	0	0	0	0	112	0	2	218
															Peak 15 Total		244
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	1	0	0	0	2	389	0	19	1	0	0	0	0	286	0	12	679
7:15 - 8:15 AM	1	0	0	0	0	489	0	18	1	0	0	0	0	312	1	14	804
7:30 - 8:30 AM	0	0	0	0	0	494	0	15	1	0	0	0	0	337	1	15	833
7:45 - 8:45 AM	0	0	1	0	0	461	0	17	0	0	0	0	0	344	2	18	808
8:00 - 9:00 AM	1	0	1	0	0	438	1	20	0	0	0	0	0	350	2	19	793
Peak Hour 7:30 - 8:30 AM	0	0	0	0	0	494	0	15	1	0	0	0	0	337	1	15	833
Peak Hour Factor		0.00				0.78				0.25				0.80			0.85
Peak Hour % Trucks		0%				3%				0%				4%			
Peak 15 Min % Trucks		0%				1%				0%				5%			

Intersection: E Street/19th Street Date: 06/01/22

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	0	0	0	0	0	119	0	6	0	0	0	0	0	158	0	5	277
4:15 - 4:30 PM	0	0	0	0	0	148	0	2	0	0	0	0	2	152	1	4	303
4:30 - 4:45 PM	1	0	0	0	0	144	1	3	2	0	0	0	3	152	1	5	304
4:45 - 5:00 PM	0	0	1	0	0	122	0	1	1	0	0	0	2	141	2	3	269
5:00 - 5:15 PM	1	0	1	1	0	112	1	2	1	0	0	0	6	135	0	5	257
5:15 - 5:30 PM	0	0	0	0	0	153	1	4	1	0	2	0	1	136	0	2	294
5:30 - 5:45 PM	1	0	0	0	2	132	0	5	1	0	0	0	2	147	0	3	285
5:45 - 6:00 PM	0	0	0	0	0	123	2	1	0	0	0	0	4	143	1	2	273
															Peak 15 Total		304
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	1	0	1	0	0	533	1	12	3	0	0	0	7	603	4	17	1,153
4:15 - 5:15 PM	2	0	2	1	0	526	2	8	4	0	0	0	13	580	4	17	1,133
4:30 - 5:30 PM	2	0	2	1	0	531	3	10	5	0	2	0	12	564	3	15	1,124
4:45 - 5:45 PM	2	0	2	1	2	519	2	12	4	0	2	0	11	559	2	13	1,105
5:00 - 6:00 PM	2	0	1	1	2	520	4	12	3	0	2	0	13	561	1	12	1,109
Peak Hour 4:00 - 5:00 PM	1	0	1	0	0	533	1	12	3	0	0	0	7	603	4	17	1,153
Peak Hour Factor		0.50				0.90				0.38				0.97			0.95
Peak Hour % Trucks		0%				2%				0%				3%			
Peak 15 Min % Trucks		0%				1%				0%				3%			

Intersection: E Street/20th Street Date: 06/01/22

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	1	0	0	0	0	60	3	1	1	0	0	0	0	58	0	2	123
7:15 - 7:30 AM	2	0	1	0	1	90	2	10	2	0	0	0	0	47	1	3	146
7:30 - 7:45 AM	0	0	1	0	0	110	5	3	2	0	0	0	3	74	0	6	195
7:45 - 8:00 AM	1	0	1	0	1	124	3	2	1	0	1	0	1	106	2	1	241
8:00 - 8:15 AM	0	0	1	0	0	158	3	1	1	0	1	0	1	84	1	4	250
8:15 - 8:30 AM	1	0	1	0	0	96	5	7	4	0	0	0	0	73	1	4	181
8:30 - 8:45 AM	1	0	1	0	4	77	2	7	4	1	0	0	3	82	0	9	175
8:45 - 9:00 AM	3	2	2	0	0	101	10	5	4	0	1	0	1	112	0	2	236
															Peak 15 Total		250
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	4	0	3	0	2	384	13	16	6	0	1	0	4	285	3	12	705
7:15 - 8:15 AM	3	0	4	0	2	482	13	16	6	0	2	0	5	311	4	14	832
7:30 - 8:30 AM	2	0	4	0	1	488	16	13	8	0	2	0	5	337	4	15	867
7:45 - 8:45 AM	3	0	4	0	5	455	13	17	10	1	2	0	5	345	4	18	847
8:00 - 9:00 AM	5	2	5	0	4	432	20	20	13	1	2	0	5	351	2	19	842
Peak Hour 7:30 - 8:30 AM	2	0	4	0	1	488	16	13	8	0	2	0	5	337	4	15	867
Peak Hour Factor		0.75				0.78				0.63				0.79			0.87
Peak Hour % Trucks		0%				3%				0%				4%			
Peak 15 Min % Trucks		0%				1%				0%				5%			

Intersection: E Street/20th Street Date: 06/01/22

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	3	0	1	0	2	116	8	6	9	1	0	0	5	157	0	5	302
4:15 - 4:30 PM	1	0	0	0	0	146	10	2	15	0	1	0	2	154	1	4	330
4:30 - 4:45 PM	5	2	0	0	1	135	10	3	8	0	5	0	2	155	2	5	325
4:45 - 5:00 PM	2	1	1	0	2	118	4	1	14	2	2	0	2	141	1	3	290
5:00 - 5:15 PM	1	2	1	0	0	110	7	2	7	1	2	0	3	142	1	5	277
5:15 - 5:30 PM	2	0	0	0	0	151	11	4	4	0	1	0	3	137	0	2	309
5:30 - 5:45 PM	2	0	0	0	1	132	8	5	11	0	0	0	3	149	0	3	306
5:45 - 6:00 PM	2	1	1	0	1	117	4	1	12	1	6	0	4	148	3	2	300
															Peak 15 Total		330
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	11	3	2	0	5	515	32	12	46	3	8	0	11	607	4	17	1,247
4:15 - 5:15 PM	9	5	2	0	3	509	31	8	44	3	10	0	9	592	5	17	1,222
4:30 - 5:30 PM	10	5	2	0	3	514	32	10	33	3	10	0	10	575	4	15	1,201
4:45 - 5:45 PM	7	3	2	0	3	511	30	12	36	3	5	0	11	569	2	13	1,182
5:00 - 6:00 PM	7	3	2	0	2	510	30	12	34	2	9	0	13	576	4	12	1,192
Peak Hour 4:00 - 5:00 PM	11	3	2	0	5	515	32	12	46	3	8	0	11	607	4	17	1,247
Peak Hour Factor		0.57				0.88				0.79				0.96			0.94
Peak Hour % Trucks		0%				2%				0%				3%			
Peak 15 Min % Trucks		0%				1%				0%				3%			

Intersection: C Street/Washougal River Road Date: 06/01/22

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	4	88	0	3	3	0	0	2	1	38	3	4	3	1	1	0	142
7:15 - 7:30 AM	14	140	1	7	2	0	0	0	4	55	5	4	15	0	5	1	241
7:30 - 7:45 AM	13	146	0	2	2	0	0	1	3	56	7	4	9	1	9	0	246
7:45 - 8:00 AM	14	102	3	2	3	0	0	0	2	55	15	3	14	1	3	0	212
8:00 - 8:15 AM	9	115	1	1	3	0	0	1	0	49	9	3	7	1	2	2	196
8:15 - 8:30 AM	9	101	2	3	3	0	0	0	0	59	9	6	9	0	5	0	197
8:30 - 8:45 AM	7	85	4	6	1	0	0	1	1	66	8	5	9	2	11	1	194
8:45 - 9:00 AM	12	119	2	2	2	0	0	0	4	60	10	6	11	4	8	1	232
															Peak 15 Total		246
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	45	476	4	14	10	0	0	3	10	204	30	15	41	3	18	1	841
7:15 - 8:15 AM	50	503	5	12	10	0	0	2	9	215	36	14	45	3	19	3	895
7:30 - 8:30 AM	45	464	6	8	11	0	0	2	5	219	40	16	39	3	19	2	851
7:45 - 8:45 AM	39	403	10	12	10	0	0	2	3	229	41	17	39	4	21	3	799
8:00 - 9:00 AM	37	420	9	12	9	0	0	2	5	234	36	20	36	7	26	4	819
Peak Hour 7:15 - 8:15 AM	50	503	5	12	10	0	0	2	9	215	36	14	45	3	19	3	895
Peak Hour Factor		0.88				0.83				0.90				0.84			0.91
Peak Hour % Trucks		2%				20%				5%				4%			
Peak 15 Min % Trucks		1%				50%				6%				0%			

Intersection: C Street/Washougal River Road Date: 06/01/22

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	6	90	2	1	6	0	0	0	4	114	12	4	17	3	7	2	261
4:15 - 4:30 PM	7	87	3	2	5	0	0	0	2	113	14	3	18	1	9	0	259
4:30 - 4:45 PM	5	99	1	1	6	0	0	1	4	115	10	2	19	2	4	0	265
4:45 - 5:00 PM	10	97	2	1	5	0	0	0	1	116	9	0	16	1	9	0	266
5:00 - 5:15 PM	5	101	2	5	5	0	0	0	1	82	12	0	11	5	9	0	233
5:15 - 5:30 PM	16	80	4	1	8	0	0	1	3	114	9	1	11	3	4	0	252
5:30 - 5:45 PM	13	87	2	2	3	0	0	0	7	94	9	1	12	3	13	0	243
5:45 - 6:00 PM	8	74	5	2	5	0	0	1	1	115	14	0	7	2	11	0	242
															Peak 15 Total		266
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	28	373	8	5	22	0	0	1	11	458	45	9	70	7	29	2	1,051
4:15 - 5:15 PM	27	384	8	9	21	0	0	1	8	426	45	5	64	9	31	0	1,023
4:30 - 5:30 PM	36	377	9	8	24	0	0	2	9	427	40	3	57	11	26	0	1,016
4:45 - 5:45 PM	44	365	10	9	21	0	0	1	12	406	39	2	50	12	35	0	994
5:00 - 6:00 PM	42	342	13	10	21	0	0	2	12	405	44	2	41	13	37	0	970
Peak Hour 4:00 - 5:00 PM	28	373	8	5	22	0	0	1	11	458	45	9	70	7	29	2	1,051
Peak Hour Factor		0.94				0.92				0.99				0.95			0.99
Peak Hour % Trucks		1%				5%				2%				2%			
Peak 15 Min % Trucks		1%				0%				0%				0%			

Intersection: 20th Street/Project Access Date: 06/01/22

AM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
7:00 - 7:15 AM	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
7:15 - 7:30 AM	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	4
7:30 - 7:45 AM	0	8	0	0	0	0	0	0	0	2	0	0	0	0	0	0	10
7:45 - 8:00 AM	0	4	0	0	0	0	0	0	0	2	0	0	0	0	0	0	6
8:00 - 8:15 AM	0	4	0	0	0	0	0	0	0	2	0	0	0	0	0	0	6
8:15 - 8:30 AM	0	5	0	0	0	0	0	0	0	4	0	0	0	0	0	0	9
8:30 - 8:45 AM	0	5	0	0	0	0	0	0	0	5	0	0	0	0	0	0	10
8:45 - 9:00 AM	0	13	0	0	0	0	0	0	0	5	0	0	0	0	0	0	18
															Peak 15 Total		18
Hourly Total by 15 minutes																	
7:00 - 8:00 AM	0	17	0	0	0	0	0	0	0	7	0	0	0	0	0	0	24
7:15 - 8:15 AM	0	18	0	0	0	0	0	0	0	8	0	0	0	0	0	0	26
7:30 - 8:30 AM	0	21	0	0	0	0	0	0	0	10	0	0	0	0	0	0	31
7:45 - 8:45 AM	0	18	0	0	0	0	0	0	0	13	0	0	0	0	0	0	31
8:00 - 9:00 AM	0	27	0	0	0	0	0	0	0	16	0	0	0	0	0	0	43
Peak Hour 8:00 - 9:00 AM	0	27	0	0	0	0	0	0	0	16	0	0	0	0	0	0	43
Peak Hour Factor		0.52				0.00				0.80				0.00			0.60
Peak Hour % Trucks		0%				0%				0%				0%			
Peak 15 Min % Trucks		0%				0%				0%				0%			

Intersection: 20th Street/Project Access Date: 06/01/22

PM Peak Hour Turning Movement Volumes

	SB				WB				NB				EB				
Time	SBR	SBT	SBL	Trucks	WBR	WBT	WBL	Trucks	NBR	NBT	NBL	Trucks	EBR	EBT	EBL	Trucks	Total
15 Minute Totals																	
4:00 - 4:15 PM	0	13	0	0	0	0	0	0	0	10	0	0	0	0	0	0	23
4:15 - 4:30 PM	0	12	0	0	0	0	0	0	0	16	0	0	0	0	0	0	28
4:30 - 4:45 PM	0	14	0	0	0	0	0	0	0	13	0	0	0	0	0	0	27
4:45 - 5:00 PM	0	7	0	0	0	0	0	0	0	18	0	0	0	0	0	0	25
5:00 - 5:15 PM	0	12	0	0	0	0	0	0	0	10	0	0	0	0	0	0	22
5:15 - 5:30 PM	0	14	0	0	0	0	0	0	0	5	0	0	0	0	0	0	19
5:30 - 5:45 PM	0	11	0	0	0	0	0	0	0	11	0	0	0	0	0	0	22
5:45 - 6:00 PM	0	9	0	0	0	0	0	0	0	19	0	0	0	0	0	0	28
															Peak 15 Total		28
Hourly Total by 15 minutes																	
4:00 - 5:00 PM	0	46	0	0	0	0	0	0	0	57	0	0	0	0	0	0	103
4:15 - 5:15 PM	0	45	0	0	0	0	0	0	0	57	0	0	0	0	0	0	102
4:30 - 5:30 PM	0	47	0	0	0	0	0	0	0	46	0	0	0	0	0	0	93
4:45 - 5:45 PM	0	44	0	0	0	0	0	0	0	44	0	0	0	0	0	0	88
5:00 - 6:00 PM	0	46	0	0	0	0	0	0	0	45	0	0	0	0	0	0	91
Peak Hour 4:00 - 5:00 PM	0	46	0	0	0	0	0	0	0	57	0	0	0	0	0	0	103
Peak Hour Factor		0.82				0.00				0.79				0.00			0.92
Peak Hour % Trucks		0%				0%				0%				0%			
Peak 15 Min % Trucks		0%				0%				0%				0%			

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WASHOUGAL LONE WOLFE TRANSPORTATION ANALYSIS

DATE: May 10, 2022

TO: Wes Hickey | Lone Wolf Development, LLC

FROM: Kevin Chewuk, PTP; Alex Correa, EIT | DKS Associates

SUBJECT: Washougal Lone Wolfe Transportation Analysis Memorandum

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The following memorandum presents a trip generation analysis for a proposed multi-family residential development at 1625 Main Street in Washougal, Washington. The intent of this analysis is to determine the transportation analysis requirements for the proposed project, consistent with Washougal Municipal Code 18.90.040.

The proposed development will consist of a 6-floor residential building comprised of 46 dwelling units, with a commercial space on the first floor that will be approximately 1,150 square feet.

PROPOSED SITE ACCESS

The proposed development will be accessed via a full access driveway to Pendleton Way that will be located approximately 100 feet north of Main Street and 120 feet south of C Street. Pendleton Way is classified as a Local Road per the City's Capital Facilities Plan.

TRIP GENERATION

Trip generation estimates were developed using rates published in the ITE Trip Generation Manual, 11th Edition. ITE land use code 221 (Mid-Rise Multi-Family Residential) was assumed for the residential portion, while ITE 710 (General Office) were used to estimate the trip generation for the small commercial space on the ground floor. Given the small size of the commercial space (i.e., 1,150 square feet), there were no retail or service land uses in the ITE manual with clusters of similar sized developments that would provide a good metric for estimating trips for the space. Therefore, this space was assumed to function similar to that of a general office. Using these assumptions, the proposed development is estimated to generate 233 daily trips, 13 AM peak hour trips, and 22 PM peak hour trips (see Table 1). Overall, it was found that the proposed

development will not produce more than 25 peak hour trips; therefore, a full Transportation Impact Study is not expected to be warranted (18.90.040 (2)).

TABLE 1: PROJECT TRIP GENERATION

LAND USE CODE	AM			PM			DAILY
	IN	OUT	TOTAL	IN	OUT	TOTAL	
MID-RISE MULTI-FAMILY RESIDENTIAL- ITE 221 (46 DWELLING UNITS)	2	7	9	11	7	18	209
GENERAL OFFICE)- ITE 710 (1,150 SQUARE FEET)	3	1	4	1	3	4	24
TOTAL	**5**	**8**	**13**	**12**	**10**	**22**	**233**

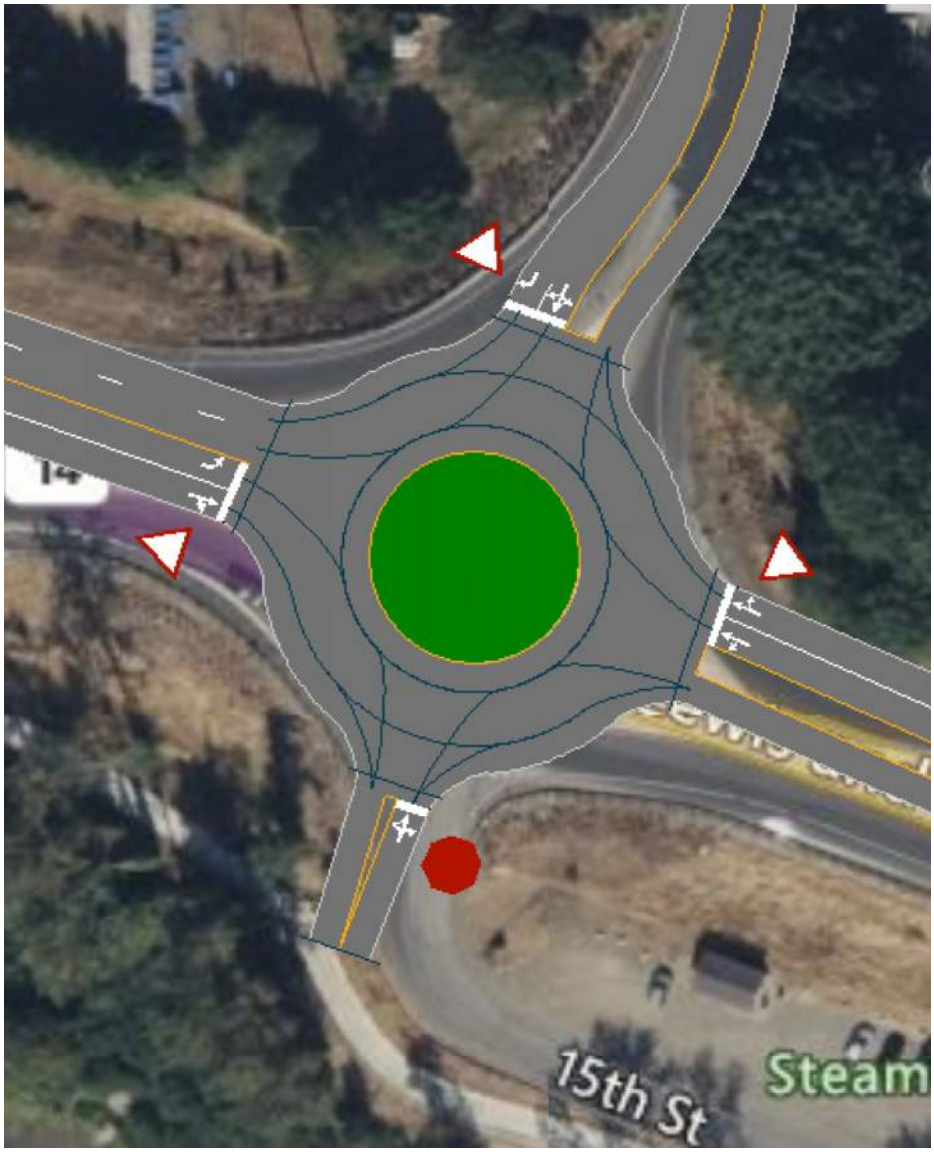
Site generated trips were distributed assuming 60 percent between SR 14 to/from the west, 20 percent to/from the north via Washougal River Road and 20 percent to/from the east via Main Street. Table 2 summarizes the expected distributed project trips through nearby intersections. Only the Pendleton Way/ Main Street intersection is estimated to receive at least 10 trips during the AM peak. During the PM peak, at least 10 trips are expected at the Pendleton Way/ Main Street, Washougal River Road/ Main Street and Washougal River Road/ SR 14 intersections.

TABLE 2: PEAK HOUR PROJECT TRIPS ADDED

Intersection	Trips Added by Movement												Total Peak Trips
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM Peak Hour													
Washougal River Road/ C Street	2								1				**3**
Pendleton Way/ C Street				1								2	**3**
Pendleton Way/ Main Street				2		5	3					1	**10**
Washougal River Road/ Main Street			3							5			**8**
Washougal River Road/ SR 14						5	3						**8**
PM Peak Hour													
Washougal River Road/ C Street	2								2				**4**
Pendleton Way/ C Street				2								2	**4**
Pendleton Way/ Main Street				2		6	7					2	**18**
Washougal River Road/ Main Street			7							6			**13**
Washougal River Road/ SR 14						6	7						**13**

APPENDIX G

PROPOSED SR14/WASHOUGAL RIVER ROAD ROUNDABOUT CONFIGURATION


15th St
Steam

Mitch Kneipp

From: Jennifer Bergmann <jenniferb@eastcountyll.com>
Sent: Friday, January 17, 2025 4:21 PM
To: Mitch Kneipp; David Stuebe
Cc: Kelly Arnerich
Subject: Pendleton Proposed Development

Hi David & Mitch,

Happy New Year!

Our East County Little League Board saw the CW- Post Record article about the proposed Pendleton Woolen Mills Development Plan.

Our board and league had a question about whether the plan included room to maintain or include at least one or two baseball fields.

East County Little League has grown so much in the last two years that it had 400 players in its 2024 Spring Season, the same size as Camas Little League. Multiple teams qualify for district championship play, and three teams compete at the state level. Most recently, we have established a community connection with WHS to connect our athletes with the WHS Baseball and Softball programs.

The city may not have known that ECLL has used and maintained the 2 Pendleton Fields under a use agreement for years. Losing those fields would eliminate vital practice and game-field options for our community.

The City of Washougal has been such a fantastic partner to our league over the years with fields, and we have always been able to find a way to cover scholarships and have additional teams because of the number of fields in our community. We hope to continue growing and serving our community's youth as the largest recreation league in Washougal!

Is there a formal process to add our concerns for city review? Or should we ask to speak and plan to attend the public hearing to share these concerns?

Thank you in advance for your time and response!
Jennifer Bergmann

Mitch Kneipp

From: Deanna Bossman <dbosslady70@gmail.com>
Sent: Tuesday, January 21, 2025 2:58 PM
To: Mitch Kneipp
Subject: Pendleton DA #24050046

External Email Warning! Use caution before clicking links or opening attachments.

Hello,
I am writing in response to the notice regarding the Pendleton development. I wish to say that I oppose this development plan. Our infrastructure is already overwhelmed. The slough bridge is already suffering. I don't feel we need more retail/business office we have empty space now. Thank you for your time.

Sincerely
Deanna Bossman

Mitch Kneipp

From: Leslie Angelo <lesliem1955@comcast.net>
Sent: Wednesday, January 22, 2025 4:06 PM
To: Mitch Kneipp
Subject: Pendleton Development

External Email Warning! Use caution before clicking links or opening attachments.

To whom it may concern,
I am writing about the Pendleton Development. If I remember correctly this piece of property, if it is right next to the Pendleton Woolen Mills, had soil contamination some years back. Children were not allowed to play on the ball fields. I feel there should be soil testing done prior to approving this development, and cleanup done prior to any construction if necessary. Also, what about the impact on the schools, police, and fire department with all these extra people in the community? 780 multi-family units seems excessive for our community, especially since there was already apartment complexes built by the Port. Thank you for your time.
Leslie Angelo
360-521-9575

Sent from my iPad

Mitch Kneipp

From: pinkernell@gmail.com
Sent: Thursday, January 23, 2025 4:32 PM
To: Mitch Kneipp
Cc: 'Dave Pinkernell'
Subject: FW: Pendleton parking lot used for Waterfront trailhead access
Attachments: IMG_1814.JPG

Update: After I sent my email below, I realized the hearing is not tomorrow. It's next month, but I'll be out of town that day as well. Hopefully my written comments below can be considered next month.

From: pinkernell@gmail.com <pinkernell@gmail.com>
Sent: Thursday, January 23, 2025 4:27 PM
To: Mitch.Kneipp@cityofwashougal.us
Cc: 'Dave Pinkernell' <pinkernell@gmail.com>
Subject: Pendleton parking lot used for Waterfront trailhead access

Dear Mr. Kneipp:
Today I saw the poster outside Pendleton with their Pendelton Development Proposal. The poster says the hearing is tomorrow at 7pm. I will be unable to attend that hearing, so I'm hoping I can give my input here. Their proposal indicates the large Pendleton parking lot will be redeveloped into "residential, retail, and office uses". That parking lot is used daily by users of the Washougal Waterfront Trail and the dike trail heading east to Captain William Clark Park and Steigerwald Lake National Wildlife Refuge. My wife and I park there many times a week to access those trails. We see many other cars parked at the trailhead who are also using the trails. I acknowledge the Pendleton parking lot is a private lot owned by Pendleton, but over the decades it has become a vital community resource for recreation. If the lot disappeared, then trail users would need to find another place to park. I am not aware of other parking locations near there (we can't park in the parking garage because we have bicycles on top of our car, as many other trail uses have. The small lot on the river side of the roundabout would not be large enough). In the redevelopment plan, I encourage the City of Washougal to take into account the need for a parking lot for the Washougal Waterfront Trail and dike trail access.
Regards,
David Pinkernell
Washougal WA

January 27, 2025

To: City of Washougal

From: Cherie Kearney and Steven Clark, 2541 Main Street, Washougal

Re: DA $24050046; ENV #24050042 (Pendleton Development Agreement)

We have lived on Main Street for 32 years and we have been deeply involved with and connected to our community here throughout that time.

More than any place in Clark County, Washougal is uniquely situated to be a city that has not been stamped into place by outside commercialism and franchises. The face of Washougal reflects leadership, creativity and economic drive that has largely come from the talent of this community.

People from the urban areas all around us know about Washougal and compliment our parks, trails, restaurants and independent vibe.

Let's expand on that! Please guide the development of this project with vigilance and commitment to ensure the following.

- **Understand, appreciate and build on Downtown Washougal** – keep the building character, size and orientation to complement our people-sized downtown.
- **Pursue and support commerce and economy that represent and benefit our community** – prevent big box stores, strip mall styles, and cookie-cutter franchises.
- **Encourage land uses that are part of our necessary future** – native plant landscaping; ecologically advanced building (e.g. solar roof tops, energy efficient designs).
- **Listen and consider long term community and neighborhood input** *above* the lure of developer promises of early and short-term financial returns that are at the expense of long-term livability.

We have pride in our community! Help us keep our confidence in Pendleton and the City's judgement and commitment to Washougal and this wonderful community: those of us here a long time; those who've just moved here; and those who look forward to a future place here.

Thank you.

Mitch Kneipp

From: Bryan Shull <bryan@trapdoorbrewing.com>
Sent: Wednesday, January 29, 2025 11:04 AM
To: Mitch Kneipp
Subject: DA 24050042 Pendleton Development

I have concerns about the road access behind our brewery (Trap Door Brewing) during construction phases. Mitigation measures, if any needed, should be part of the plan on B street. Our entire operation depends on free flow of goods through the back dock.

Bryan Shull
CEO
Trap Door Brewing
Vancouver / Washougal

COMMENTS FOR APPLICATION

To: City of Washougal
Mitch Kneipp, Community Development Director
1701 C Street
Washougal, WA 98671
Email: mitch.kneipp@cityofwashougal.us

From: David and Carolyn Simms, adjacent property owners
1120 South A Street
Washougal, WA 98671
Tax Parcel #'s 71790-001, 71892-000 & 71821-000

Date: February 3, 2025
Subject: Proposed Development Agreement for proposed Mixed-Use Master Plan
Regarding: Public Hearing tentative City Council on February 24, 2025

Dear Mr. Kneipp,

These comments are being made regarding the proposed Development Agreement of the Pendleton Mixed-Use Master Plan. It is not our intention to seek denial of the proposal, but to bring forward our concern regarding the inclusion of the tidelands in the proposal, and potential development of the same.

It appears that the West tidelands shown on the proposal are adjacent to our property. It is unclear whether those tidelands include ones that were purportedly associated with our parcel, by prior deed or by agreement with the Pendleton corporation. Of course, our concern is the ability to develop the associated tidelands under the proposal, to the detriment of our private property.

Our property was part of a larger parcel that was short platted, ours was the remainder properties. The prior deeds contained language that included tidelands on tax parcel 71790-001 and following, but it appears a deed history was not completed to verify.

Further, we understand that George Schmid had entered into an agreement to complete work for the Pendleton corporation, in exchange for receiving any available tidelands that abutted their property, which we now own. (George Schmid is the father of Carolyn Simms.) Carolyn Simms prepared the appropriate deeds for the transfer, but was not part of the negotiations for the agreement or exchange. It is assumed, the deeds were never signed by the Pendleton Corporation or recorded.

Since we believe there is dispute as to the ownership of the tidelands that are part of this proposal, we respectfully ask that the Development Agreement contain language that restricts development of the tidelands adjacent to our property or West of the current Steamboat Landing, at least until such time as this issue can be fully resolved.

Respectfully Submitted,
Carolyn A. Simms
Sent via Email: carolyn@csimmslaw.com

Mitch Kneipp

From: dors ward <depubo3@yahoo.com>
Sent: Thursday, February 6, 2025 4:52 PM
To: Mitch Kneipp
Subject: Pendleton Development

Dear Sir,

My wife and I moved here from Portland about five years ago. What drew us here was being in the Gorge, the history, the community, and the small town feel of it. We both grew up in rural settings, and generally prefer them. After she got out of the Army, being in Portland worked for a while, but it wasn't home. Since we've been here, we feel more at home than we have since we were kids in the woods. We know that development and growth is inevitable, and really hope that all the history, character, and symbiosis with the land are honored in all the future plans. We have an amazing neighborhood and town, and look forward to being a part of its evolution, but please try not to make it look like Hillsboro.

Thank you for your time.

Dors & Erin Ward

Washington State Department of Transportation

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

February 20, 2025

Mitch Kneipp, Director
City of Washougal Community Development
211 39th Street
Washougal, WA 98671

Re: Pendleton Master Plan—SEPA MDNS (DA 24050046/ ENV 24050042)
SR 14 MP 16.75

Dear Mitch Kneipp:

Washington State Department of Transportation (WSDOT) staff have reviewed the application materials submitted for the Pendleton Master Plan proposal. Approval of subsequent permits will result in a 63-acre mixed-use project consisting of the existing Pendleton Woolen Mill (light industrial use), construction of 190,000 sq. ft. of office space, 175,000 sq. ft. of commercial space, 780 multi-family units, and recreational use that incorporates connector trails.

WSDOT would like to address our concerns and offer the following comments on the Traffic Impact Analysis.

- WSDOT uses Sidra for analysis of roundabouts, with methodology differing from HCM standard methodology. Please redo the roundabout modeling in Sidra and update mitigation recommendations if appropriate. See the WSDOT Sidra Policy for details (WSDOT Sidra Policy Setting). WSDOT will review the TIA after the updates.

- WSDOT agrees trip generation and distribution are appropriate. Using 2019 volumes for pre-development analysis is atypical but acceptable as AADTs in the project vicinity remain below pre-pandemic levels.

- Please include justification explaining why only PM peak was analyzed.

If the Sidra analysis still shows a significant increase in average delay in the post-development scenario, WSDOT considers this increase in average delay to be a significant adverse impact to the highway system, and we will need to review mitigation options as determined by the updated TIA.

These comments are based on a review of your project. As this project progresses, there may be need for additional information by this department for further review. There may be other issues and requirements by this department that are not stated here. This review does not constitute final approval by WSDOT.

Thank you for the opportunity to comment on the above referenced project. If you have any questions or need additional information, please contact me at Jason.Lugo@wsdot.wa.gov or at 360-787-3522.

Sincerely,

Jason Lugo
Development Review Planner
WSDOT Southwest Region

Mitch Kneipp

From: Peplinski, Joy (DFW) <Joy.Peplinski@dfw.wa.gov>
Sent: Thursday, February 20, 2025 5:52 PM
To: Mitch Kneipp
Cc: R5 Planning (DFW)
Subject: WDFW Comments: Pendleton Development Agreement – DA #24050046 / ENV # 24050042

Hi Mitch,

Thank you for the opportunity to comment on the Pendleton Development Agreement. WDFW recognizes that this Development Agreement does not propose any development. However, by considering the location of critical areas, particularly fish and wildlife habitat conservation areas (FWHCAs), future development can sufficiently avoid and minimize impacts as outlined in Washougal Municipal Code 16.04.085 Mitigation.

WDFW's Priority Habitat and Species (PHS) webmap does not indicate that any PHS are present on site; however, wintering waterfowl concentrations are located near this project. The PHS webmap has limitations as outlined here, so it is critical that a site assessment is performed to confirm the presence of PHS. Furthermore, the DNR hydrolayer indicates that a fish-bearing stream is present on site. **We recommend that future development confirm the stream location, consider development layouts that avoid impacts to the riparian habitat, and if impacts cannot be avoided, that an alternatives analysis is performed to determine how to minimize if impacts to the riparian habitat and other FWHCAs.**

Additionally, if any construction activities occur on or near waters of the state, please direct the applicant to WDFW to confirm Hydraulic Project Approval (HPA) permitting requirements.

Please let us know if there is additional technical assistance we can provide.

Thank you,
Joy

Joy Peplinski | she/her
Habitat Biologist | Southwest Region 5
Washington Department of Fish and Wildlife
5525 South 11th Street
Ridgefield, WA 98642

joy.peplinski@dfw.wa.gov | (564) 237-1913

Agenda Bill #06-2025

BUSINESS OF THE CITY COUNCIL

City of Washougal, Washington

FOR AGENDA OF:
2/24/2025

SUBJECT:
Biosolids Handling Facilities Ecology Loan Acceptance

DEPT. OF ORIGIN:
Public Works

REVIEWED AT:
Public Works Committee meeting February 13, 2025.

TO BE RETURNED TO COUNCIL:
No

ATTACHMENTS:

- **Biosolids Loan Acceptance - Resolution**

EXPENDITURE REQUIRED:	BUDGETED:	APPROPRIATION REQUIRED:
N/A	$22,564,700	$22,567,700

SUMMARY STATEMENT

On March 11, 2024, the City Council approved the construction contract for the Biosolids Handling Facilities Project, with a total project budget of $34,564,700. During the March 6 Public Works Committee meeting, we outlined the funding breakdown, noting that approximately $22,564,700 was awarded as a loan by the Department of Ecology. As part of the authorization process for this loan, the City is required to pass a resolution formally accepting it.

RECOMMENDED ACTION

Pass and post the resolution in the usual manner.

Resolution No. _____

A RESOLUTION of the City of Washougal accepting a loan from the Department of Ecology.

WHEREAS, The City of Washougal was awarded a $22,564,700 standard loan (WQC-2025-WashPW-00068) from the Department of Ecology, to aid in financing the cost of construction of a new biosolids management facility; and

WHEREAS, this loan has a 1.6% interest rate;

WHEREAS, this loan has a 30yr term; and

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL FOR THE CITY OF WASHOUGAL, WASHINGTON as follows:

Section I

That the City of Washougal is herby authorized to accept Loan # WQC-2025-WashPW-00068.

Section II

This resolution shall take effect after its passage and posting according to law.

PASSED by the Council of the City of Washougal on the 24th day of February 2025.

City of Washougal, Washington

_____

Mayor, Dave Stuebe

ATTEST:

_____

Finance Director / City Clerk

APPROVED AS TO FORM:

_____

City Attorney

BUSINESS OF THE CITY COUNCIL

City of Washougal, Washington

FOR AGENDA OF:
2/24/2025

SUBJECT:
Council Discussion: Interstate Bridge Replacement Project

DEPT. OF ORIGIN:
Administration

REVIEWED AT:

TO BE RETURNED TO COUNCIL:
Yes

ATTACHMENTS:

- **IBR discussion 2 24 2025.pdf**

EXPENDITURE REQUIRED: **BUDGETED:** **APPROPRIATION REQUIRED:**

SUMMARY STATEMENT

RECOMMENDED ACTION

Council Discussion re: IBR

2/24/2025 |

City of Washougal

Agenda

- Purpose of Discussion
- Background information
- Council Discussion/Direction

Purpose of Discussion

- Recent CTRAN action and information concerning the IBR has raised concerns re: LRT O&M costs and LRT generally
- Camas City Council Resolution
- Request by Washougal Council to discuss this issue
- Possible Council consensus/direction

Background: Prior Ballot Measures

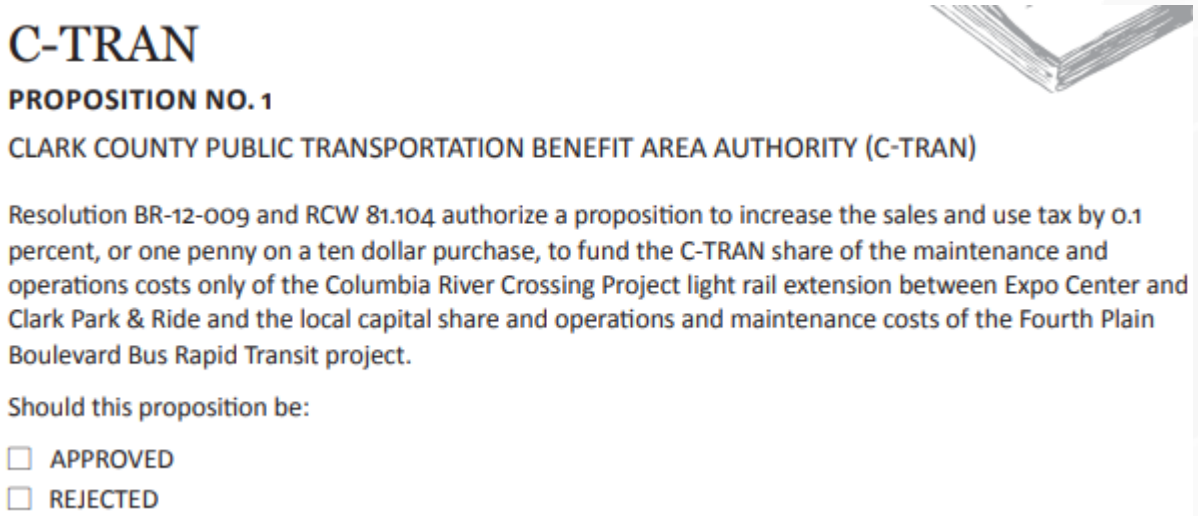
- Light rail has appeared on the ballot three times in Clark County

- Aspects of light rail were on the ballot in 1995, 2012 and 2013. Each time, voters did not favor the specific proposal.

- 1995
  - A proposed light rail line from Clackamas Town Center to the Northeast 99th Street area of Hazel Dell was voted down by 67.8 percent.
  - The proposal included a 0.3 percent sales tax increase and a motor vehicle excise tax (~ $60 annual increase for an average late model car) to pay for Clark County's roughly $237.5 million share.

Background: Prior Ballot Measures

- 2012:



C-TRAN

PROPOSITION NO. 1

CLARK COUNTY PUBLIC TRANSPORTATION BENEFIT AREA AUTHORITY (C-TRAN)

Resolution BR-12-009 and RCW 81.104 authorize a proposition to increase the sales and use tax by 0.1 percent, or one penny on a ten dollar purchase, to fund the C-TRAN share of the maintenance and operations costs only of the Columbia River Crossing Project light rail extension between Expo Center and Clark Park & Ride and the local capital share and operations and maintenance costs of the Fourth Plain Boulevard Bus Rapid Transit project.

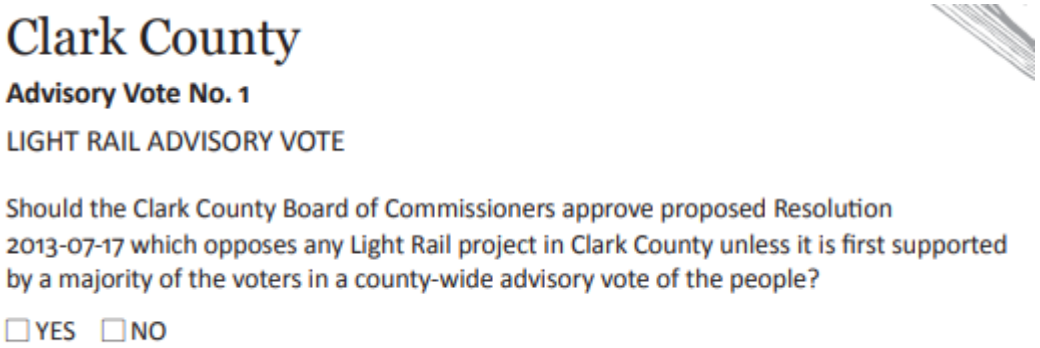
Should this proposition be:

☐ APPROVED
☐ REJECTED

- This was rejected by 56.51% of voters

Background: Prior Ballot Measures

- 2013:



Clark County

Advisory Vote No. 1

LIGHT RAIL ADVISORY VOTE

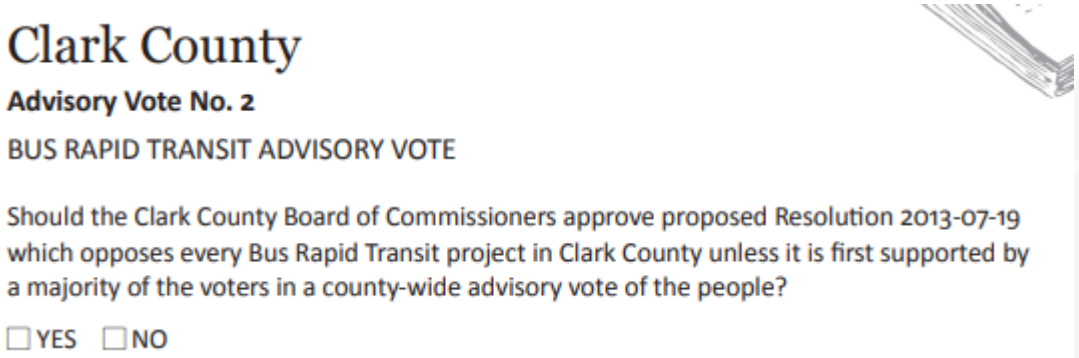
Should the Clark County Board of Commissioners approve proposed Resolution 2013-07-17 which opposes any Light Rail project in Clark County unless it is first supported by a majority of the voters in a county-wide advisory vote of the people?

☐ YES ☐ NO

- This was approved by 68.39% of voters

Background: Prior Ballot Measures

- 2013:



Clark County

Advisory Vote No. 2

BUS RAPID TRANSIT ADVISORY VOTE

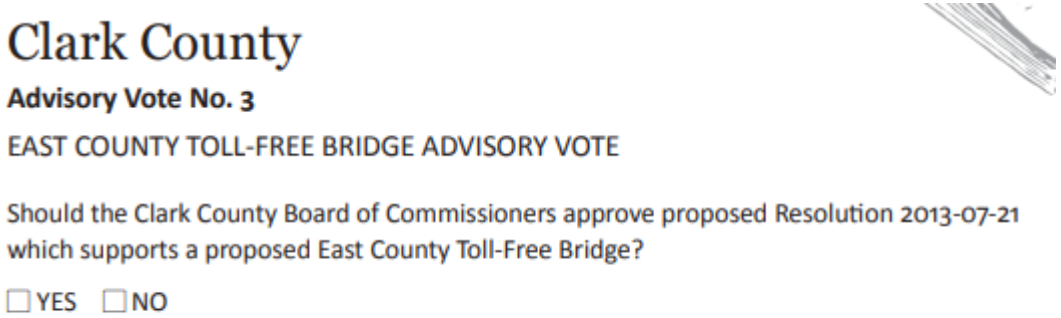
Should the Clark County Board of Commissioners approve proposed Resolution 2013-07-19 which opposes every Bus Rapid Transit project in Clark County unless it is first supported by a majority of the voters in a county-wide advisory vote of the people?

☐ YES ☐ NO

- This was approved by 62.79% of voters

Background: Prior Ballot Measures

- 2013:



Clark County

Advisory Vote No. 3

EAST COUNTY TOLL-FREE BRIDGE ADVISORY VOTE

Should the Clark County Board of Commissioners approve proposed Resolution 2013-07-21 which supports a proposed East County Toll-Free Bridge?

☐ YES ☐ NO

- This was approved by 57.73% of voters

Background: Prior Ballot Measures

- 2013:

Clark County

Advisory Vote No. 4

INTERSTATE-5 TOLL-FREE BRIDGE REPLACEMENT

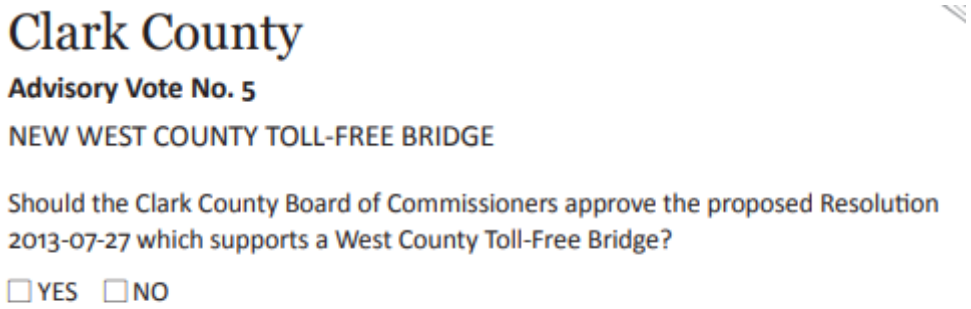
Should the Clark County Board of Commissioners approve proposed Resolution 2013-07-25 which would create a board policy which supports a proposed I-5 Toll-Free Bridge Replacement?

☐ YES ☐ NO

- This was approved by 55.71% of voters

Background: Prior Ballot Measures

- 2013:



Clark County

Advisory Vote No. 5

NEW WEST COUNTY TOLL-FREE BRIDGE

Should the Clark County Board of Commissioners approve the proposed Resolution 2013-07-27 which supports a West County Toll-Free Bridge?

☐ YES ☐ NO

- This was rejected by 50.03% of voters

Background: 2022 Survey

- Conducted 1,005 interviews with registered voters in Clark, Clackamas, Multnomah and Washington counties from April 13-20, 2022
- Overall margin of sampling error of ±4% at the 95% confidence level

Background: 2022 Survey

- *As you may know, the states of Washington and Oregon have been working together on a plan to replace the I-5 bridge between Washington and Oregon. In general, do you strongly support, somewhat support, somewhat oppose, or strongly oppose replacing the I-5 bridge between Washington and Oregon with a new bridge?*

  - 85% of total respondents strongly or somewhat support replacing the I-5 bridge with a new bridge:
    - Portland Metro Area (OR): 86%
    - City of Portland: 88%
    - Clark County: 81% (Clark County excluding Vancouver: 78%)
    - City of Vancouver: 87%

Background: 2022 Survey

- *There will be dedicated space on the new bridge where Light Rail can be built. To do this, the existing Max Yellow line from Expo Station in North Portland would be extended across the bridge into Vancouver. You could travel between downtown Portland and Vancouver on Light Rail with no transfers. The extension would be paid for by a combination of funds from the states of Oregon, Washington, and the federal government. Would you say you strongly support, somewhat support, somewhat oppose, or strongly oppose having Light Rail on the bridge?*

  - 79% of total respondents strongly or somewhat support light rail across the bridge:
    - Portland Metro Area (OR): 84%
    - City of Portland: 90%
    - Clark County: 61% (Clark County excluding Vancouver: 57%)
    - City of Vancouver: 69%

Council Discussion/Direction