

# **Land Use Application For NE 152<sup>nd</sup> Avenue TSR Property Type IV Annual Review & Zone Change**

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**Date:** January 2019

**Submitted to:** Clark County  
Community Planning  
1300 Franklin Street  
Vancouver, WA 98660

**Applicant:** TSR Investments, LLC  
PO Box 1900  
Battle Ground, WA 98604  
(360) 687-1148  
garyr@tapani.com

**Owner:** TSR Investments, LLC  
PO Box 1900  
Battle Ground, WA 98604

**AKS Job Number:** 5974



9600 NE 126th Avenue, Suite 2520  
Vancouver, WA 98682  
(360) 882-0419

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## **Submittal Items**

### **(One Original)**

1. County Land Use Application Form
2. Application Fee
3. Legal Description
4. Pre-Application Conference Report
5. Clark County Developer's GIS Packet
6. State Environmental Review (SEPA)
7. Project Narrative
8. School District Letter
9. Airport Notice
10. Neighborhood Association Notice
11. CREDC Letter
12. Traffic Memo



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## 1. County Land Use Application Form

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# Development Application

<b>Project name:</b> NE 152nd Avenue TSR Property		
<b>Type(s) of application (see reverse side):</b> Application for Annual Review & Zone Change		
<b>Description of proposal:</b> The applicant proposes a zone change from Community Commercial to R1-6 Residential, requiring a comprehensive plan map change from Commercial to Urban Low Density Residential.		
<b>Applicant name:</b> TSR Investments, LLC Contact: Gary Rademacher		<b>Address:</b> PO Box 1900 Battle Ground, WA 98604
<b>E-mail address:</b> garyr@tapani.com		<b>Phone and fax:</b> (360) 687-1148
<b>Property owner name (list multiple owners on a separate sheet):</b> Same As Applicant		<b>Address:</b>
<b>E-mail address:</b>		<b>Phone and fax:</b>
<b>Contact person name (list if not same as applicant):</b> Seth Halling		<b>Address:</b> 9600 NE 126th Avenue, Suite 2520 Vancouver, WA 98682
<b>E-mail address:</b> sethh@aks-eng.com		<b>Phone and fax:</b> (360) 882-0419
<b>Project site information:</b> Site address: 9000 NE 152nd Avenue Vancouver, WA 98682		<b>Comp plan designation:</b> Commercial (C)
<b>Cross street:</b> NE 152nd Ave & NE 93rd St	<b>Zoning:</b> Community Commercial (CC)	<b>Parcel numbers:</b> 154246-000
<b>Overlay zones:</b> None	<b>Legal:</b> NE 1/4, S02, T2N, R2E	<b>Acreage of original parcels:</b> 7.68 Acres
<b>Township:</b> 2N	<b>Range:</b> 2E	<b>1/4 of section:</b> 02

## Authorization

The undersigned hereby certifies that this application has been made with the consent of the lawful property owner(s) and that all information submitted with this application is complete and correct. False statements, errors, and/or omissions may be sufficient cause for denial of the request. This application gives consent to the county to enter the properties listed above.

Applicant's signature

Date

Property owner or authorized  
representative's signature

Date

For staff use only

Case number:

Work order number:

Revised 6/14/12



Community Development  
1300 Franklin Street, Vancouver, Washington  
Phone: (360) 397-2375 Fax: (360) 397-2011  
[www.clark.wa.gov/development](http://www.clark.wa.gov/development)



For an alternate format,  
contact the Clark County  
ADA Compliance Office.  
Phone: (360) 397-2322  
Relay: 711 or (800) 833-6384  
E-mail: [ADA@clark.wa.gov](mailto:ADA@clark.wa.gov)



## Application types

If you have any questions regarding the type of application being requested, our Permit Technicians will be happy to assist you.

- ☒ Annual Review
- ☐ Appeal
- ☐ Boundary Line Adjustment and Lot Reconfiguration
- ☐ Conditional Use

### Environmental/Critical Areas

- ☐ Critical Aquifer Recharge Area (CARA)
- ☐ Columbia River Gorge
- ☐ Forestry + (Moratorium Waiver, Moratorium Removal, Class I, Class IVG or COHP)
- ☐ Floodplain
- ☐ Geological
- ☐ Habitat
- ☐ Habitat Monitoring
- ☐ Historic
- ☐ SEPA
- ☐ Shoreline
- ☐ Wetland
- ☐ Wetland Monitoring

### Land Division

- ☐ Binding Site Plan
- ☐ Final Plat
- ☐ Plat Alteration
- ☐ Short Plat (\_\_\_ Infill)
- ☐ Subdivision (\_\_\_ Infill)

### Miscellaneous










- ☐ Addressing
- ☐ Accessory Dwelling
- ☐ Covenant Release
- ☐ Home Business
- ☐ Legal Lot Determination and Innocent Purchasers Determination
- ☐ Non-Conforming Use Determination
- ☐ Sewer Waiver
- ☐ Shooting Range
- ☐ Sign

### Planning Director Review

- ☐ Post Decision
- ☐ Pre-Application Conference
- ☐ Pre-Application Waiver
- ☐ Public Interest Exception
- ☐ Similar Use
- ☐ Temporary Use
- ☐ Planned Unit Develop/Master Plan
- ☐ Road Modification
- ☐ Site Plan
- ☐ Variance
- ☒ Zone Change

## ANNUAL REVIEW SUBMITTAL REQUIREMENTS CHECKLIST

The following is a checklist of the required information for submitting an Annual Review application. Applications cannot be accepted unless ALL of the following information is submitted. Applications cannot be processed until ALL of the following information is determined to be fully complete.

1.  **Cover Sheet and Table of Contents**
2.  **APPLICATION FORM** completed and signed by owner(s) of record.
3.  **ALL FILING FEES:** The required fee shall accompany the application. The check is to be made payable to "Clark County Community Planning."
4.  A full and complete **LEGAL DESCRIPTION** of the property (*available from a title company or surveyor*).
5.  A copy of the **PRE-APPLICATION CONFERENCE REPORT**.
6.  **A copy of the DEVELOPER'S GIS PACKET INFORMATION.**
  - A copy of the "Developer's GIS Packet" obtained for the pre-application submittal shall be included with the Annual Review application submittal.
7.  **ENVIRONMENTAL (SEPA) CHECKLIST**
  - A State Environmental Policy Act (SEPA) ENVIRONMENTAL CHECKLIST must be completed, original signed in ink and submitted (*available at the Permit Services Center*).
8.  **WRITTEN NARRATIVE**, including:
  - Description of the request
  - Area of the site (acres or square feet)
  - Related or previous permit activity
  - Applicant's interest in the property (whether owner, buyer, lessee, contractor, engineer, consultant, or legal representative)
  - Statements which fully analyze how the plan/zone request is consistent with the applicable goals, policies, key growth indicators, and criteria in the *Comprehensive Growth Management Plan, Community Framework Plan*, the Growth Management Act (GMA), applicable local city Comprehensive Plan(s), applicable capital facility plan(s), and official population growth forecasts (see the section that addresses *What is the process for applying for an Annual Review?* for greater detail).
9.  **SPECIAL STUDIES**

For properties requesting a Comprehensive Plan Change to any Commercial designation:

- One copy of a **MARKET ANALYSIS (Form 21-B)** which identifies the need for the new commercial center/area.
- One copy of a **TRANSPORTATION ANALYSIS** if requested during the pre-application conference.
- One copy of a **LAND USE ANALYSIS** of available commercially zoned land in the market area of the proposed site and a determination of why the existing commercial land is inadequate.
- One copy of additional information requested.

**10. ✓** Any **ADDITIONAL INFORMATION** the applicant believes is necessary to justify the requested plan amendment.

**11. ✓ SUBMITTAL COPIES:**

One copy of the main submittal, bound by a jumbo clip or rubber band, with original signatures;

Once the application is deemed fully complete, the applicant will be directed to submit a CD in PDF format, with a copy of the fully complete application, including any revisions or additional information required in the Fully Complete review. Any special studies shall also be included on the CD. The CD application shall be organized as follows:

The application submittal shall be organized in the same order as the fully complete application table of contents, with a separate PDF document for each separate item.

The PDF document must be organized into separate files. Each PDF file must be labeled with a number followed by a name (example):

1. Cover Sheet and Table of Contents
2. Application Fee
3. Pre-Application Conference report
4. etc.

## 2. Application Fee

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**#5974 - NE 152nd Avenue TSR Property**

**PAC 2018-00116**

<b>PRELIMINARY PLAN REVIEW FEES:</b>	
<b>Preliminary Plan Review Fees (Fully Complete)</b>	
<b>Planning</b>	
<b>Combined Annual Review/Zone Change</b>	<b>\$8,207.00</b>
Base Fee	\$8,113.00
Issuance	\$94.00
<b>SEPA</b>	<b>\$2,040.00</b>
Non-Project Review	\$1,987.00
Issuance	\$53.00
<b>Total</b>	<b>\$10,247.00</b>

## 3. Legal Description

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VANCOUVER  
WASHINGTON

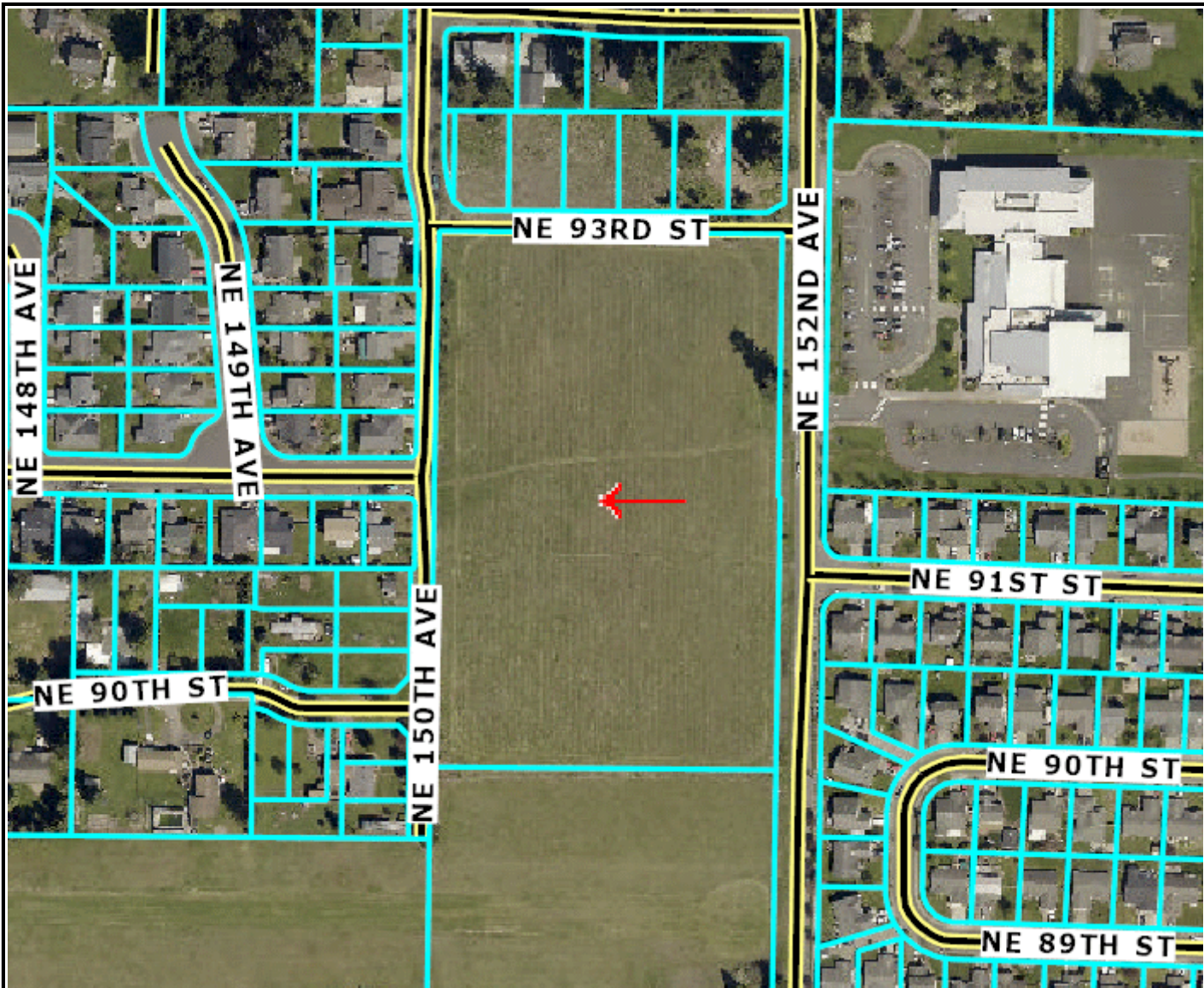


**CHICAGO TITLE Fidelity National Title**  
TWO COMPANIES ONE UNITED TEAM

### CLARK COUNTY PROPERTY PROFILE INFORMATION

Parcel: 154246000  
Owner: Tsr Investments LLC  
Site: WA 98682  
Mail: PO Box 1900 Battle Ground WA 98604-1900  
Land Use: 991 UNUSED OR VACANT LAND - NO IMPROVEMENTS  
Subdivision:  
Zoning: C-3 Community commercial (C-3, C2, CC, CCB)  
School Dist: 114 Evergreen

Year Built:  
Bedrooms: 0  
Bathrooms: 0.00  
Total Area: 0 SF  
Lot Size: 8.14 AC/354,578 SF  
Mkt Value: \$1,063,700  
Assd Value: \$2,803  
Sale: 02/01/17 \$900,000



**5373244 D**

Total Pages: 4 Rec Fee: \$76.00

eRecorded in Clark County, WA 02/01/2017 12:30 PM

CHICAGO TITLE DT VANCOUVER

SIMPLIFILE LC E-RECORDING

**When recorded return to:**

TSR Investments, LLC, a Washington limited  
liability company

PO Box 1900

Battle Ground, WA 98604

Filed for record at the request of:



**CHICAGO TITLE**

COMPANY OF WASHINGTON

1111 Main Street, Suite 200

Vancouver, WA 98660

Escrow No.: 622-84718

**STATUTORY WARRANTY DEED**

THE GRANTOR(S) Diocese of Olympia, Inc., a Washington corporation

for and in consideration of Ten And No/100 Dollars (\$10.00) and other good and valuable  
consideration

in hand paid, conveys, and warrants to TSR Investments, LLC, a Washington limited liability company

the following described real estate, situated in the County of Clark, State of Washington:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Abbreviated Legal: (Required if full legal not inserted above.)

Tax Lot 89, Section 2, Township 2 North, Range 2 East

Tax Parcel Number(s): 154246000

Subject to:

SEE EXHIBIT "B" ATTACHED HERETO AND MADE A PART HEREOF

Dated: January 31, 2017

Diocese of Olympia, Inc.

BY: Barbara A. Fox

Barbara A. Fox  
Treasurer



# STATUTORY WARRANTY DEED

(continued)

State of WASHINGTON

County of King

I certify that I know or have satisfactory evidence that Barbara A. Fox is the person who appeared before me, and said person acknowledged that he/she signed this instrument, on oath stated that he/she was authorized to execute the instrument and acknowledged it as Treasurer of Diocese of Olympia, Inc. to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: Jan 31, 2017

Judith Andrews  
Name: JUDITH ANDREWS  
Notary Public in and for the State of Washington  
Residing at: Seattle  
My appointment expires: 11-10-17



**EXHIBIT "A"**  
Legal Description

**For APN/Parcel ID(s): 154246000**

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The South 717 feet of the following described property:

That portion of the Southeast quarter of the Northeast quarter of Section 2, Township 2 North, Range 2 East of the Willamette Meridian, Clark County, Washington, described as follows:

BEGINNING at a point 440.22 feet North of the Southeast corner of said Northeast quarter and running thence North 879.78 feet; thence West 495 feet; thence South 879.78 feet and thence East 495 feet to the Point of Beginning.

EXCEPT that portion conveyed to Clark County, Washington by Quit Claim Deed recorded under Auditor's File No. 5155274.

ALSO EXCEPT any portion lying within NE 152nd Avenue.

PAZ

## **EXHIBIT "B"**

### **Exceptions**

1. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:  
  
In favor of:           Northwestern Electric Company, a Washington corporation  
Purpose:               Transmission of electric current  
Recording Date:       March 29, 1947  
Recording No.:         F77248, Book 415, Page 574
2. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:  
  
In favor of:           CITY OF VANCOUVER, a municipal corporation  
Purpose:               water and sewer  
Recording Date:       February 27, 2015  
Recording No.:         5150304
3. Easement(s) for the purpose(s) shown below and rights incidental thereto as set forth in a document:  
  
Purpose:               private storm sewer  
Recording Date:       March 17, 2015  
Recording No.:         5155273
4. Any rights, interests, or claims which may exist or arise by reason of the following matters disclosed by survey,  
  
Recording Date:       April 24, 1992  
Recording No.:         Book 31, Page 5 and Book 33, Page 73  
Matters shown:        fence
5. Any unrecorded leaseholds, right of vendors and holders of security interests on personal property installed upon the Land and rights of tenants to remove trade fixtures at the expiration of the terms.

*BA7*

**5155274 D**

RecFee - \$75.00 Pages: 5 - CLARK COUNTY PUBLIC WORKS  
Clark County, WA 03/17/2015 02:42



Real Estate Excise Tax  
Ch. 11 Rev. Laws 1951

EXEMPT

Affd. # 723252 Date 3-17-15  
For Details of tax paid see

Affd. # \_\_\_\_\_

Doug Lasher  
Clark County Treasurer

By U  
Deputy

**RETURN ADDRESS**

Clark County – Public Works/Development Engineering

**DOCUMENT TITLE (S)**

Quit Claim Deed

**REFERENCE NUMBER (S) OF RELATED DOCUMENT (S)**

FLD2014-00040

**GRANTOR (S)**

Diocese of Olympia, INC.

**GRANTEE (S)**

Clark County

**LEGAL DESCRIPTION (abbreviated form i.e. lot, block, plat or section, township, range, quarter/quarter)**

Portion of Section 2, T2N, R2E WM

**ASSESSOR'S PROPERTY TAX PARCEL/ACCOUNT NUMBER**

154246000

The Auditor/Recorder will rely on the information provided on this form. The staff will not read the document to verify the accuracy or completeness of the indexing information provided herein.

Serial #: 154246-000

Abbreviated Legal: Portion of Section 2, T2N, R2E, WM

Project: ENG2014-00091

**QUIT CLAIM DEED**  
**Right- of- Way Dedication**

THE GRANTOR(s), **Diocese of Olympia, Inc.**, for and in consideration of valuable considerations as set out in part below, conveys and quit claims to **CLARK COUNTY, WASHINGTON, A Political Subdivision of the State of Washington**, its heirs and assigns, the following described real estate situated in the County of Clark, State of Washington, together with all after acquired title of the Grantor(s) therein:

Legal description "exhibit A" attached.

NOTE: It is understood and agreed that the delivery of this deed is hereby tendered and the terms and obligations hereof shall not become binding upon Clark County, Washington, until this document is accepted and approved by the Clark County Board of County Commissioners.

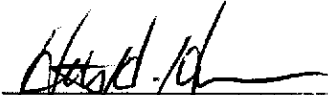
Clark County by accepting and recording this deed hereby agrees to the below written conditions and considerations. No condition or consideration not written below will be honored by Clark County. If there are no conditions or considerations, so state.

**CONSIDERATIONS:** None

DATED this 10th day of Feb, 2015.

  
\_\_\_\_\_  
Diocese of Olympia, Inc.

Accepted on behalf of Clark County  
Under the authority of CCC 2.33.095

  
\_\_\_\_\_  
Heath H. Henderson, P.E.  
Director of Public Works

TO QUIT CLAIM DEED DATED \_\_\_\_\_

**Grantor:** Diocese of Olympia, Inc.  
**Grantee:** CLARK COUNTY, A Political Subdivision of the State of Washington  
**Serial #** 154246-000

STATE OF WASHINGTON )  
COUNTY OF ~~CLATSOP~~ *King* ) SS.

On this day 10th of Feb, 2015, before me, the undersigned, A Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared BARBARA A. FOX to me known to be the TREASURER of Diocese of Olympia Inc the entity that executed the foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of the said entity, for the uses and purposes therein mentioned, and on oath stated that she is/are authorized to execute the said instrument on behalf of the said entity.

WITNESS my hand and official seal hereto affixed the day and year in the certificate above written.

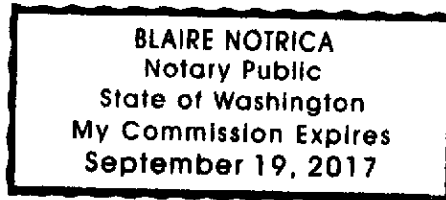
Blue No. 1234567890  
Signature of Notary Public

Notary Public in and for the State of Washington,

Name Printed BLAINE NOTRICA

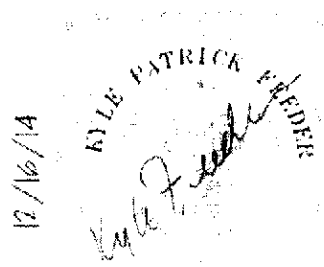
Residing at SEATTLE

My Commission Expires: 9/12/17





**KPF Surveying Inc.**  
**1514 N.E. 267<sup>th</sup> Ave.**  
**Camas, WA 98607**  
**360-834-0174**

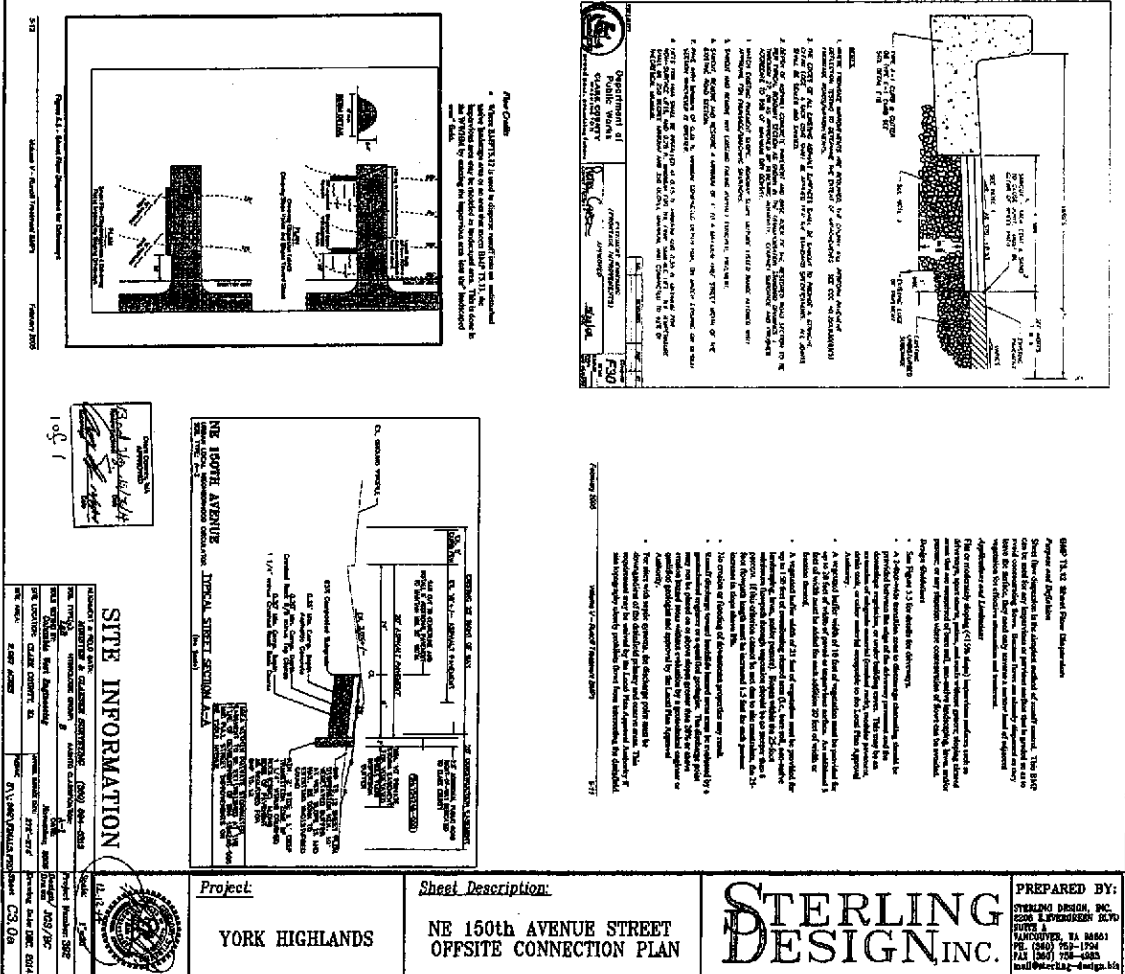


December 16, 2014

**RIGHT-OF-WAY DEDICATION**

A tract of land in a portion of the Southeast quarter of the Northeast quarter of Section 2, Township 2 North, Range 2 East, Willamette Meridian, Clark County, Washington, more particularly described as follows:

The West 2.50 feet of the North 355.00 feet of that certain tract recorded in Auditors' File Number 3259231, records of Clark Country, Washington.





CHARTER TITLE

D

9.00

Real Estate Excise Tax  
Ch. 11 Rev. Laws 1951

\$9211.50 has been paid

Recpt.# 470258 Date 10-11-00

When Recorded Return to Sec. 61, see Affd. No.

Doug Lasher  
Clark County Treasurer



Charter Title Corporation

CTC-102406 -LR

STATUTORY WARRANTY DEED

THE GRANTOR ROSANN M. BRUNGARDT, AS HER SEPARATE ESTATE

for and in consideration of TEN DOLLARS AND OTHER VALUABLE  
CONSIDERATION  
in hand paid, conveys and warrants to DIOCESE OF OLYMPIA, INC.

the following described real estate, situated in the County of  
**CLARK**, State of Washington:

Legal description attached hereto as Exhibit A.

Legal Description (Abbreviated):  
**SECTION 2, TOWNSHIP 2 NORTH, RANGE 2 EAST**

Assessor's Tax Parcel ID# **154246-000**

Dated: 10-6-00

Rosann M. Brungardt  
ROSANN M. BRUNGARDT

STATE OF WASHINGTON,  
County of **CLARK**

ss.

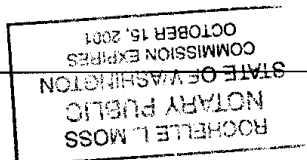
I certify that I know or have satisfactory evidence that

**ROSANN M. BRUNGARDT**

(is/are) the person(s) who appeared before me, and said person(s) acknowledged that (he/she/they) signed this instrument and acknowledged it to be (his/her/their) free and voluntary act for the uses and purposes mentioned in the instrument.

Dated: 10-6-00

Rochelle L. Moss  
Notary Public in and for the State of Washington, residing at **VANCOUVER**  
My appointment expires 12/15/03 10-15-01



**EXHIBIT A**

CTC-102406

The South 717 feet of the following described property:

That property of the Southeast quarter of the Northeast quarter of Section 2, Township 2 North, Range 2 East of the Willamette Meridian, Clark County, Washington, described as follows:

BEGINNING at a point 440.22 feet North of the Southeast corner of said Northeast quarter and running thence North 879.78 feet; thence West 495 feet; thence South 879.78 feet and thence East 495 feet to the point of beginning.

**SUBJECT TO:**

1. Matters disclosed by survey recorded in Volume 31 of Surveys, Page 5, copy attached.
2. Sewer Reimbursement Contracts, including the terms and conditions thereof, as recorded under Auditor's File Nos. 9112190013 and 9204230009.
3. Water Reimbursement Contracts, including the terms and conditions thereof, as recorded under Auditor's File Nos. 9112190015 and 9408010369.



TRANSAMERICA TITLE  
INSURANCE COMPANY

THIS SPACE RESERVED FOR RECORDER'S USE:

Filed for Record at Request of

*Mail*

Name.....Battle Ground Realty, Inc.....

Address.....P. O. Box 261.....

City and State.....Battle Ground, Washington 98604.....

G 540842

731750

FILED FOR RECORD  
CLARK CO. WASH.  
TRANSAMERICA TITLE INS. CO.

AUG 6 8 18 AM '69

AUDITOR DON BONKER

## Statutory Warranty Deed

Form 467- 1-REV

THE GRANTORS, PHILLIP W. ROGERS and MARY M. ROGERS, husband and wife,

for and in consideration of TEN AND NO/100 (\$10.00) DOLLARS,

in hand paid, conveys and warrants to ALFRED BRUNGARDT and ROSANN M. BRUNGARDT, husband and wife,

the following described real estate, situated in the County of Clark, State of Washington:



The South 717 feet of the following described property:

That portion of the Southeast quarter of the Northeast quarter of Section 2, Township 2 North, Range 2 East of the Willamette Meridian, described as follows:

Beginning at a point 6.67 chains North of the Southeast corner of said Northeast quarter and running thence North 13.33 chains; thence West 7.50 chains; thence South 13.33 chains and thence East 7.50 chains to the point of beginning.

EXCEPT County Roads.

Real Estate Excise Tax  
Ch. 11 Rev. Laws 1951

\$110.00 has been paid

Rept. #70657 Date 8-8-68

Sec. 61, see Act No. 100

Dorothy Carlson  
Clark County Treasurer

By *[Signature]* Deputy

Dated this

8th

day of

August

, 1968

*Phillip W Rogers* (SEAL)

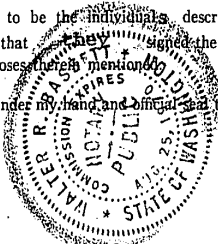
*Mary M Rogers* (SEAL)

STATE OF WASHINGTON, } ss.  
County of Clark

On this day personally appeared before me Phillip W. Rogers and Mary M. Rogers,

to me known to be the individuals described in and who executed the within and foregoing instrument, and acknowledged that they signed the same as their free and voluntary act and deed, for the uses and purposes therein mentioned.

GIVEN under my hand and official seal this 8th day of August, 1968



*Walter R. B. Burt*  
Notary Public in and for the State of Washington,  
residing at Battle Ground, therein.

*Battle Ground Realty*

G 520142

## REAL ESTATE CONTRACT

703894

THIS CONTRACT, made this 8th day of August, 1968, between

PHILLIP W. ROGERS and MARY M. ROGERS, husband and wife, hereinafter called the "seller" and  
~~ALFRED BRUNGARDT~~ and ROSANN M. ROGERS, husband and wife, hereinafter called the "purchaser,"

WITNESSETH: The seller agrees to sell to the purchaser, and the purchaser agrees to purchase of the seller the following described real estate with the appurtenances, situate in Clark County, Washington:

The South 717 feet of the following described property:

That portion of the Southeast quarter of the Northeast quarter of Section 2, Township 2 North, Range 2 East of the Willamette Meridian, described as follows:

Beginning at a point 6.67 chains North of the Southeast corner of said Northeast quarter and running thence North 13.33 chains; thence West 7.50 chains; thence South 13.33 chains and thence East 7.50 chains to the point of beginning.

EXCEPT County Roads.

On the following terms and conditions: The purchase price is

ELEVEN THOUSAND AND NO/100\*\*\*\*\* (\$ 11,000.00) dollars, of which SIX THOUSAND AND NO/100\*\*\*\*\* (\$ 6,000.00 ) dollars has been paid, the receipt whereof is hereby acknowledged, and the purchaser agrees to pay the balance of said purchase price as follows:

Balance of FIVE THOUSAND AND NO/100 (\$5,000.00) DOLLARS, to <sup>be</sup> paid in full one (1) year from date of closing.

The Purchaser further agrees to pay interest on said balance at the rate of 6 1/2 per cent per annum from the 8th day of August 1968.

As referred to in this contract, "date of closing" shall be 8-68.

Real Estate Excise Tax  
Ch. 11 Rev. Laws 1951

\$ 1100.00 has been paid

Rcpt. # 70657 Date 8-8-68

Sec. 61, see 61-110

Deputy: Carlson  
Clark County Treasurer

By [Signature]  
Deputy

The purchaser agrees: (1) to pay before delinquency all payments of whatsoever nature, required to be made upon or by virtue of said mortgage, if any; also all taxes and assessments which are above assumed by him, if any, and all which may, as between grantor and grantee, hereafter become a lien on the premises; and also all taxes which may hereafter be levied or imposed upon, or by reason of, this contract or the obligation thereby evidenced, or any part thereof; (2) to keep the buildings now and hereafter placed upon the premises unceasingly insured against loss or damage by fire, to the full insurable value thereof, in the name of the seller as owner, in an insurance company satisfactory to the seller for the benefit of the mortgagee, the seller, and the purchaser, as their interests may appear, until the purchase price is fully paid, and to deliver to seller the insurance policies, renewals, and premium receipts, except such as are required to be delivered to the mortgagee; (3) to keep the buildings and all other improvements upon the premises in good repair and not to permit waste; and (4) not to use the premises for any illegal purpose.

In the event that the purchaser shall fail to pay before delinquency any taxes or assessments or any payments required to be made on account of the mortgage, or to insure the premises as above provided, the seller may pay such taxes and assessments, make such payments, and effect such insurance, and the amounts paid therefor by him shall be deemed a part of the purchase price and become payable forthwith with interest at the rate of 10 per cent per annum until paid, without prejudice to other rights of seller by reason of such failure.

703895

The purchaser agrees to assume all risk of damage to any improvements upon the premises, or of the taking of any part of the property for public use; that no such damage or taking shall constitute a failure of consideration, but in case of such damage or taking, all moneys received by the seller by reason thereof shall be applied as a payment on account of the purchase price of the property, less any sums of money which the seller may be required to expend in procuring such money, or at the election of the seller, to the rebuilding or restoration of such improvements.

The seller agrees, upon receiving full payment of the purchase price and interest in the manner above specified, to execute and deliver to purchaser a **Warranty** deed to the property, excepting such part thereof which may hereafter be condemned, if any, free of incumbrances except those above mentioned, and any that may accrue hereafter through any person other than the seller.

The seller has delivered, or within ten days herefrom will procure and deliver, to the purchaser, a title policy in usual form issued by the Transamerica Title Insurance Company, insuring the purchaser to the full amount of said purchase price against loss or damage occasioned by reason of defect in, or incumbrance against, seller's title to the premises, not assumed by the purchaser, or as to which the conveyance hereunder is not to be subject.

The parties agree: (1) to execute all necessary instruments for the extension of payment or renewal of said mortgage during the period prior to the delivery of said deed, or the termination of purchaser's rights by virtue of the provisions hereof; provided the seller shall not be obligated thereby to assume any personal obligation or to execute any mortgage providing for a deficiency judgment against the seller, or securing a principal indebtedness in excess of that now unpaid on the above mentioned mortgage or bearing an interest rate of more than two per cent greater than that of the original mortgage indebtedness; (2) that the purchaser has made full inspection of the real estate and that no promise, agreement or representation respecting the condition of any building or improvement thereon, or relating to the alteration or repair thereof, or the placing of additional improvements thereon, shall be binding unless the promise, agreement or representation be in writing and made a part of this contract; (3) that the purchaser shall have possession of the real estate on and be entitled to retain possession so long as purchaser is not in default in carrying out the terms hereof; and (4) that, upon default, forfeiture may be declared by notice sent by registered mail to the address of the purchaser, or his assigns, last known to the seller.

Time is of the essence hereof, and in the event the purchaser shall fail to comply with or perform any condition or agreement hereof promptly at the time and in the manner herein required, the seller may elect to declare all of the purchaser's rights hereunder terminated, and upon his doing so, all payments made by the purchaser hereunder and all improvements placed upon the premises shall be forfeited to the seller as liquidated damages, and the seller shall have the right to re-enter and take possession of the property; and if the seller within six months after such forfeiture shall commence an action to procure an adjudication of the termination of the purchaser's rights hereunder, the purchaser agrees to pay the expense of searching the title for the purpose of such action, together with all costs and a reasonable attorney's fee.

In Witness Whereof the parties have signed and sealed this contract the day and year first above written.

*Phillip W. Rogers*

(Seal)

*Mary M. Rogers*

(Seal)

*Alfred Brungardt*

(Seal)

*Rosann M. Brungardt*

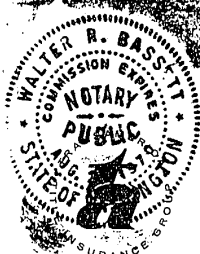
(Seal)

STATE OF WASHINGTON,  
County of Clark ss.

I, the undersigned, a notary public in and for the state of Washington, hereby certify that on this 8th day of August, 1968, personally appeared before me Phillip W. Rogers, Mary M. Rogers, Alfred Brungardt and Rosann M. Brungardt, to me known to be the individual as described in and who executed the foregoing instrument, and acknowledged that they signed and sealed the same as their free and voluntary act and deed, for the uses and purposes therein mentioned.

Witness my hand and official seal the day and year last above written.

*Walter R. Bassett*  
Notary Public in and for the state of Washington,  
residing at Battle Ground, therein.



FILED FOR RECORD  
TRANSAMERICA TITLE INS. CO.

AUG 9 8 18 AM '68

AUDITOR DON BONKER

THIS SPACE RESERVED FOR RECORDER'S USE:

Filed for Record at Request of

Name Battle Ground Realty, Inc.

Address P. O. Box 261

City and State Brush Prairie, Washington 98604

After Recording  
Return to:  
Robert C. Brungardt  
P.O. Box 638  
Shelton, Wa. 98584

9004050109

ANNEX "A"

COMMUNITY PROPERTY AGREEMENT

AGREEMENT made this 15 day of January, 1988,  
between ALFRED BRUNGARDT and ROSANN BRUNGARDT, husband and wife,  
both of whom are domiciled in the State of Washington. In  
consideration of their mutual agreements set forth below, the  
parties agree as follows:

1. PROPERTY COVERED: This Agreement shall apply to all  
community and separate property now owned or hereafter acquired  
by Husband and Wife of either of them (except for assets for  
which a separate beneficiary designation has been or is hereafter  
made by Husband or Wife and approved by the other spouse) even  
though some items may have been or may be purchased or acquired  
in the name of one or the other or both. All such property is  
declared to be community property of Husband and Wife and is  
referred to in this Agreement as the "described community  
property."

2. VESTING AT DEATH OF A SPOUSE: If Husband dies and Wife  
survives him, all of the described community property shall vest  
in Wife as of the moment of Husband's death. If Wife dies and  
Husband survives her, all of the described community property  
shall vest in Husband as of the moment of Wife's death.

3. DISCLAIMER: Upon the death of either spouse, the  
surviving spouse may disclaim any interest passing under this  
Agreement in whole or in part, or with reference to specific  
parts, shares or assets thereof, in which event the interest  
disclaimed shall pass as if the provisions of paragraph 3 had  
been revoked as to such interest with the surviving spouse  
entitled to the benefits provided by any alternate disposition.

4. AUTOMATIC REVOCATION: The provisions of paragraph 3  
shall be automatically revoked;

a. Upon the filing by either party of a petition, complaint  
or other pleading for separation, dissolution or divorce; or

b. Upon the establishment of a domicile out of the State of  
Washington by either party; or

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c. Immediately prior to death, if the order of death cannot be ascertained.

5. OPTIONAL REVOCATION BY ONE PARTY: If either party becomes disabled, the other party shall have the power to terminate the provisions of paragraph 3 and each party designates the other as attorney-in-fact to become effective upon disability to exercise such power. The termination shall be effective upon the delivery of written notice thereof to the disabled spouse and to the guardians, if any, of the person and of the estate of the disabled person. For the purposes of this paragraph, a spouse shall be deemed disabled if a person duly licensed to practice medicine in the State of Washington signs a statement declaring that the person is unable to manage his or her own affairs.

6. POWERS OF APPOINTMENT: This Agreement shall not affect any power of appointment now held by or hereafter given to Husband or Wife or both of them, nor shall it obligate Husband or Wife or both of them to exercise any such power of appointment in any way.

7. REVOCATION OF INCONSISTENT AGREEMENTS: To the extent this Agreement is inconsistent with any provisions of any community property agreement or other arrangement previously made by the parties that affects the described community property, the terms of this agreement shall be deemed to revoke such prior provisions to the extent of the inconsistency.

DATED this 15 day of January, 1988.

Alfred Brungardt  
ALFRED BRUNGARDT, Husband

Rosann Brungardt  
ROSANN BRUNGARDT, Wife

Evelyn Barnett  
Witness

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Witness

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STATE OF WASHINGTON)

ss:

County of Mason )

On this day personally appeared before me Alfred Brungardt, to me known to be the individual described in and who executed the within and foregoing Community Property Agreement, and acknowledged that he signed the same as his free and voluntary act and deed for the uses and purposes therein mentioned.

Given under my hand and official seal on this day of , 1988.

Notary Public in and for the State of Washington, residing at Olympia. My commission expires 7/27/90.

STATE OF WASHINGTON)

ss:

County of Mason )

On this day personally appeared before me Rosann Brungardt, to me known to be the individual described in and who executed the within and foregoing Community Property Agreement, and acknowledged that she signed the same as her free and voluntary act and deed for the uses and purposes therein mentioned.

Given under my hand and official seal on this day of , 1988.

Notary Public in and for the State of Washington, residing at Olympia. My commission expires 7/27/90.

*Robert Brungardt*  
APR 5 2 14 PM '90

ELIZABETH A. LUCE

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9410170298

## AFFIDAVIT TO THE PUBLIC

STATE OF WASHINGTON )

: ss.

COUNTY OF CLARK )

ROSANN M. BRUNGARDT, being first duly sworn, upon oath deposes and says:

That this affidavit is made for the purposes of supplying information for record pertaining to that certain Community Property Agreement, executed by ALFRED BRUNGARDT and ROSANN BRUNGARDT, husband and wife, dated January 1, 1988, and recorded under Auditor's File No. 9004050109 on April 5, 1990; and also to the estate of ALFRED BRUNGARDT, deceased, one of the parties to said agreement, and it is intended that the statements set forth herein shall be considered representations of fact which may be relied upon by all persons dealing with the following described real property, situate in Clark County, Washington, to wit:

Lot 3, Block 52, and that portion of Lot 6, Block 52, Camas, according to the plat thereof, recorded in Volume "B" of Plats, Page 25, records of Clark County, Washington, described as follows:

Beginning at the Southeast corner of said Lot 6; thence North 36 degrees 30' West along the Easterly boundary of said Lot 6, a distance of 84 feet; thence South 71' 15" West, a distance of 52.5 feet, to the Westerly boundary of said Lot 6; thence South 36 degrees 30' East a distance of 100 feet to the Southwest corner of said Lot 6; thence North 53 degrees 30' East to the point of beginning.

SUBJECT TO easements and restrictions of record.

Tax Parcel Numbers:

079604-000.0

079600-000.0

Value at Date of Death:

\$ \_\_\_\_\_

Lots 9, 10, and 11 of Elaine Park, according to the plat thereof, recorded in Book "C" of Plats, Page 64, records of Clark County Auditor.

Tax Parcel Number 104170-000.5

Value at Date of Death:

\$ \_\_\_\_\_

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AFFIDAVIT TO THE PUBLIC

Page 1

JACKSON, JACKSON &amp; KURTZ, INC. PS

ATTORNEYS AT LAW

P.O. Box 96 - 804 East Main

Battle Ground, Washington 98604

(206) 687-7106

OCTOBER 17, 1994

The South 717 feet of the following described property:

That portion of the Southeast quarter of the Northeast quarter of Section 2, Township 2, Range 2 East of the Willamette Meridian, described as follows:

Beginning at a point 6.67 chains North of the Southeast corner of said Northeast quarter and running thence North 13.33 chains; thence West 7.50 chains; thence South 13.33 chains and thence East 7.50 chains to the point of beginning.

Except County Roads.

Tax Parcel Number 154246-000.0

Value at Date of Death:

\$ \_\_\_\_\_

ROSANN M. BRUNGARDT further states under oath:

**FIRST**, that ALFRED BRUNGARDT died on November 16, 1988, in Clark County, Washington.

**SECOND**, that the parties to said agreement entered into no subsequent joint Wills or Agreements which would have the effect of abrogating or nullifying the above-mentioned Community Property Agreement.

**THIRD**, that no federal estate tax was due the United States of America for the reason that the taxable estate was within the specific exemption allowed decedent at the time of her death.

**FOURTH**, no estate taxes were imposed by the State of Washington.

**FIFTH**, that all obligations of the community owing at the date of death have been paid in full or provided for, and all expenses of last illness and funeral expenses have been paid.

**SIXTH**, that your affiant is the surviving spouse of the decedent, and these facts and representations set out herein are within the personal knowledge of your affiant, and may be relied upon by all persons dealing with the assets of said decedent.

DATED this 10 day of October, 1994.



ROSANN M. BRUNGARDT

Surviving Spouse

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AFFIDAVIT TO THE PUBLIC  
Page 2

JACKSON, JACKSON & KURTZ, INC. PS  
ATTORNEYS AT LAW  
P.O. Box 96 - 804 East Main  
Battle Ground, Washington 98604  
(206) 687-7106

OCTOBER 17, 1994

SIGNED AND SWORN to before me this 10<sup>th</sup> day of October, 1994, by  
ROSANN M. BRUNGARDT.

M. Joan Emge  
NOTARY PUBLIC in and for the State of  
Washington; my appointment  
expires: \_\_\_\_\_.

M. JOAN EMGE  
NOTARY PUBLIC  
STATE OF WASHINGTON  
COMMISSION # 11115  
JUNE 1, 1991

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AFFIDAVIT TO THE PUBLIC  
Page 3

JACKSON, JACKSON & KURTZ, INC. PS  
ATTORNEYS AT LAW  
P.O. Box 96 - 804 East Main  
Battle Ground, Washington 98604  
(206) 687-7106

OCTOBER 17, 1994

STATE OF WASHINGTON DEPARTMENT OF SOCIAL AND HEALTH SERVICES											
DECEASED											
ALFRED NMI BRUNGARDT		Male		NOV 16, 1988		145-8					
4 AGE—LAST BIRTH DAY (Yr.)		5 UNDER 1 YEAR		6 UNDER 1 DAY		7 BIRTHDATE (Mo., Day, Yr.)		8 COUNTY OF DEATH			
67						MAY 01, 1921		Clark			
9 CITY, TOWN OR LOCATION OF DEATH		10 PLACE OF DEATH—25 BOX FOR PLACE THEN GIVE ADDRESS OR INSTITUTION NAME		11 BIRTH STATE (If not in USA give country)							
Battle Ground		10 HOME 10 IN TELEPHONE 10 IN HEALTHCARE 10 IN HOSP. 10 IN NURS. HOME 10 OTHER PLACE		Clark		Kansas					
12 MARRIED, NEVER MARRIED, WIDOWED, DIVORCED		13 SPOUSE (If wife give Maiden Surname)		14 WAS DECEASED EVER IN U.S. ARMED FORCES? (Yr./Mo)		15 SOCIAL SECURITY NO.		16 HIGHER SCHOOL GRADUATE (Yr./Mo)			
Married		Rosann Marguerite Connolly		Yes		511-12-8754		Yes			
17 USUAL OCCUPATION (Give kind of work done during most of working life even if retired)		18 KIND OF BUSINESS OR INDUSTRY		19 RACE (White, Black, Am. Ind., etc. Specify)		20 Was Decedent of Mexican Origin? (Specify Yes or No—if yes, specify 1. 0 Yes 2. X No (Specify))					
Berry Grower		Agriculture		White		1. 0 Yes 2. X No (Specify)					
21 SMOKING IN LAST 15 YEARS (Yr./Mo)		22 RESIDENCE—NUMBER AND STREET		23 CITY/TOWN OR LOCATION		24 RESIDE CITY LIMITS? (Yr./Mo)		25 COUNTY			
Yes		16817 N.E. 88th Street		Vancouver		No		Clark			
26 FATHER'S NAME—FIRST, MIDDLE, LAST		27 MOTHER'S NAME—FIRST, MIDDLE, MARRIAGE SURNAME		28 STATE		29 ZIP CODE					
Adam Brungardt		Margaret Weikel		Wash		98682					
30 INFORMANT—NAME		31 MAILING ADDRESS		32 COUNTY/CITY/TOWN, STATE		33 LOCATION—CITY/TOWN, STATE					
Rosann M. Brungardt		16817 N.E. 88th Street, Vancouver, Washington 98682		Vancouver, Washington		Vancouver, Washington					
34 BURIAL CREATION		35 DATE (Mo., Day, Yr.)		36 COUNTRY/CREMATION—NAME		37 LOCATION—CITY/TOWN, STATE					
Burial		NOV 19, 1988		St. John's Cemetery		Vancouver, Washington					
38 FUNERAL DIRECTOR		39 CITY/TOWN, STATE		40 FUNERAL HOME, INC.		41 LOCATION—CITY/TOWN, STATE					
David R. Fuller		Vancouver, Washington		Funeral Home, Inc.		Vancouver, Washington					
TO BE COMPLETED ONLY BY CERTIFYING PHYSICIAN											
39 TO THE BEST OF MY KNOWLEDGE, DEATH OCCURRED AT THE TIME, DATE, AND PLACE AND DUE TO THE CAUSE(S) STATED					40 ON THE BASIS OF EXAMINATION AND/OR INVESTIGATION, IN MY OPINION DEATH OCCURRED AT THE TIME, DATE AND PLACE AND DUE TO THE CAUSE(S) STATED						
SIGNATURE AND TITLE					SIGNATURE AND TITLE						
X David J. Zepp, M.D.					X						
42 DATE SIGNED (Mo., Day, Yr.)					43 HOUR OF DEATH (24 Hrs.)		44 DATE SIGNED (Mo., Day, Yr.)		45 HOUR OF DEATH (24 Hrs.)		
11/21/88					1950 HRS						
46 NAME AND TITLE OF ATTENDING PHYSICIAN IF OTHER THAN CERTIFIER (Type or Print)					47 PREVIOUSLY DEAD (Mo., Day, Yr.)					48 HOUR PREVIOUSLY DEAD (24 Hrs.)	
David J. Zepp, M.D., 10180 S.E. Sunnyside Road, Clackamas, Oregon 97015											
TO BE COMPLETED ONLY BY MEDICAL EXAMINER OR CORONER											
49 PART I. ENTER THE DISEASES, INJURIES, OR COMPLICATIONS WHICH CAUSED THE DEATH. DO NOT ENTER THE MODE OF DYING, SUCH AS CARING OR RESPIRATORY ARREST, SHOCK, OR HEART FAILURE. LIST ONLY ONE CAUSE ON EACH LINE											
IMMEDIATE CAUSE (Final disease or condition resulting in death)											
(A) Pulmonary Embolism											
DUE TO, OR AS A CONSEQUENCE OF,											
(B)											
DUE TO, OR AS A CONSEQUENCE OF,											
(C)											
INTERVAL BETWEEN ONSET AND DEATH											
10 yrs											
INTERVAL BETWEEN ONSET AND DEATH											
INTERVAL BETWEEN ONSET AND DEATH											
50 OTHER SIGNIFICANT CONDITIONS—CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO CAUSE GIVEN ABOVE											
51 RUSTOFT? (Yr./Mo)											
No											
52 WAS CASE REFERRED TO MEDICAL EXAMINER OR CORONER? (Yr./Mo)											
No											
53 ACC. CLINIC, HOME, UNDER, OR 54 INJURY DATE (Mo., Day, Yr.)											
55 HOUR OF INJURY (24 Hrs.)											
56 DESCRIBE HOW INJURY OCCURRED											
57 INJURY AT WORK? (Yr./Mo)											
58 PLACE OF INJURY—AT HOME, FARM, STREET, FACTORY, OFFICE BLDG. ETC. (Specify)											
59 LOCATION—STREET OR RFD NO., CITY/TOWN, STATE											
60 REGISTRAR SIGNATURE											
X											
61 DATE RECEIVED (Mo., Day, Yr.)											
NOV 2 8 1988											
62 ITEM											
63 ITEM											
DOCUMENTARY EVIDENCE REVIEWED BY DATE											
DOCUMENTARY EVIDENCE REVIEWED BY DATE											
OCT 17 2 57 PM '94											
KAREN STEINGART, M.D.											
DISTRICT HEALTH OFFICER											
601											

SEAL

ELIZABETH A. LUCE  
NOV 2 8 1988KAREN STEINGART, M.D.  
DISTRICT HEALTH OFFICER

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DSHS 9-541A (11/85)

VERY POOR COPY  
Will not reproduceRoger A. Bakken  
Technical Imaging Services

## 4. Pre-Application Conference Report

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# Pre-Application Conference FINAL Report

<b>Project Name:</b>	NE 152 <sup>nd</sup> Ave
<b>Case Number:</b>	PAC2018-00116
<b>Location:</b>	Vacant parcel west of intersection NE 152 <sup>nd</sup> Ave; on south side of NE 93 <sup>rd</sup> St; NE Quarter of Section 02 Township 2 North, Range 2 East of the Willamette Meridian
<b>Parcel Number(s):</b>	154246000
<b>Site Size:</b>	7.56 acres
<b>Request:</b>	A request to amend the Comprehensive Plan and Zoning Maps from Community Commercial (CC) to UL ( R1-5)
<b>Applicant:</b>	TSR Investments, LLC Attn: Gary Rademacher PO Box 1900 Battle Ground, WA 98604 (360) 687-1148 garyr@tapani.com
<b>Contact Person:</b>	Seth Halling <a href="mailto:sethh@aks-eng.com">sethh@aks-eng.com</a> 9600 NE 126 <sup>th</sup> Ave, Ste 2520 Vancouver, WA 98682 (360) 882-0419
<b>Property Owner:</b>	Same as applicant

**DATE OF CONFERENCE:** November 15, 2018

**STAFF CONTACT:** Sharon Lumbantobing, Clark County Annual Review Coordinator  
(564) 397-4909 Sharon.Lumbantobing@clark.wa.gov

**PRESENT AT CONFERENCE:**

<b>Name</b>	<b>Contact Information</b>
Sharon Lumbantobing	Clark County Community Planning (see above)
Jose Alvarez	Clark County Community Planning, (564) 397- 4898
Gary Albrecht	Clark County Community Planning, (564) 397- 4318
Seth Halling	AKS Engineering (360) 882-0419; sethh@aks-eng.com
Gary Rademacher	TSR Investments, LLC (360) 687-1148; garyr@tapani.com
Kevin Tapani	kevin@tapani.com
Dave Weston	davew@aks-eng.com
LeAnne Bremer	Leanne.bremer@millernash.com

**Disclaimer:** The following is a brief summary of issues and requirements that were identified at the pre-application conference based on the information provided by the applicant. This summary may contain supplemental information which was not discussed in the conference and is intended to aid the applicant in preparing a complete Annual Review application and/or to provide the applicant with additional information regarding the subject site. Staff responses and information contained in this pre-application report are preliminary in nature, and do not constitute an approval or denial. The determinations contained in this report were based upon information submitted by the applicant, and may be subject to change upon further examination or in light of new or revised information contained in the formal application.

## APPLICATIONS REQUIRED

The requested Comprehensive Plan map and concurrent zone map amendments require an Annual Review/Zone Change Application to be completed. The application will be processed through the Type IV Review process. A SEPA checklist is required to be completed as a part of the Annual Review application.

### Estimated fees:\*

Combined Annual Review/Rezone.....	\$8,113.00
Issuance Fee.....	\$94.00
Environmental Checklist Review (SEPA).....	\$1,987.00
Issuance Fee.....	\$53.00

**\*Fees cited are estimated and based upon the fee schedule in effect at the time of pre-application conference and are subject to change.**

## APPLICABLE POLICIES, CODES and CRITERIA

The following list is not exhaustive of all county, state or federal regulations that may govern development of the site, but is inclusive of those addressed by the county in this comprehensive plan/zone amendment review process.

- WAC 365-196-300
- Clark County 20 Year Comprehensive Growth Management Plan Policies
  - Chapter 1 – Land Use Element
  - Chapter 2 – Housing
  - Chapter 9 – Economic Development
  - Chapter 10 – School Element
- Clark County Unified Development Code
  - Title 40:
    - Section 40.220 (Urban Residential Districts)
    - Section 40.500.010 (Procedures)
    - Section 40.560.010 (Plan Amendment Procedures)
    - Section 40.570 (SEPA)

Clark County Criteria for Map Changes (found within the text of this report)

- Section 40.560.010G (Criteria for all Map Changes)
- Section 40.560.020 (Changes to Districts, Amendments, and Alterations)
- Section 40.560.020G (Approval Criteria)

## **Comprehensive Plan Designation Map Change Criteria**

Comprehensive plan designation changes may only be approved if **all** the following criteria are met (40.560.010G):

1. *The proponent shall demonstrate that the proposed amendment is consistent with the Growth Management Act and requirements, the Countywide Planning Policies, the Community Framework Plan, the Comprehensive Growth Management Plan, applicable city comprehensive Plans, and including applicable capital facilities plans and official population growth forecasts; and*
2. *The proponent shall demonstrate that the designation is in conformance with the appropriate location criteria identified in the plan; and*
3. *The map amendment or site is suitable for the proposed designation and there is a lack of appropriately designated alternative sites within the vicinity; and*
4. *The plan map amendment either: (a) responds to a substantial change in conditions applicable to the area within which the subject property lies; (b) better implements applicable Comprehensive Plan policies than the current map designation; or (c) corrects an obvious mapping error; and*
5. *Where applicable, the proponent shall demonstrate that the full range of urban public facilities and services can be adequately provided in an efficient and timely manner to serve the proposed designation. Such services may include water, sewage, storm drainage, transportation, fire protection and schools. Adequacy of services applies only to the specific change site.*

## **Zone Change Criteria**

The concurrent zone change may only be approved if **all** the following criteria are met (40.560.020G):

1. *Requested zone change is consistent with the comprehensive plan map designation.*
2. *The requested zone change is consistent with the plan policies and location criteria and the purpose statement of the zoning district.*
3. *The zone change either:*
  - a. *Responds to a substantial change in conditions applicable to the area within which the subject property lies;*
  - b. *Better implements applicable comprehensive plan policies than the current map designation; or*
  - c. *Corrects an obvious mapping error.*
4. *There are adequate public facilities and services to serve the requested zone change.*

## **SUBMITTED MATERIALS REVIEWED**

The following materials were provided by the applicant and were reviewed by Clark County staff in advance of the pre-application conference:

- Application forms
- Narrative
- GIS Packet



## BACKGROUND

The applicant proposes to amend the comprehensive plan and rezone approximately 7.56 acres from Community Commercial (CC) to Urban Low Density Residential (R1-5).

## SUMMARY

The following comments and issues were discussed or identified during the pre-application meeting held on November 15, 2018.

### Land Use

#### ***Comments provided by Clark County Long Range Planning, Jose Alvarez and Sharon Lumbantobing:***

Staff provided the applicant with a brief overview of how the pre-application conference would be conducted, including a summary of what information would be covered. Staff stated that a final staff report will be sent to the applicant within a week following the pre-app meeting. Staff stated that January 31 is the deadline to submit an annual review application.

Staff provided information regarding Clark County's obligation to plan under the State's Growth Management Act and the long-range, comprehensive planning exercise that concluded in 1994 with the adoption of the 20-Year Comprehensive Growth Management Plan and corresponding zone map. In 2016, the County adopted an updated 20-Year Comprehensive Plan and zone map.

Staff proceeded to discuss with the applicant the Comprehensive Plan Designation Map Change Criteria that the applicant will need to address in an application.

Specific to this application, staff stated that the assumption is that the current comprehensive plan and zone designation (Community Commercial (CC)) is still applicable to this area and that the applicant will need to demonstrate how a change to a residential (R1-5) zone is appropriate and consistent with the County's Growth Management Plan, the county-wide planning policies, and the Unified Development Code.

Staff emphasized that an Annual Review Application for a change in land use designation from commercial to residential will need to show how the proposed change is compatible with the neighborhood and surrounding area.

Staff expressed concern about the lack of commercial zoning in the vicinity.

Staff stated that the applicant should confer with the neighborhood association.

Staff stated that the surrounding properties are R1-10 and R1-6. The applicant will need to address how the R1-5 would be a better fit than R1-6 zone and why this would not be a spot zone.

Staff stated that the applicant should confer with the school district on school impacts.

The applicant stated that they already have site plan approval for RV storage on the subject parcel and asked staff when this would expire. Staff stated that the proposed comp plan and zone change from Commercial to Residential would not affect the approved site plan. Per 40.500.100(B)(1): "Basic Rule. Preliminary approval of land divisions, site plan approval...shall be valid for a period of seven years after approval..."

Preliminary approval for PSR2017-00038 NE 152<sup>nd</sup> Ave RV storage was issued on February 8, 2018.

## **Transportation**

### ***Comments provided by Clark County Long Range Planning, Gary Albrecht:***

Transportation Comments NE 152<sup>nd</sup> Avenue

NE 152<sup>nd</sup> Avenue is classified as C-2, a 2-lane collector.

Staff reviewed the 2018-2023 Transportation Improvement Program and found one project that would impact the area immediately around the site of the proposed comprehensive plan amendment and zone change. Project 5: NE 152<sup>nd</sup> Avenue – Padden Parkway to NE 99<sup>th</sup> Street. The site abuts an airport to the south, and will need to address any applicable airport standards. Applicant shall provide written comments from the Washington State Department of Transportation Aviation, the Federal Aviation Administration and the airport owner to Clark County.

### **Criteria for annual review transportation analysis**

#### **Transportation analysis**

To meet the requirements of Clark County Title 40 code section 40.560.010, the applicant must show that adequate transportation facilities will be available to accommodate the proposed comprehensive plan amendment, which is why a transportation analysis is needed for applications for comprehensive plan amendments. The specific language states the following:

Where applicable, the proponent shall demonstrate that the full range of urban public facilities and services can be adequately provided in an efficient and timely manner to serve the proposed designation. Such services may include water, sewage, storm drainage, transportation, fire protection and schools. Adequacy of services applies only to the specific change site.

A transportation analysis is defined per Clark County Title 40 code section 40.100.070 (Definitions) as a study done by a licensed engineer that compares a build-out scenario under the existing and proposed designations for a twenty (20) year horizon

For the proposed comprehensive plan amendment application, the transportation analysis must include the following:

#### **Existing and proposed comprehensive plan designation:**

- Trip generation-present day
- Trip generation-projected 20-years
- Modal split-present day
- Modal split-projected 20-years
- Trip distribution-present day
- Trip distribution-projected 20-years

#### **Net comparison (proposed comprehensive plan designation-existing comprehensive plan designation)**

The applicant must show the Level-of-Service standards, per CCC 40.350.020.G.1.a-d, under the existing and proposed land use designations for both current and projected 20 years out

#### **Access**

The applicant needs to show how the subject site will have access.

The applicant must submit a conceptual plan that shows probable circulation of the transportation network.

## **NEIGHBORHOOD ASSOCIATION CONTACT**

While not required of a complete application for a comprehensive plan amendment, staff recommended that the applicant talk to the neighborhood association chair for their area. The Sifton Neighborhood Association President is Christie BrownSilva at (360) 326-4353, email: [siftonneighborhood@gmail.com](mailto:siftonneighborhood@gmail.com). Staff also encouraged the applicant to discuss the proposed land use designation change with neighbors.

## **TIME FRAMES**

January 1 through January 31 - Submit Final Annual Review Application

February 1 through to April 1 – Clark County staff will review and prepare a recommendation to the Planning Commission (**this period may be extended depending on staff work load**).

Fourth Quarter or sooner - Planning Commission will approve or deny request. If the Planning Commission approves, the county council will review and make a final determination. If the Planning Commission denies the request, the applicant needs to appeal the denial. In practice, staff forwards all recommendations to the county council for final resolution of the requests.

## **ADDITIONAL MATERIALS**

A complete list of required documents is contained in the Annual Review application packet. A Completed SEPA checklist is required for the final application. NOTE: Submit a copy of this summary with your final application.

## 5. Clark County Developer's GIS Packet

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# DEVELOPER'S PACKET

## **Produced By:**

Clark County Geographic Information System (GIS)



## **For:**

152nd Ave RV Storage

## **Subject Property Account Number(s):**

154246000

PDF # 209195

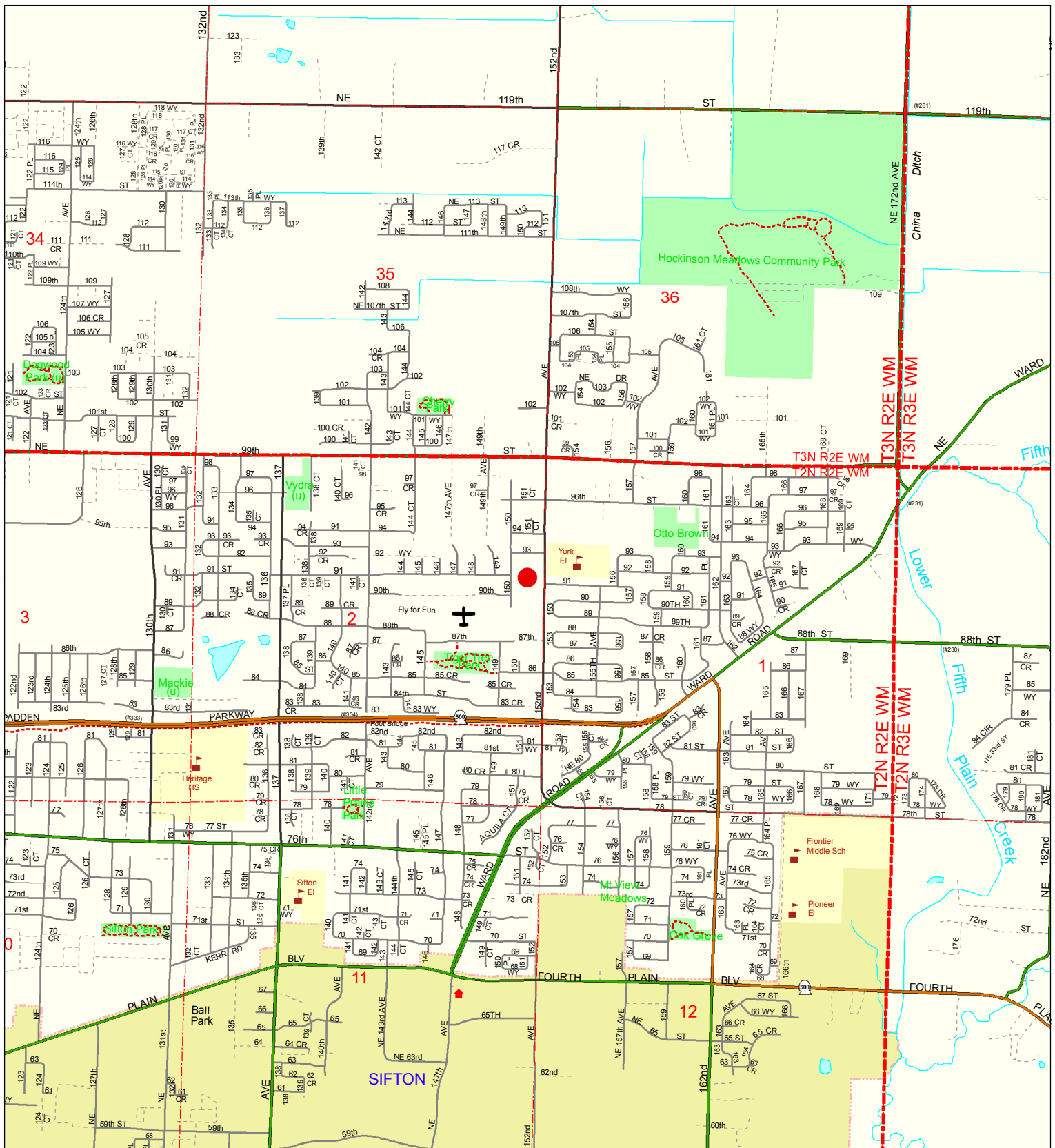
Printed: September 17, 2018

Expires: September 17, 2019

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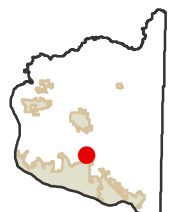


## General Location

Printed on: September 17, 2018

Account: 154246000  
 Owner: TSR INVESTMENTS LLC  
 Address: PO BOX 1900  
 C/S/Z: BATTLE GROUND, WA 98604

● Location of Subject Property(s)



Geographic Information System

0 1,000 2,000 Feet

Information shown on this map was collected from several sources. Clark County accepts no responsibility for any inaccuracies that may be present.

# Property Information Fact Sheet

## Mailing Information:

Account No.: 154246000  
Owner: TSR INVESTMENTS LLC  
Address: PO BOX 1900  
C/S/Z: BATTLE GROUND, WA 98604

**Assessed Parcel Size:** 7.56 Ac

**Property Type:** UNUSED OR VACANT LAND - NO IMPROVEMENTS

---

## PARCEL LOCATION FINDINGS:

**Quarter Section(s):** NE 1/4,S02,T2N,R2E

**Municipal Jurisdiction:** ClarkCounty

**Urban Growth Area:** Vancouver

**Zoning:** CC

**Zoning Overlay:** No Mapping Indicators

**Comprehensive Plan Designation:** C

**Columbia River Gorge NSA:** No Mapping Indicators

**Late-Comer Area:** No Mapping Indicators

**Trans. Impact Fee Area:** Orchards: Current,  
North Orchards: End Date Dec. 31, 2016

**Park Impact Fee District:** 5

**Neighborhood Association:** Sifton

**School District:** Evergreen

**Elementary School:** York

**Junior High School:** Frontier

**Senior High School:** Heritage

**Fire District:** FD 5

**Sewer District:** Vancouver

**Water District:** Vancouver

**Wildland:** No Mapping Indicators

**Historic Sites:** No Mapping Indicators

---

## ENVIRONMENTAL CONSTRAINTS:

**Soil Type(s):** LeB, 100.0% of parcel

**Hydric Soils:** Non-Hydric, 100.0% of parcel

**Flood Zone Designation:** Outside Flood Area

**CARA:** Category 2 Recharge Areas

**Forest Moratorium Area:** No Mapping Indicators

**Liquefaction Susceptibility:** Very Low

**NEHRP:** C

**Slope:** 0 - 5 percent, 100.0% of parcel

**Landslide Hazards:** No Mapping Indicators

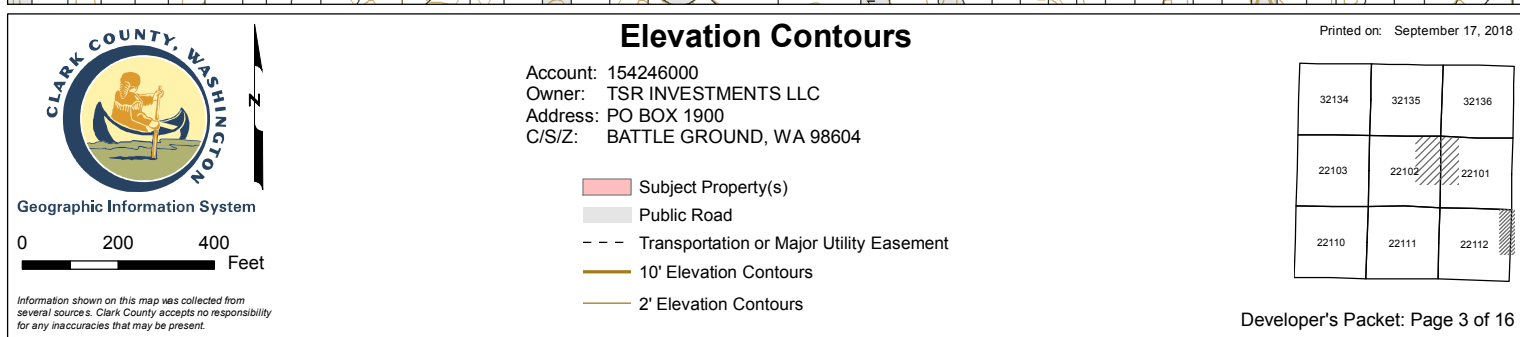
**Slope Stability:** No Mapping Indicators

**Priority Habitat and Species Areas:** No Mapping Indicators

**Archeological Predictive:** High, 100.0% of parcel

**Archeological Site Buffers:** No Mapping Indicators









## 2016 Aerial Photography

Account: 154246000  
 Owner: TSR INVESTMENTS LLC  
 Address: PO BOX 1900  
 C/S/Z: BATTLE GROUND, WA 98604

Printed on: September 17, 2018



Geographic Information System

0 200 400 Feet

 Subject Property(s)

32134	32135	32136
22103	22102	22101
22110	22111	22112

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Geographic Information System

0 100 200 Feet

Information shown on this map was collected from several sources. Clark County accepts no responsibility for any inaccuracies that may be present.

## 2016 Aerial Photography with Elevation Contours

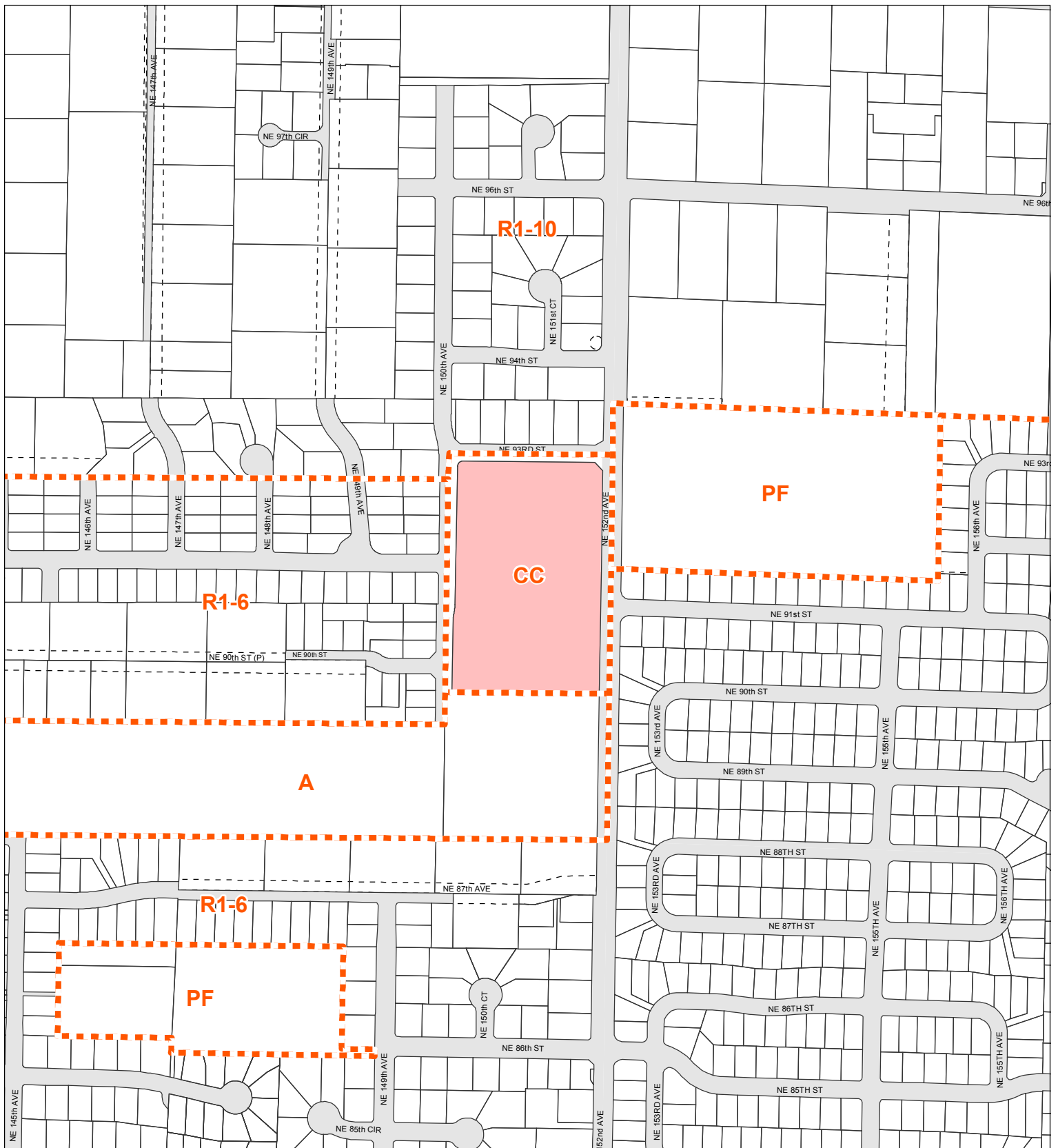
Account: 154246000  
 Owner: TSR INVESTMENTS LLC  
 Address: PO BOX 1900  
 C/S/Z: BATTLE GROUND, WA 98604


 Subject Property(s)  
 2' Elevation Contours

Printed on: September 17, 2018

32134	32135	32136
22103	22102	22101
22110	22111	22112







**Geographic Information System**

0 200 400 Feet

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## Zoning Designations

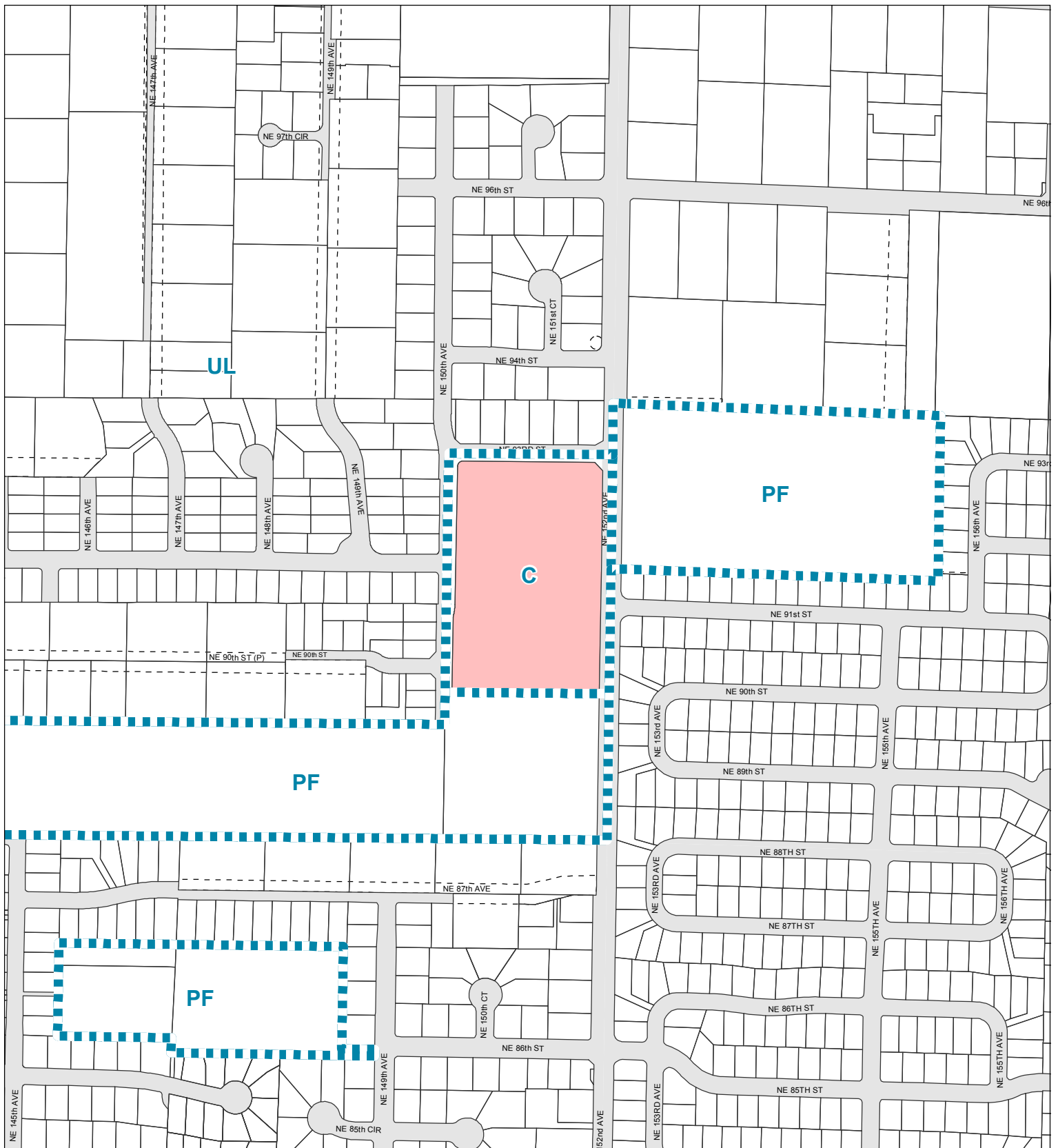
Account: 154246000  
 Owner: TSR INVESTMENTS LLC  
 Address: PO BOX 1900  
 C/S/Z: BATTLE GROUND, WA 98604

Printed on: September 17, 2018

32134	32135	32136
22103	22102	22101
22110	22111	22112

- Subject Property(s)
- Public Road
- Transportation or Major Utility Easement
- Zoning Boundary

- Urban Holding - 10 (UH-10)
- Urban Holding - 20 (UH-20)
- Urban Holding - 40 (UH-40)
- Surface Mining Overlay District



Geographic Information System

0 200 400 Feet

Information shown on this map was collected from several sources. Clark County accepts no responsibility for any inaccuracies that may be present.

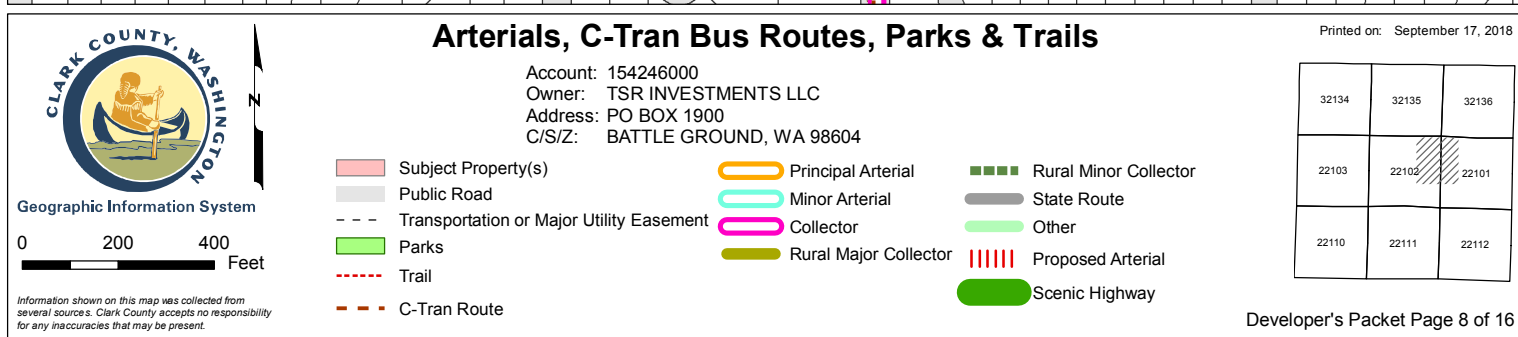
## Comprehensive Plan Designations

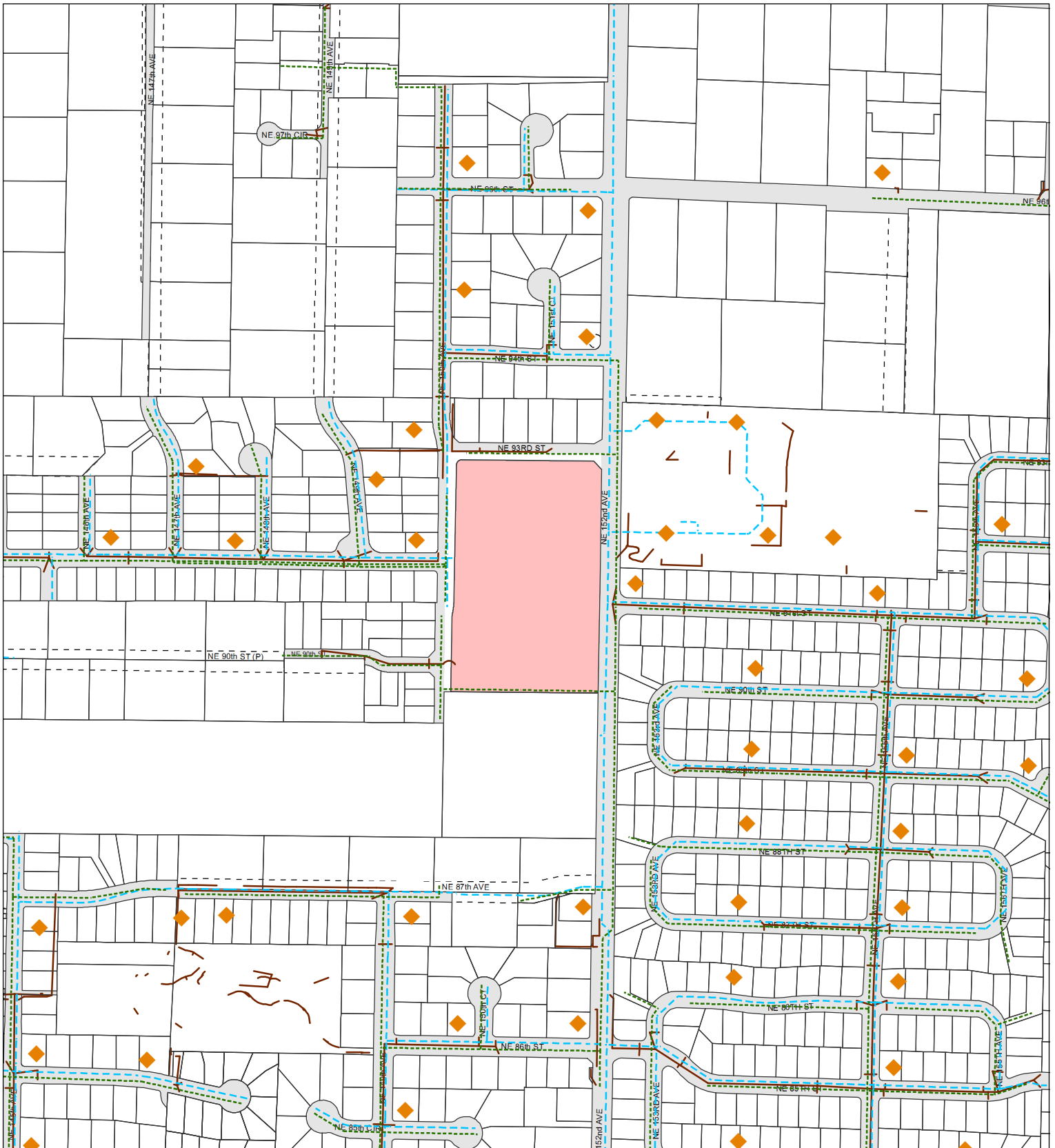
Account: 154246000  
Owner: TSR INVESTMENTS LLC  
Address: PO BOX 1900  
C/S/Z: BATTLE GROUND, WA 98604

- Subject Property(s)
- Public Road
- Transportation or Major Utility Easement
- Comprehensive Plan Boundary
- Urban Reserve
- Industrial Reserve
- Railroad Industrial Reserve
- Mining
- Rural Center Mixed Use
- Columbia River Gorge Scenic Area

Printed on: September 17, 2018

32134	32135	32136
22103	22102	22101
22110	22111	22112





CLARK COUNTY, WASHINGTON

Geographic Information System

0 200 400 Feet

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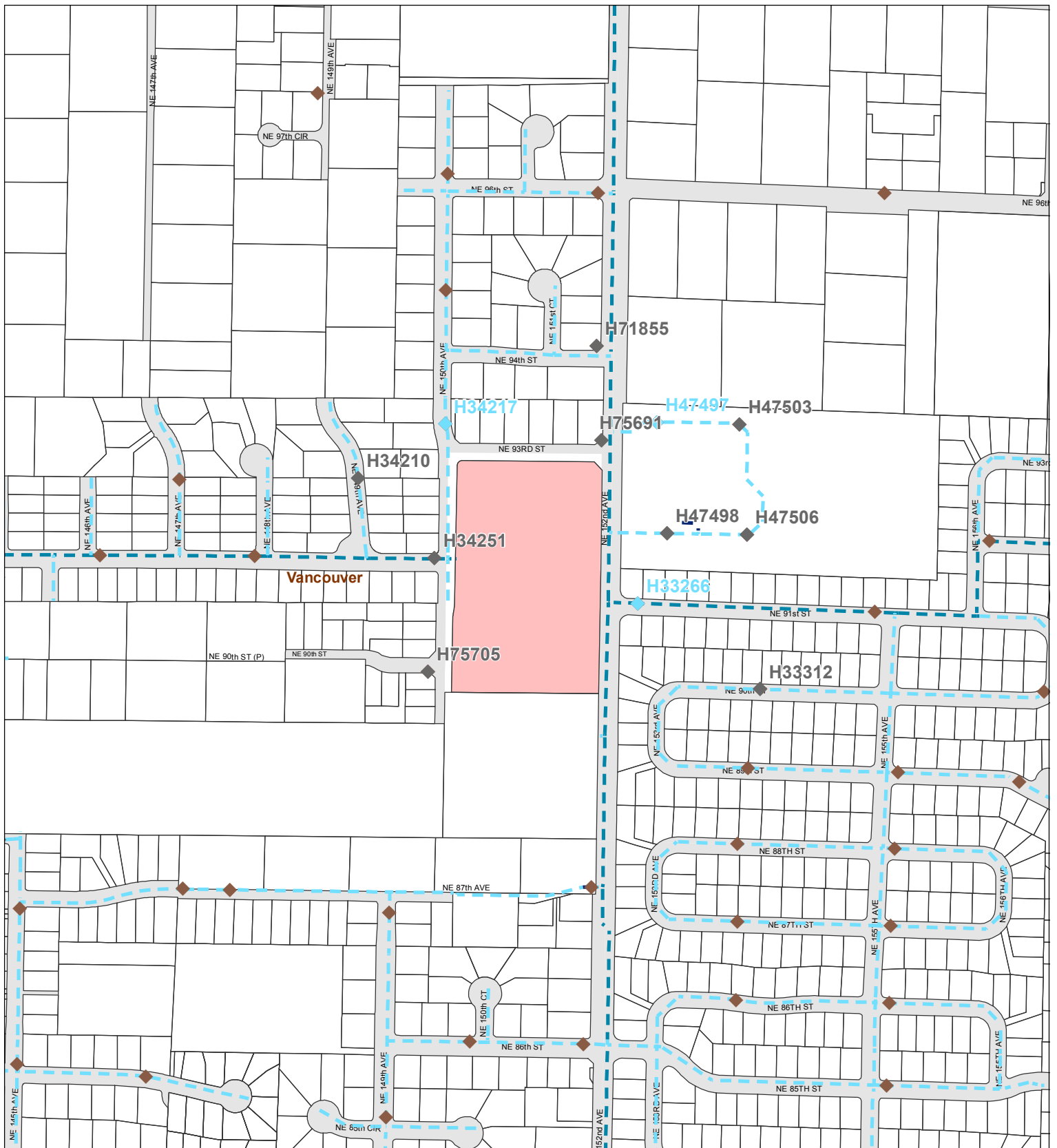
## Water, Sewer, and Storm Systems


Account: 154246000  
 Owner: TSR INVESTMENTS LLC  
 Address: PO BOX 1900  
 C/S/Z: BATTLE GROUND, WA 98604

Printed on: September 17, 2018

Subject Property(s)	Storm Water Lines
Public Road	1-year Wellhead ZOC
Transportation or Major Utility Easement	5-year Wellhead ZOC
Water Lines	10-year Wellhead ZOC
Sewer Lines	Hydrants

32134	32135	32136
22103	22102	22101
22110	22111	22112





Geographic Information System

0 200 400 Feet

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## Water Systems

Account: 154246000  
 Owner: TSR INVESTMENTS LLC  
 Address: PO BOX 1900  
 C/S/Z: BATTLE GROUND, WA 98604

Printed on: September 17, 2018

32134	32135	32136
22103	22102	22101
22110	22111	22112

<div style="display: flex; justify-content: space-between;"> <div> <div style="background-color: #f8d7da; width: 20px; height: 10px; margin-bottom: 5px;"></div> Subject Property(s)           <div style="border: 2px solid black; width: 20px; height: 10px; margin-bottom: 5px;"></div> Water District Boundary           <div style="border-bottom: 2px solid gray; width: 20px; margin-bottom: 5px;"></div> Unknown Size Water Line           <div style="border-bottom: 2px dashed blue; width: 20px; margin-bottom: 5px;"></div> &lt; 10" Water Line         </div> <div> <div style="border-bottom: 2px solid blue; width: 20px; margin-bottom: 5px;"></div> 10-20" Water Line           <div style="border-bottom: 2px solid darkblue; width: 20px; margin-bottom: 5px;"></div> &gt; 20" Water Line           <div style="width: 10px; height: 10px; background-color: gray; border: 1px solid black; margin-bottom: 5px; display: flex; align-items: center; justify-content: center;">◆</div> No Flow Data Hydrant           <div style="width: 10px; height: 10px; background-color: red; border: 1px solid black; margin-bottom: 5px; display: flex; align-items: center; justify-content: center;">◆</div> 0 - 499 GPM at 20 PSI           <div style="width: 10px; height: 10px; background-color: orange; border: 1px solid black; margin-bottom: 5px; display: flex; align-items: center; justify-content: center;">◆</div> 500 - 999 GPM at 20 PSI         </div> </div>	<div style="display: flex; justify-content: space-between;"> <div> <div style="color: green; font-weight: bold; font-size: 1.2em;">◆</div> &gt; 1000 - 1749 GPM at 20 PSI           <div style="color: blue; font-weight: bold; font-size: 1.2em;">◆</div> &gt; 1750 GPM at 20 PSI           <div style="width: 10px; height: 10px; background-color: brown; border: 1px solid black; margin-bottom: 5px; display: flex; align-items: center; justify-content: center;">◆</div> Hydrant &gt; 500' from parcel(s)         </div> </div>
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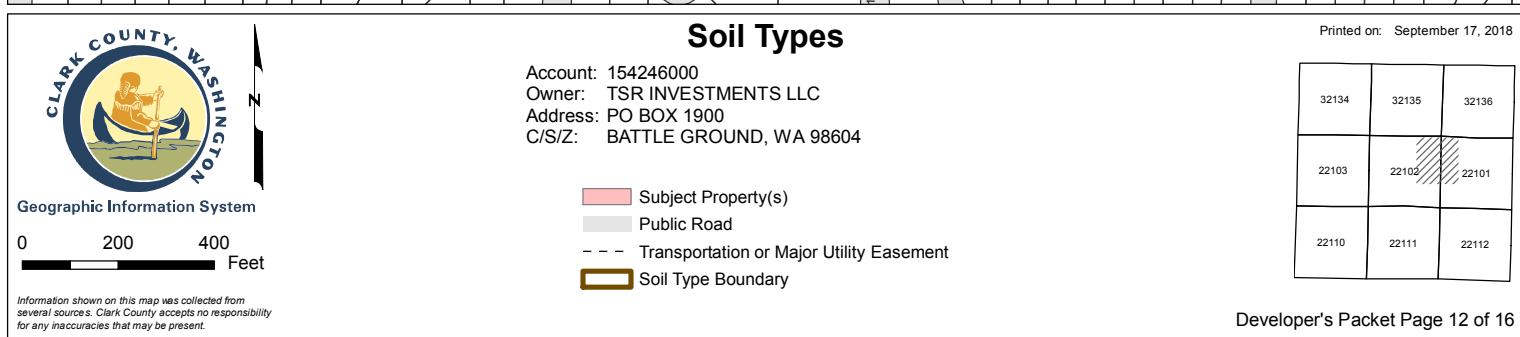
# Hydrant Fire Flow Details

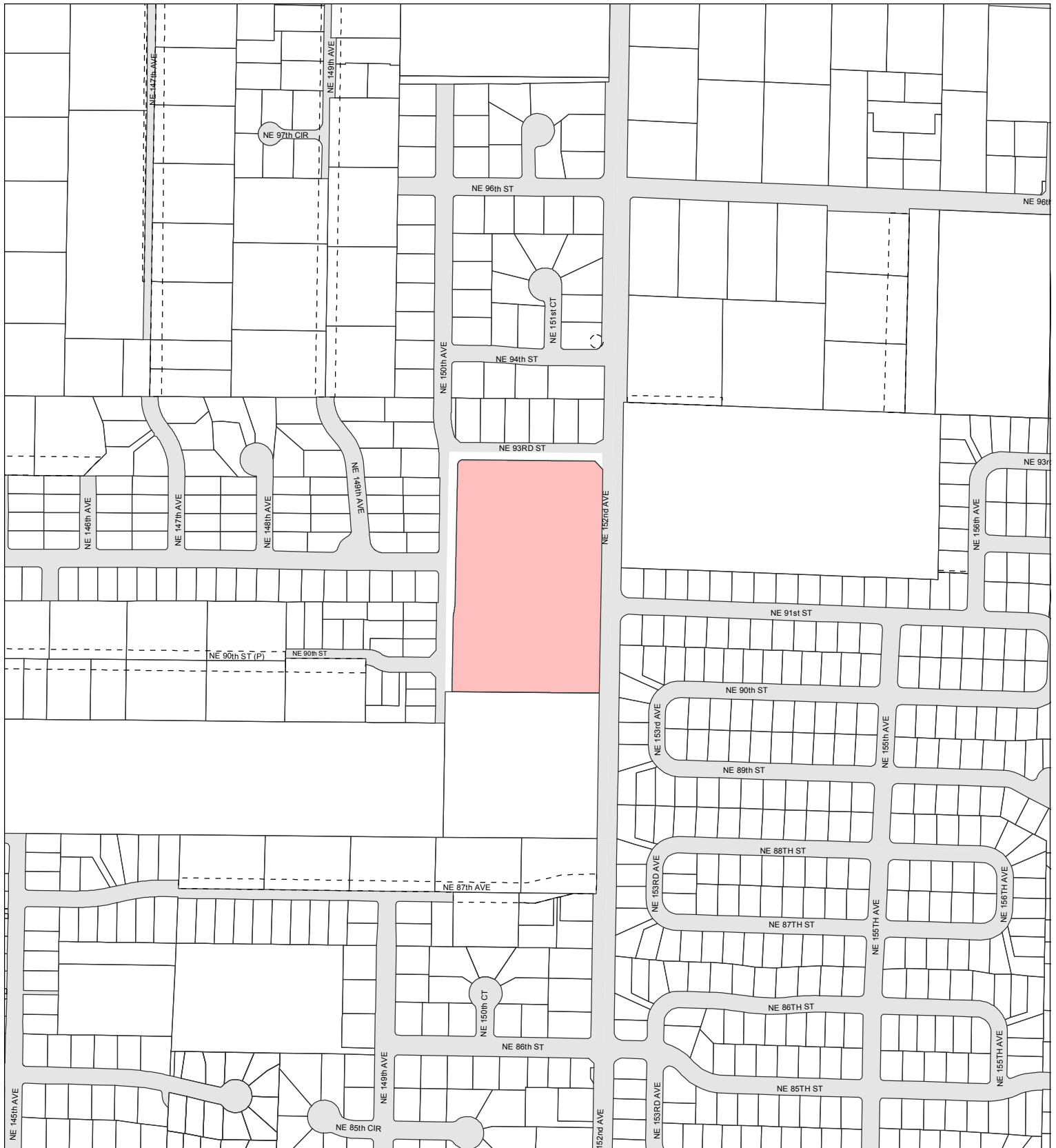
Account No.: 154246000  
Owner: TSR INVESTMENTS LLC  
Address: PO BOX 1900  
C/S/Z: BATTLE GROUND, WA 98604

Water District(s)	Hydrant Data Update	Project Site Provider
Vancouver	January 1, 2017	Service Provider

## HYDRANT INFORMATION:

Hydrant ID	Hydrant Owner	Main Diameter	Flow at 20 PSI	Test Date	Distance to site
H34251	Vancouver	0.0"	No Data	None	61 ft
H75691	Vancouver	0.0"	No Data	None	68 ft
H75705	Vancouver	0.0"	No Data	None	71 ft
H33266	Vancouver	0.0"	2734 GPM	November 30, 2001	114 ft
H34217	Vancouver	0.0"	2391 GPM	July 8, 2005	120 ft
H47498	Vancouver	0.0"	No Data	None	200 ft
H47497	Vancouver	0.0"	4774 GPM	November 18, 2003	221 ft
H34210	Vancouver	0.0"	No Data	None	297 ft
H71855	Vancouver	0.0"	No Data	None	350 ft
H47503	Vancouver	0.0"	No Data	None	438 ft
H47506	Vancouver	0.0"	No Data	None	440 ft
H33312	Vancouver	0.0"	No Data	None	489 ft





## Environmental Constraints I

Account: 154246000  
 Owner: TSR INVESTMENTS LLC  
 Address: PO BOX 1900  
 C/S/Z: BATTLE GROUND, WA 98604

Printed on: September 17, 2018



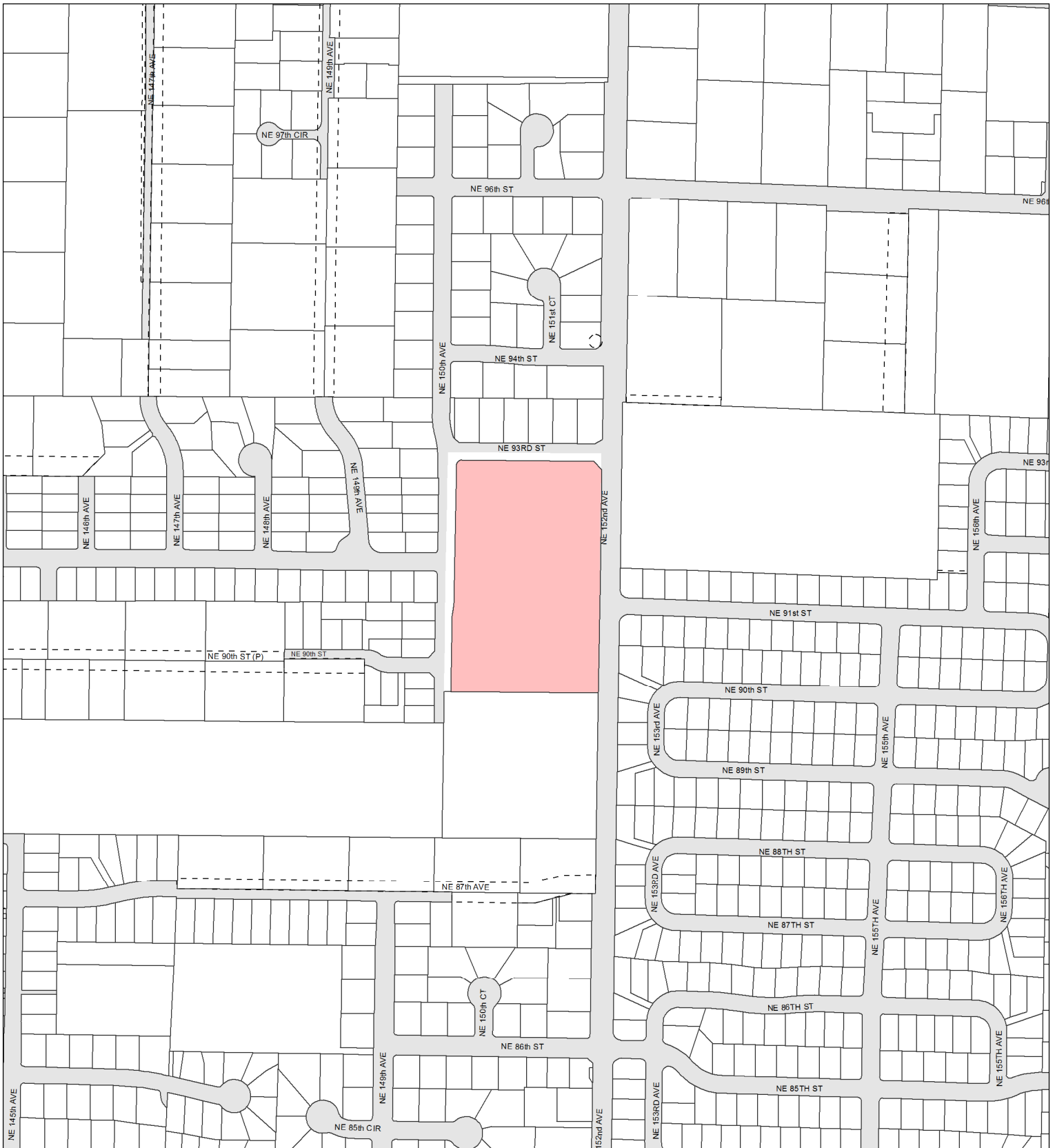
Geographic Information System

0 200 400 Feet

Information shown on this map was collected from several sources. Clark County accepts no responsibility for any inaccuracies that may be present.

- Subject Property(s)
- Public Road
- Transportation or Major Utility Easement
- Hydric Soils
- Wetland Inventory
- CARA Category 1
- Riparian Habitat or Species Area
- Non-Riparian Habitat or Species Area
- 100 year Floodplains
- Floodway
- Shorelines
- Stream

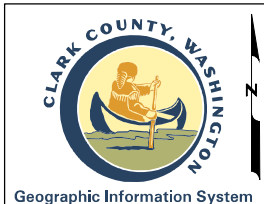
32134	32135	32136
22103	22102	22101
22110	22111	22112



## Environmental Constraints II

Account: 154246000  
 Owner: TSR INVESTMENTS LLC  
 Address: PO BOX 1900  
 C/S/Z: BATTLE GROUND, WA 98604

Printed on: September 17, 2018

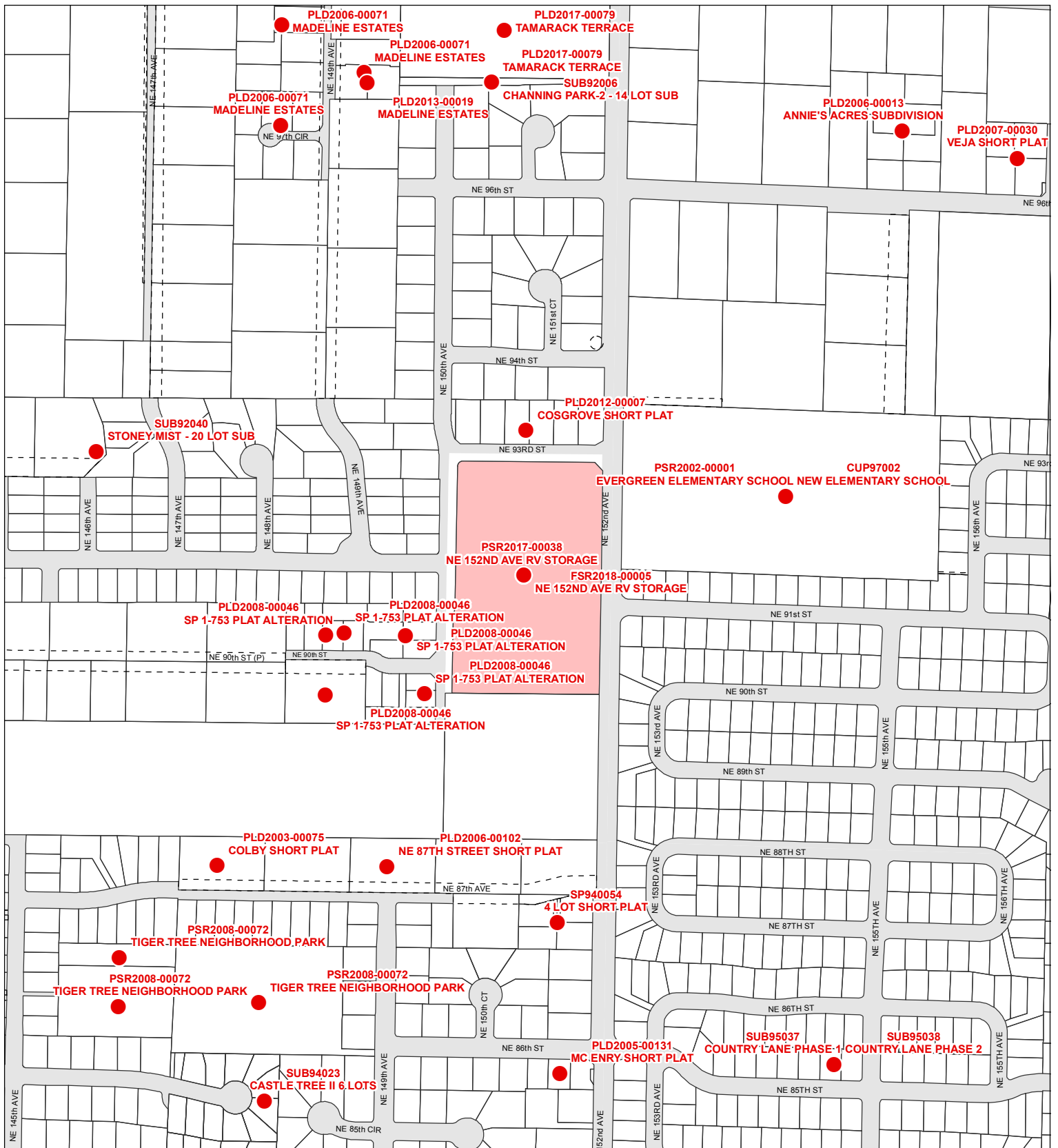


0 200 400 Feet

Information shown on this map was collected from several sources. Clark County accepts no responsibility for any inaccuracies that may be present.

- Subject Property(s)
- Public Road
- Transportation or Major Utility Easement
- Slopes > 15%
- Potentially Unstable Slope
- Historic or Active Landslide
- Severe Erosion Hazard Area
- Forest Moratorium Area
- CCHR Historic Site
- NRHP Historic Site
- INV Historic Site

32134	32135	32136
22103	22102	22101
22110	22111	22112





Geographic Information System

0 200 400 Feet

Information shown on this map was collected from several sources. Clark County accepts no responsibility for any inaccuracies that may be present.

## Adjacent Development

Account: 154246000  
 Owner: TSR INVESTMENTS LLC  
 Address: PO BOX 1900  
 C/S/Z: BATTLE GROUND, WA 98604

Subject Property(s)

Public Road

Transportation or Major Utility Easement

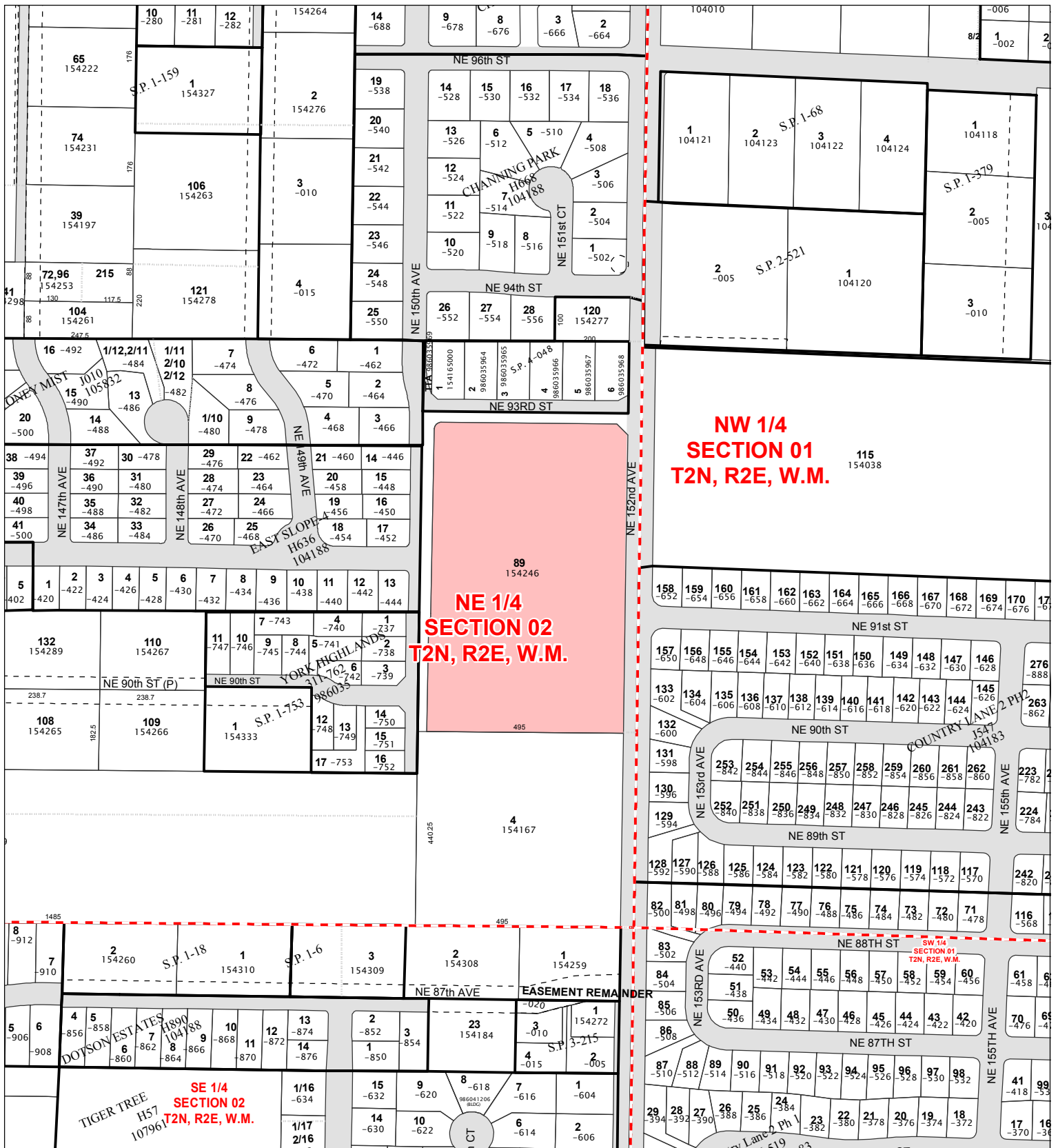
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 Adjacent Development

Printed on: September 17, 2018

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22103	22102	22101
22110	22111	22112

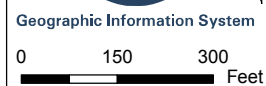
Developer's GIS Packet: Page 15 of 16



## Quarter Section Parcels

Account: 154246000  
 Owner: TSR INVESTMENTS LLC  
 Address: PO BOX 1900  
 C/S/Z: BATTLE GROUND, WA 98604

Printed on: September 17, 2018



Information shown on this map was collected from several sources. Clark County accepts no responsibility for any inaccuracies that may be present.

- Subdivision Lines
- Donation Land Claim
- Section Quarters
- City Boundaries
- Subject Property(s)
- Road Right of Way - Actual Road May not Exist
- Transportation or Major Utility Easement

32134	32135	32136
22103	22102	22101
22110	22111	22112

## **6. State Environmental Review (SEPA)**

---

# SEPA ENVIRONMENTAL CHECKLIST

## ***Purpose of checklist:***

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

## ***Instructions for applicants:***

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

## ***Instructions for Lead Agencies:***

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

## ***Use of checklist for nonproject proposals:***

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.



## A. Background

1. Name of proposed project, if applicable:

***NE 152<sup>nd</sup> Avenue TSR Property***

2. Name of applicant:

***TSR Investments LLC.***

3. Address and phone number of applicant and contact person:

***Applicant:***

***TSR Investments LLC.***

***PO Box 1900***

***Battle Ground, WA 98604***

***Gary Rademacher***

***garyr@tapani.com***

***360-687-1148***

***Contact:***

***AKS Engineering & Forestry, LLC.***

***9600 NE 126th Ave, Suite 2520***

***Vancouver, WA 98682***

***Seth Halling***

***sethh@aks-eng.com***

***360-882-0419***

4. Date checklist prepared:

***January 21, 2018***

5. Agency requesting checklist:

***Clark County***

6. Proposed timing or schedule (including phasing, if applicable):

***The applicant intends to have the annual review and zone change review process completed to allow the comprehensive plan map change and zone change to be enacted in January of 2020.***

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

***Yes, the applicant plans to develop a single-family subdivision after the completion of the annual review and zone change.***

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

***A geotechnical investigation and report, Level 1 Site Evaluation, and Archaeological Predetermination were completed in 2017 with a previous land use application for the site. No additional environmental information will be prepared for this application.***

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

***Yes. The site as Final Site Plan and Final Engineering approval for a self-storage facility through Clark County (DEV2017-00125).***

10. List any government approvals or permits that will be needed for your proposal, if known.

***Annual Review for Comprehensive Plan Map Change and Zone Change Application.***

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

***The subject site has a gross area of approximately 7.68 acres. The applicant proposes to change the existing Comprehensive Plan Map designation of Commercial to Urban Low Density Residential, which would include a land use zone change from Community Commercial to R1-6 Residential.***

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

***Address: 9000 NE 152nd Avenue, Vancouver, WA 98682***

***Abbreviated Legal: NE 1/4, Sec 02, T2N, R2E, WM.***

***Clark County parcel ID#'s: 154246-000***

## **B. ENVIRONMENTAL ELEMENTS**

### **1. Earth**

#### **a. General description of the site:**

(circle one): **Flat**, rolling, hilly, steep slopes, mountainous, other \_\_\_\_\_

#### **b. What is the steepest slope on the site (approximate percent slope)?**

***The site is generally flat with an area of slopes up to 10% along the west edge of the site.***

#### **c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.**

***According to the USDA NRCS web soil survey, soils on site consist of Lauren Gravelly loam (0 to 8 percent slopes) (LgB-100%).***

#### **d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**

***No surface indications or history of unstable soils on site or in the immediate vicinity.***

#### **e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.**

***This application is for an Annual Review and Zone Change. No grading is proposed with this application.***

#### **f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.**

***No erosion will occur with this application. Future construction activities that will occur under other applications that can result from this application could***

***have erosion in the form of silt transfer and dust blow-ff. Erosion potential will be minimized by utilizing best management practices for erosion control.***

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

***None.***

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

***No construction is proposed with this application; therefore, no measures are proposed.***

## **2. Air**

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

***None with this application. Once the zone change has been completed, it is anticipated that a subdivision will be built. During site development and building construction, there will be exhaust emissions from construction equipment. Once construction is completed, air emission will be limited to automobile exhaust from vehicles entering and leaving the site.***

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

***None known.***

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

***No impacts are proposed with this application; therefore, no measures are proposed. With any future construction the applicant will comply with applicable code and best management practices.***

## **3. Water**

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

***No***

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

***N/A***

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

***N/A***

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

**No**

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

**No**

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

**No**

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

**No**

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

**N/A**

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

***Existing runoff is infiltrated and dispersed within the vegetation on site. No new runoff will be created as a result of this application. Any future construction project will determine how to best manage on-site stormwater.***

2) Could waste materials enter ground or surface waters? If so, generally describe.

***No waste materials are proposed to enter ground or surface waters as part of this application.***

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

***Existing runoff is infiltrated and dispersed within the vegetation on site. No new runoff or changes to existing drainage patterns will be occur as a result of this application. Any future construction project will determine how to best manage on-site stormwater and maintain no impact to drainage patterns in the vicinity.***

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

***No impacts are proposed with this application; therefore, no measures are proposed.***

#### 4. Plants

a. Check the types of vegetation found on the site:

- ☐ deciduous tree: alder, maple, aspen, other
- ☒ evergreen tree: fir, cedar, pine, other
- ☐ shrubs
- ☒ grass
- ☐ pasture
- ☒ crop or grain
- ☐ Orchards, vineyards or other permanent crops.
- ☐ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- ☐ water plants: water lily, eelgrass, milfoil, other
- ☐ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

***No vegetation will be removed as a result of this application. Any future construction will remove all vegetation from the site.***

c. List threatened and endangered species known to be on or near the site.

***None known***

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

***No landscaping is proposed with this application. Any future project will install landscaping meeting the requirements of Clark County Code and using some native plan material.***

e. List all noxious weeds and invasive species known to be on or near the site.

***Himalayan Blackberry.***

#### 5. Animals

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: **hawk**, heron, eagle, **songbirds**, other:  
mammals: deer, bear, elk, beaver, **other: rodents, rabbits**  
fish: bass, salmon, trout, herring, shellfish, other \_\_\_\_\_

b. List any threatened and endangered species known to be on or near the site.

***None known.***

c. Is the site part of a migration route? If so, explain.

***Yes, Pacific Flyway for waterfowl.***

d. Proposed measures to preserve or enhance wildlife, if any:

***None with this application. Landscape installed with future project will meet the requirements of Clark County Code and use some native plant material. New landscape will provide greater diversity for wildlife than the existing vegetation on site.***

e. List any invasive animal species known to be on or near the site.

***None known.***

## **6. Energy and Natural Resources**

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

***No energy needs will result from this application; however, electricity will be available for the energy needs of future development.***

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

***No.***

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

***None.***

## **7. Environmental Health**

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

***No environmental hazards will be associated with this application. Any future application that leads to construction will have environmental health hazards limited to standard risks associated with construction and occupancy of the development.***

1) Describe any known or possible contamination at the site from present or past uses.

***None known.***

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

***None known.***

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

***None as part of this application. Any future application that leads to construction will have typical construction materials such as: gas, diesel, oil, etc.***

4) Describe special emergency services that might be required.

***No special emergency service needs will be created with this application.***

5) Proposed measures to reduce or control environmental health hazards, if any:

**No impacts will be created with this application; therefore, no measures are proposed.**

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

**None known.**

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

**No noise will occur as a result of this application. Any future application that involves construction will have short-term construction noise that will occur during daylight hours, with typical neighborhood vehicular noise occurring in the long term.**

3) Proposed measures to reduce or control noise impacts, if any:

**No impacts are proposed with this application; therefore, no measures are proposed. Any future application that involves construction will require equipment to have muffled exhaust and construction hours will be restricted to those approved by Clark County.**

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

**The site is currently used for farming hay. Adjacent uses are residential to the north, southeast, and west, a public school to the northeast and an airport to the south. The proposed project is not anticipated to affect adjacent land uses.**

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

**No, the site is not currently in a farmland tax status.**

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

**No.**

c. Describe any structures on the site.

**There are no on-site structures.**

d. Will any structures be demolished? If so, what?

**N/A**

e. What is the current zoning classification of the site?

**CC**

f. What is the current comprehensive plan designation of the site?

**C**

g. If applicable, what is the current shoreline master program designation of the site?

**N/A**

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

**No.**

i. Approximately how many people would reside or work in the completed project?

**No project is proposed, no people will reside or work on site as a result of this application. Since this application is to change from a commercial zone to a residential zone (R1-6) it is assumed that between 82 and 119 people will reside in a completed project depending on final density.**

j. Approximately how many people would the completed project displace?

**None.**

k. Proposed measures to avoid or reduce displacement impacts, if any:

**No displacements are proposed with this application; therefore, no measures are proposed.**

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

**Proposed measures include approval through the Clark County Annual Review and Zone Change application process. Any future development will also be approved through Clark County, following the appropriate review process for a proposed project.**

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

**Proposed measures include approval through the Clark County Annual Review and Zone Change application process. Any future development will also be approved through Clark County, following the appropriate review process for a proposed project.**

## 9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

**No units will be provided with this application. A subdivision that could result from an approved zone change could conceivably provide between 31 and 45 new middle-income housing units.**

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

**None.**



c. Proposed measures to reduce or control housing impacts, if any:

**No impacts are proposed with this application, or will occur with a future application; therefore, no measures are proposed.**

#### 10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

**No structures are proposed with this application. There is no maximum allowed building height for the community commercial zone and maximum building height in the R1-6 zone is 35 feet.**

b. What views in the immediate vicinity would be altered or obstructed?

**No known views will be obstructed.**

c. Proposed measures to reduce or control aesthetic impacts, if any:

**No aesthetic impacts are proposed with this application; therefore, no measures are proposed.**

#### 11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

**No lighting is proposed with the application.**

b. Could light or glare from the finished project be a safety hazard or interfere with views?

**N/A**

c. What existing off-site sources of light or glare may affect your proposal?

**None known.**

d. Proposed measures to reduce or control light and glare impacts, if any:

**No lighting impacts are proposed with this application; therefore, no measures are proposed.**

#### 12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

**Tiger Tree neighborhood park is located approximately 0.20 miles southwest of the subject site. There is a private airport located on the parcel to the south of the site.**

b. Would the proposed project displace any existing recreational uses? If so, describe.

**No.**

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

**No impacts on recreation are proposed with this application; therefore, no measures are proposed. Park impact fees will be paid with a future residential development resulting from the approval of this application.**

### 13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

**No.**

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

**A predetermination survey was conducted on the subject site in 2017 and was submitted to DAHP for review. No artifacts were discovered by the applicant's archaeologist.**

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

**A predetermination survey was conducted on the subject site in 2017 and was submitted to DAHP for review.**

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

**No impact or loss are proposed or anticipated with this application. The applicant will follow the recommendations of the predetermination report and DAHP.**

### 14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

**The site is bordered by NE 152nd Avenue to the east, NE 93rd Street to the north, and NE 150th Avenue to the west. No project is proposed with this application; therefore, no access is proposed.**

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

**There is a C-Tran bus stop for route 72 along the site's frontage on NE 152nd Avenue.**

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

**None.**

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

**No improvements will be required with this application. A residential development that would result from approval of this application will provide half width improvements for NE 152nd Avenue, NE 93rd Street, and NE 150th Avenue. A**

**subdivision will also have construction of internal streets to serve all proposed lots.**

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

**The project will not use air transportation, however, there is an airport located on the parcel to the south of the subject site.**

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

**No use is proposed with this application; therefore, no trips will be generated as a result. Any future development will be required to submit a traffic study as part of the subdivision application requirements.**

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

**No.**

h. Proposed measures to reduce or control transportation impacts, if any:

**No transportation impacts are proposed with this application; therefore, no measures are proposed. Any future development will be required to pay transportation impact fees.**

## 15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

**No, there is no project proposed with this application. Any future development would require and incremental increase in the need for public services directly related to the total number of lots proposed in the development.**

b. Proposed measures to reduce or control direct impacts on public services, if any.

**No public services impacts are proposed so no measures are proposed. Any future development will pay the appropriate impact fees.**

## 16. Utilities

a. Circle utilities currently available at the site:

**electricity, natural gas, water, refuse service, telephone, sanitary sewer,** septic system,  
other \_\_\_\_\_

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

**Electrical: Clark Public Utilities**

**Refuse: Waste Connections**

**Telephone: Century Link**

**Sanitary Sewer: Vancouver**

**Public Water: Vancouver**

**Natural Gas: NW Natural**

## C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision

Signature: 

Name of signee: Seth Halling

Position and Agency/Organization: Project Manager / AKS Engineering

Date Submitted: 1/23/2019

## D. Supplemental sheet for nonproject actions

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

***The proposal to change from Commercial zoning to Urban Low Density Residential is unlikely to greatly increase discharge to water or emissions to the air. The existing commercial zone would allow a project with similar amounts of impervious surface and traffic trips as an allowed project under the proposed residential zone. It is likely that the noise level for a residential development would be less than that of a commercial development. It is not anticipated there will be any increase to storage or release of toxic or hazardous substances. Any proposed development, commercial or residential, will need to go through the County's site plan or subdivision application respectively, thus meeting state and local code.***

Proposed measures to avoid or reduce such increases are:

***As no increases are anticipated from the zone change, no specific measures are proposed. Future development will collect and treat any runoff from the developed site, and discharge at rates approved by Clark County Code.***

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

***The existing land is used for hay field with one large evergreen tree on site. Any future development will remove all existing vegetation. Minimal animal habitat will be removed. There are no fish or marine life on or near the site.***

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

***Landscaping will be proposed with any future site development. Any landscape proposed will increase the available habitat in the form of trees and shrubs.***

3. How would the proposal be likely to deplete energy or natural resources?

***Any future development of the site will require additional energy use. A change from commercial to residential zoning is not likely to greatly increase the energy needs of a completed project. It is not likely that a residential project would deplete natural resources.***

Proposed measures to protect or conserve energy and natural resources are:

***No measures are proposed or required at this time. Possible measure could include the use of energy efficient building materials and local sourcing of materials as much as is practicable during future development of the site. The use of solar panels is another option that could be considered.***

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

***Tiger Tree park is located approximately 0.2 miles south of the site. It is likely that a change from Commercial zoning to Residential zoning will increase the use of the park facility. If the site is rezoned residential, park impact fees will be paid when future homes are constructed. Tiger Tree Park is a neighborhood park designed to serve the surrounding community. There is also an airport immediately south of the site. The future construction of buildings on the property could have an impact on the airport. Any future development, commercial or residential, will need to submit notice of structure height to the Federal Aviation Administration. No other environmentally sensitive areas or areas designated for governmental protection will be affected.***

Proposed measures to protect such resources or to avoid or reduce impacts are:

***Any future development will be required to pay park impact fees. Any building or structure will need to be approved by the FAA to ensure no impacts to the adjacent airport.***

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

***The proposal will change the allowed land uses from commercial to residential. This would allow land uses that are consistent with the surrounding existing residential and airport uses. There are no shorelines associated with the property.***

Proposed measures to avoid or reduce shoreline and land use impacts are:

***Land use impacts will be reduced by requiring all future projects to go through applicable land use review processes with Clark County.***

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

***A traffic memo was completed by Lancaster Engineering on January 17, 2019. The memo states that the zone change from community commercial to residential will decrease the peak hour and average weekday trip potential for the site, therefore decreasing demand on the transportation system.***

***Any future development installed under the current or proposed zones will increase the demand on public services and utilities. The zone change to residential will likely increase the potential demand on public services over the existing potential with the commercial zone. It is unknown at this time what that increase would be.***

Proposed measures to reduce or respond to such demand(s) are:

***Any future development will install all public utilities required within the development, as well as pay all applicable impact fees for the utilities and public services.***

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

***The proposal will not conflict with any laws or requirements for protection of the environment.***

## 7. Project Narrative

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# **NE 152<sup>nd</sup> Avenue TSR Property Type IV Annual Review & Zone Change**

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**Date:** January 2019

**Submitted to:** Clark County  
Community Planning  
1300 Franklin Street  
Vancouver, WA 98660

**Applicant:** TSR Investments, LLC  
PO Box 1900  
Battle Ground, WA 98604  
(360) 687-1148

**AKS Job Number:** 5974



9600 NE 126<sup>th</sup> Avenue, Suite 2520  
Vancouver, WA 98682  
(360) 882-0419

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# Land Use Application For a Type IV Annual Review & Zone Change

**Submitted to:** Clark County  
Community Planning  
1300 Franklin Street  
Vancouver, WA 98660

**Applicant:** TSR Investments, LLC  
PO Box 1900  
Battle Ground, WA 98604  
Contact: Gary Rademacher  
Email: garyr@tapani.com  
Phone: (360) 687-1148

**Property Owner:** TSR Investments, LLC  
PO Box 1900  
Battle Ground, WA 98604

**Applicant's Contact:** AKS Engineering & Forestry, LLC  
9600 NE 126<sup>th</sup> Avenue, Suite 2520  
Vancouver, WA 98682  
Contact: Seth Halling  
Email: sethh@aks-eng.com  
Phone: (360) 882-0419

**Site Location:** Site is within unincorporated Clark County and  
addressed as 9000 NE 152<sup>nd</sup> Avenue, Vancouver, WA  
98682  
Assessor's Serial Numbers: 154246-000

**Site Size:** Total Area: 7.68 acres (334,493 SF)

**Land Use Districts:** Community Commercial (CC)



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## **I. Executive Summary**

Through this application, the Applicant (TSR Investments, LLC) requests approval from Clark County through an Annual Review to change the subject site (described below) from Community Commercial (CC) to Residential (R1-6), requiring a Clark County Comprehensive Plan Map change from Commercial (C) to Urban Low Density Residential (UL). The plan map change requires the submittal of an Annual Review with a Zone Change application.

The site has previous permit activity under project number DEV2017-00125. PSR2017-00038, which included CRA2017-00008, SEP2017-00086; and EVR2017-00083, was approved with conditions on February 8, 2018. EVR2018-00038 was approved May 4, 2018, ENG2018-00047 was approved for construction on June 8, 2018, and FSR 2018-00005 was final on June 15, 2018. The site plan and engineering approval is for the construction of a self-storage facility. The Applicant has decided to pursue the Annual Review and Zone Change due to multiple storage sites recently being constructed and/or approved in the regional vicinity of the site, as well as the site being a “Grade B” location for a storage facility.

The applicant reached out to the Washington State Department of Transportation (WSDOT) Aviation, the Federal Aviation Administration (FAA), the Fly for Fun Airport owner, the neighborhood association and the Evergreen School District. Responses were received from the owner of the airport, WSDOT Aviation, and the Evergreen School District. These responses are included with this application.

This written narrative includes findings of fact demonstrating that the application complies with all applicable approval criteria. These findings are supported by substantial evidence. This information, which is included in this application package, provides the basis for Clark County to approve the application.

## **II. Site Description/Setting**

The subject site comprises one lot (Parcel Serial Number 154246-000) approximately 7.68 acres in total size, located at the southwest corner of NE 152<sup>nd</sup> Avenue and NE 93<sup>rd</sup> Street, in unincorporated Clark County, and zoned Community Commercial (CC). The property to the south of the project is zoned Airport (A). The properties to the west of the site across NE 150<sup>th</sup> Avenue are developed with single-family residences and a zoning of R1-6 and R1-10. The properties to the north across NE 93<sup>rd</sup> Street are developed with single-family residences and a zoning of R1-10. The properties to the east of the site across NE 152<sup>nd</sup> Avenue, are developed with a public elementary school and single-family residences and a zoning of PF and R1-6 respectively.

The subject site has frontage on NE 152<sup>nd</sup> Avenue to the east, NE 93<sup>rd</sup> Street to the north, and NE 150<sup>th</sup> Avenue to the west. There are no existing structures on the subject site. Existing site topography is generally flat. The property’s vegetation includes hay and a single evergreen tree. There are no wetlands, steep slopes, water resources, or critical habitat located on the subject site.

## **III. Applicable Review Criteria**

### **WAC 365-196-300**

#### **Urban density.**

- (1) The role of urban areas in the act. The act requires counties and cities to direct new growth to urban areas to allow for more efficient and predictable provision of adequate public facilities, to promote an orderly transition of governance for urban areas, to reduce development pressure on rural and resource lands, and to encourage redevelopment of existing urban areas.

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**Response:** The subject site is located within the Vancouver Urban Growth Area (UGA) and surrounded by urban development. Public facilities are currently available at the site.

- (2) How the urban density requirements in the act are interrelated. The act involves a consideration of density in three contexts:
- (a) Allowed densities: The density, expressed in dwelling units per acre, allowed under a county's or city's development regulations when considering the combined effects of all applicable development regulations.
  - (b) Assumed densities: The density at which future development is expected to occur as specified in the land capacity analysis or the future land use element. Assumed densities are also referred to in RCW 36.70A.110 as densities sufficient to permit the urban growth that is projected to occur.
  - (c) Achieved density: The density at which new development occurred in the period preceding the analysis required in either RCW 36.70A.130(3) or 36.70A.215.

**Response:** The subject site will be able to meet the density requirements of Clark County Code (CCC) Chapter 40.220.010. Currently Clark County has an overall density of approximately 5.7 units per acre. The comprehensive plan density goal is 8 units per acre. The proposed zone change would help the County approach that density goal.

- (3) Determining the appropriate range of urban densities. Within urban growth areas, counties and cities must permit urban densities and provide sufficient land capacity suitable for development. The requirements of RCW 36.70A.110 and 36.70A.115 apply to the densities assumed in the comprehensive plan and the densities allowed in the implementing development regulations.
- (a) Comprehensive plans. Under RCW 36.70A.070(1) and in RCW 36.70A.110(2), the act requires that the land use element identify areas and assumed densities sufficient to accommodate the twenty-year population allocation. The land use element should clearly identify the densities, or range of densities, assumed for each land use designation as shown on the future land use map. When reviewing the urban growth area, the assumed densities in the land capacity analysis must be urban densities.
  - (b) Development regulations. Counties and cities must provide sufficient capacity of land suitable for development.
    - (i) Development regulations must allow development at the densities assumed in the comprehensive plan.
    - (ii) Counties and cities need not force redevelopment in urban areas not currently developed at urban densities, but the development regulations must allow, and should not discourage redevelopment at urban densities. If development patterns are not occurring at urban densities, counties and cities should review development regulations for potential barriers or disincentives to development at urban densities. Counties and cities should revise regulations to remove any identified barriers and disincentives to urban densities, and may include incentives.

**Response:** The proposed zone change to R1-6 will allow for a development that will help the County reach its residential density goals stated in the comprehensive plan.

- 
- (4) Factors to consider for establishing urban densities. The act does not establish a uniform standard for minimum urban density. Counties and cities may establish a specified minimum density in county-wide or multicounty planning policies. Counties and cities should consider the following factors when determining an appropriate range of urban densities:

- (a) An urban density is a density for which cost-effective urban services can be provided. Higher densities generally lower the per capita cost to provide urban governmental services.

**Response:** The subject site currently has urban services available. The surrounding properties are zoned to allow for an urban density, however, not all properties in the area are developed to this density. The proposed zone change would allow development of the subject site to the allowed urban density.

- (b) Densities should be higher in areas with a high local transit level of service. Generally, a minimum of seven to eight dwelling units per acre is necessary to support local urban transit service. Higher densities are preferred around high capacity transit stations.

**Response:** The subject site is located in an area with only one transit route serving the neighborhood, lending to the existing low-density residential zoning adjacent to the site and the proposed lower density residential zone of R1-6. The current county-wide density is approximately 5.7 units per acre, a development to the proposed R1-6 standards would help increase the County's overall density toward the goal of the seven to eight units per acre to help support and urban transit service.

- (c) The areas and densities within an urban growth area must be sufficient to accommodate the portion of the twenty-year population that is allocated to the urban area. Urban densities should allow accommodation of the population allocated within the area that can be provided with adequate public facilities during the planning period.

**Response:** There are some properties that are adjacent to the subject site that are underdeveloped, yet they can be serviced by public facilities. The proposed zone change for the site would help the County in achieving proper density goals for the area.

- (d) Counties and cities should establish significantly higher densities within regional growth centers designated in RCW 47.80.030; in growth and transportation efficiency centers designated under RCW 70.94.528; and around high capacity transit stations in accordance with RCW 47.80.026. Cities may also designate new or existing downtown centers, neighborhood centers, or identified transit corridors as focus areas for infill and redevelopment at higher densities.

**Response:** The subject site is not located within a regional growth center. The proposed zone change is consistent with the existing zoning surrounding the site.

- (e) Densities should allow counties and cities to accommodate new growth predominantly in existing urban areas and reduce reliance on either continued expansion of the urban growth area, or directing significant amounts of new growth to rural areas.

**Response:** The County is currently under-zoned for single-family residential uses. The proposed zone change will allow the development of single-family residences, providing housing for new

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growth. The subject site is surrounded by existing residential to the north, southeast, and west, and there are existing public facilities to accommodate the future growth.

- (f) The densities chosen should accommodate a variety of housing types and sizes to meet the needs of all economic segments of the community. The amount and type of housing accommodated at each density and in each land use designation should be consistent with the need for various housing types identified in the housing element of the comprehensive plan.

**Response:** While the final housing product that will result from proposed zone change is unknown at this time, the proposed R1-6 zone permits single-family detached dwellings, duplexes, and family day care centers, and townhouses are permitted as part of a planned unit development. Accessory dwelling units are also permitted with review and approval (CCC 40.220.010).

- (g) Counties and cities may designate some urban areas at less than urban densities to protect a network of critical areas, to avoid further development in frequently flooded areas, or to prevent further development in geologically hazardous areas. Counties or cities should show that the critical areas are present in the area so designated and that area designated is limited to the area necessary to achieve these purposes.

**Response:** The proposed R1-6 zone will meet urban densities within the urban area.

- (5) Addressing development patterns that occurred prior to the act.
  - (a) Prior to the passage of the act, many areas within the state developed at densities that are neither urban nor rural. Inside the urban growth area, local comprehensive plans should allow appropriate redevelopment of these areas. Newly developed areas inside the urban growth area should be developed at urban densities.

**Response:** The proposed application is for a zone change from commercial to residential. The subject site has been zoned commercial since 1994 (per Clark County) and has remained undeveloped. The Applicant would like to develop the site with in-demand residential. This policy does not apply.

- (b) Local capital facilities plans should include plans to provide existing urban areas with adequate public facilities during the planning period so that available infrastructure does not serve as a limiting factor to redevelopment at urban densities.

**Response:** Adequate public facilities exist at the subject site, with NE 152<sup>nd</sup> Avenue, NE 150<sup>th</sup> Avenue, and NE 93<sup>rd</sup> Street. Water and sanitary sewer are available to the site in the existing streets, along with other utilities, including communication, gas, etc.

## **CLARK COUNTY COMPREHENSIVE PLAN POLICIES**

### **Chapter 1 – Land Use Element**

#### **Goals and Policies**

#### **Land Use Element policies**

The Land Use Element for 20-year comprehensive plans determines the general distribution and location and extent of the uses of land, where appropriate, for agriculture, timber production, housing, commerce, industry, recreation, open spaces, public utilities, public facilities and other uses. The Land Use Element includes population densities, building



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intensities and estimates of future population growth. The land use element is to provide for protection of groundwater resources and where applicable, address drainage, flooding and run-off problems and provide for coordinated solutions. The following policies are to coordinate the efforts of Clark County and cities in designating land uses, densities and intensities to achieve the pattern described above in their respective Comprehensive Growth Management Plans.

**Response:** This application is for an annual review to change the land use designation of a piece of property in Clark County. Therefore, the goals and policies of the Land Use Element of the comprehensive plan apply.

#### 1.1 Countywide Planning Policies

1.1.1 Clark County, municipalities and special districts will work together to establish urban growth areas within which urban growth shall be encouraged and outside of which growth may occur only if it is not urban in nature. Each municipality within Clark County shall be included within an urban growth area. An urban growth area may include territory located outside of a city if such territory is characterized by urban growth or is adjacent to areas characterized by urban growth.

**Response:** The Applicant is proposing an urban zoning designation. The subject site is located in unincorporated Clark County, within the urban growth boundary. This policy is met.

1.1.2 Urban growth areas shall include areas and densities sufficient to permit the urban growth that is projected to occur in Clark County for the succeeding 20-year period.

**Response:** The Applicant is proposing to change the parcel's land use zone from commercial to residential. An R1-6 zone is proposed, which will provide a density consistent with the surrounding area and allow for the creation of in-demand housing to support the growth in Clark County. This policy is met.

1.1.3 Urban growth shall be located primarily in areas already characterized by urban growth that have existing public facility and service capacities to adequately serve such development and second in areas already characterized by urban growth that will be served by a combination of both existing public facilities and services that are provided by either public or private sources. Urban governmental services shall be provided in urban areas. These services may also be provided in rural areas, but only at levels appropriate to serve rural development. Urban governmental services include those services historically and typically delivered by cities or special districts and include storm and sanitary sewer systems, domestic water systems, street cleaning services, fire and police protection, public transit services and other public utilities not normally associated with non-urban areas.

**Response:** The subject site is currently within the urban growth area and is surrounded by existing residential development, as well as a small airport. Public facilities currently exist around the site with the capacity to serve the site once developed under the proposed zoning of R1-6. This policy is met.

1.1.9 Clark County and municipalities shall use the results of the Buildable Lands Capacity Report to determine the most appropriate means to address inconsistencies between land capacity and needs. In addressing these inconsistencies, Clark County and municipalities shall identify reasonable measures, other than adjusting urban growth areas that will be taken to comply with the requirements of Chapter 36.70A.



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**Response:** While the proposed annual review and zone change will remove commercially zoned land and add low-density residential land, the overall percentage of change will be minimal within the whole county and should allow the current balance to be maintained. The subject property has been zone CC since 1994 (per Clark County) and remained undeveloped. This policy is met.

#### County 20-Year Planning Policies

**Goal:** Adopt Urban Growth Area (UGA) boundaries to efficiently accommodate residential and employment increases projected within the boundaries over the next 20 years.

##### 1.2 Policies

1.2.1 The UGAs shall be consistent with the following general goals:

- reduce the inappropriate conversion of undeveloped land into sprawling, low-density development;

**Response:** The proposed change from a commercial zone to a residential zone will reduce the inappropriate conversion of undeveloped land into sprawling, low-density development by placing an urban low-density residential development inside of an area already developed with urban low-density residential. This policy is met.

- provide for the efficient provision of public services;

**Response:** The site has frontage on three public streets: NE 150<sup>th</sup> Avenue to the west, NE 93<sup>rd</sup> Street on the north, and NE 152<sup>nd</sup> Avenue to the east. All three of these streets contain the utilities required for a residential development. Emergency services and public transportation are also available at the site. This policy is met.

- protect natural resource, environmentally sensitive and rural areas;

**Response:** There are no natural resources, environmentally sensitive areas, or rural areas on, or within the vicinity of the site. This policy is met.

- encourage a clear distinction between urban and rural areas;

**Response:** The proposed zone change would allow for an urban low-density residential development within an area away from the urban growth boundary and surrounded by similar low-density development. The subject site is greater than half a mile away from the urban growth boundary. This policy is met.

- maintain densities which support a multi-modal transportation system;

**Response:** The proposed R1-6 zone will provide a density that is consistent with the surrounding zoning, which will help to maintain support for the existing multi-modal transportation system serving the site, including vehicular, pedestrian, bicycles, and public transportation. This policy is met.

- support variety, choice and balance in living and working environments;

**Response:** The proposed zone change will allow for development of a vacant property with single-family, middle-income homes that will be close to transit and other major travel ways, while still being within an area developed with low-density residential. This provides a balance of living in a residential neighborhood while still being able to commute to work via public transportation, bicycle, vehicle, or as a pedestrian. This policy is met.

- 
- promote a variety of residential densities; and,

**Response:** The proposed R1-6 zone is consistent with the surrounding densities, maintaining the overall variety of residential densities within the county. This policy is met.

- include sufficient vacant and buildable land.

**Response:** The subject site contains approximately 7.68 acres of vacant buildable land. This will allow for a development that meets the density and dimensional requirements of the proposed R1-6 zone. This policy is met.

**1.2.2 The UGAs shall be consistent with the following more specific criteria:**

- Each UGA shall provide sufficient urban land to accommodate future population/employment projections through the designated planning period.

**Response:** The proposed change to R1-6 will allow for the development of in-demand detached single-family residential product to accommodate the expected population growth. In a letter from the Columbia River Economic Development Council (CREDC) dated October 18, 2018, the CREDC stated that they do not consider the site a key employment site. Therefore, the zone change would not have a large effect on supplying employment for the proposed growth but can accommodate the future population's housing needs when approved. This policy is met.

- Cities shall be located within UGAs. Urban services shall be provided within those areas. Urban services should generally not be provided outside UGAs. (See Chapter 6, Capital Facilities and Utilities for urban and rural services.)

**Response:** The site has frontage on three public streets: NE 150<sup>th</sup> Avenue to the west, NE 93<sup>rd</sup> Street on the north, and NE 152<sup>nd</sup> Avenue to the east. All three of these streets contain the utilities required for a residential development. Emergency services and public transportation are also available at the site. This standard is met.

- Lands included within UGAs shall either be already characterized by urban growth or adjacent to such lands.

**Response:** The site is surrounded by lands with urban development, including a public elementary school, low-density residential, and a small airport. This policy is met.

- Existing urban land uses and densities should be included within UGAs.

**Response:** The subject site is located within the urban growth area boundary. This policy is met.

- Land within the UGA shall not contain areas designated for long-term agriculture or forestry resource use.

**Response:** The subject site does not contain, nor is it in the vicinity of, areas designated for long-term agricultural or forest use. This policy is met.

- UGAs shall provide a balance of industrial, commercial and residential lands.

**Response:** While the proposed annual review and zone change will replace commercially zoned land with low-density residential land, the overall percentage of change will be minimal within

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the whole county and should allow the current balance to be maintained. This policy is met.

- The UGAs should utilize natural features (such as drainage ways, steep slopes, open space and riparian corridors) to define the boundaries.

**Response:** The subject site is surrounded by lands developed with urban uses and is within the urban growth boundary. This policy is met.

- No UGA expansion into the 100-year floodplain of a river segment that is located west of the Cascade crest and when the river has a mean annual flow of 1,000 or more cubic feet per second per RCW36.70A.110(8).

**Response:** The proposed zone change does not expand into any 100-year flood plain. This policy is met.

- Each UGA shall have the anticipated financial capability to provide infrastructure/services needed in the area over the planning period under adopted concurrency standards.

**Response:** Infrastructure and public services currently exist to and around the subject site. The expansion of utilities will occur with future development of the site, and any future development will pay appropriate impact fees for services. This policy is met.

#### Vancouver Urban Growth Area

- 1.2.3 Ensure coordination of environmental protection, preservation and enhancement programs and regulations.

**Response:** There are no environmentally sensitive or habitat areas on or within the vicinity of the site. This policy does not apply.

- 1.2.5 Restrict amendments to the urban growth boundary to encourage infill development.

**Response:** The subject site is located inside with urban growth boundary and will not require amendments to the urban growth boundary.

- 1.2.6 Concentrate development in areas already served by public facilities and services. Use the provision or planned provision of public services and facilities as a means of directing development into desirable areas.

**Response:** Public facilities and services area currently available to the site, including frontage on three public streets: NE 150<sup>th</sup> Avenue to the west, NE 93<sup>rd</sup> Street to the north, and NE 152<sup>nd</sup> Avenue to the east. All three of these streets contain the utilities required for a residential development. Emergency services and public transportation are also available at the site. This policy is met.

- 1.2.7 Water service should be extended throughout the Vancouver urban area in accordance with the timing and phasing established in the Vancouver six-year capital facilities plan. Extension of public water service should not be permitted outside the Vancouver urban area.

**Response:** Water service exists at the site, with Vancouver as the purveyor. Water service will be extended through the site with any future R1-6 development. This policy is met.

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- 1.2.8 Encourage retrofitting areas with sewer and prohibit new development on septic tanks in the urban growth area.

**Response:** There are no existing septic tanks on site. Public sewer exists at the site, with Vancouver as the purveyor. Sewer service will be extended through the site with any future R1-6 development. This policy is met.

**Goal:** Encourage more compact and efficiently served urban forms and reduce the inappropriate conversion of land to sprawling, low-density development.

### 1.3 Policies

- 1.3.1 Urban densities and uses may occur throughout the urban growth area if it is provided with adequate services. Development and redevelopment in the UGA should be strongly encouraged to occur in greater intensity in major centers, transit routes and other areas characterized by both existing higher density urban development and existing urban services. Development and redevelopment should be encouraged to occur with less intensity in areas where urban development is of lower density or has not yet occurred, or in areas where urban services do not yet exist.

**Response:** The subject site is surrounded by urban, low-density residential development, along with a public elementary school and small airport. Applying the R1-6 zone to the subject site will allow for a development with a density that is consistent with the surrounding area and has existing and adequate public services available at the site, without expanding sprawl. This policy is met.

- 1.3.4 Zoning ordinances and other implementing measures shall specify maximum and minimum residential densities with the residential zoning districts.

**Response:** The subject site is approximately 7.68 acres in size. The site will be able meet the residential densities and minimum lot dimensions required by section 40.220.010 of the Clark County Code. This policy is met.

**Goal:** Integrate land uses to reduce sprawl, promote physical activity through active transportation and foster neighborhood and community identity.

### 1.4 Policies

- 1.4.1 Interrelated uses should generally be encouraged to locate in close proximity of each other:
- Frequently used commercial activities and the residential areas they serve should be allowed and encouraged to locate near to one another.
  - Schools or other frequently used public facilities and the residential areas they serve should be allowed and encouraged to locate near to one another.
  - Commercial, industrial or other employers and the residential areas they serve should be allowed and encouraged to locate near to one another, as long as negative impacts from non-residential uses on the residential areas are mitigated.

**Response:** The existing site has had the opportunity to develop as a commercial site since 1994 (per Clark County), and to this point has not. As discussed earlier in the narrative, the site has an approved site plan for a storage facility. While the storage facility will supply some employment, it will not be a frequently used commercial activity adjacent to residential. Also, with the elementary school located to the east, a residential development on this

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site would meet the goal of being located near a school. It is the Applicant's belief that residential is the best use for the site. This policy is met.

1.4.3 Promote the development of identifiable residential neighborhoods and shopping districts through the encouragement of more compact development patterns and the use of shared design and landscaping characteristics and the development of landmarks.

**Response:** The subject site will be able to be developed as part of an identifiable neighborhood connecting to the existing neighborhood to the east and north. This policy is met.

1.4.7 Higher intensity uses should be located on or near streets served by transit.

**Response:** The proposal is to change the existing CC zone to R1-6, creating a low-intensity use. However, transit is available on NE 152<sup>nd</sup> Avenue, with a stop immediately adjacent to the subject site.

1.4.8 Streets, pedestrian paths and bike paths should contribute to a system of fully connected routes to all destinations.

**Response:** The subject site is bordered by streets to the west, north, and east, that connects the site to all destinations. Sidewalks exist along the east side of NE 152<sup>nd</sup> Avenue, as well as in the neighborhoods to the north and west. Improvements to NE 152<sup>nd</sup> Avenue from NE 99<sup>th</sup> Street to Padden Parkway are proposed as part of the 2018-2023 Transportation Improvement Program (TIP). This project will provide sidewalks along both sides of NE 152<sup>nd</sup>, connecting pedestrians to the multi-use pathway along Padden Parkway. NE 152<sup>nd</sup> Avenue is classified as a C2 Collector, which does not require bike lanes, however bicycles can use NE 91<sup>st</sup> Street to NE 137<sup>th</sup> Avenue to connect to the multiuse pathway along Padden Parkway. Cyclist can also share the travel lane on NE 152<sup>nd</sup> Avenue to reach the multiuse pathway should they choose to. Site development for the proposed R1-6 zone will provide roads and sidewalks within the development, with bikes sharing the travel lanes.

1.4.9 Access to the transit system should be provided.

- Transit stations should be located at major activity centers and along transit streets and nodes.
- Neighborhoods and commercial nodes should have access to the public transportation system.
- Transit stops should be located within convenient walking distance of residential and employment populations.
- Transit shelters should be provided where appropriate.
- Bicycle parking should be included in commercial, industrial and public facility sites.

**Response:** C-Tran provides transit service to the area with route #72. The route has a southbound stop on NE 152<sup>nd</sup> Avenue just north of the NE 91<sup>st</sup> Street intersection, immediately adjacent to the subject site. As it is a residential area, no shelter or bike parking are provided. This policy is met.

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## Chapter 2 – Housing Element

### Goals and Policies

Clark County has developed general goals and policies it will use to direct housing development. The Clark County Housing policies are as follows:

#### 2.1 Countywide Planning Policies

- 2.1.3 Link transportation and housing strategies to assure reasonable access to multimodal transportation systems and to encourage housing opportunities in locations that will support the development of public transportation.

**Response:** The site is currently served by multimodal transportation. C-Tran provides service to the site and has a bus stop immediately adjacent to the site. Sidewalks exist along the east side of NE 152<sup>nd</sup> Avenue, as well as in the neighborhoods to the north and west. Improvements to NE 152<sup>nd</sup> Avenue from NE 99<sup>th</sup> Street to Padden Parkway are proposed as part of the 2018-2023 Transportation Improvement Program (TIP). This project will provide sidewalks along both sides of NE 152<sup>nd</sup>, connecting pedestrians to the multi-use pathway along Padden Parkway. NE 152<sup>nd</sup> Avenue is classified as a C2 Collector, which does not require bike lanes, however bicycles can use NE 91<sup>st</sup> Street to NE 137<sup>th</sup> Avenue to connect to the multiuse pathway along Padden Parkway. Cyclist can also share the travel lane on NE 152<sup>nd</sup> Avenue to reach the multiuse pathway should they choose to. Site development for the proposed R1-6 zone will provide roads and sidewalks within the development, with bikes sharing the residential travel lane. This policy is met.

- 2.1.4 Link housing strategies with the locations of work sites and jobs.

**Response:** The subject site is located along NE 152<sup>nd</sup> Avenue (C2 collector) which connects directly to Padden Parkway (highway) to the south and NE 99<sup>th</sup> Street (arterial) to the north. C-Tran route 72 has a stop adjacent to the site, which connects the neighborhood to the transit center at the Vancouver Mall, which then connects users to other parts of the county. Cyclists can use NE 91<sup>st</sup> Street to NE 137<sup>th</sup> Avenue to connect to the multiuse pathway along Padden Parkway. Cyclist can also share the travel lane on NE 152<sup>nd</sup> Avenue to reach the multiuse pathway should they choose to. Construction of a residential subdivision, along with the NE 152<sup>nd</sup> Avenue TIP project will fully connect pedestrian from the existing and any proposed community to Padden Parkway and NE 99<sup>th</sup> Street. This variety of connect creates a link to many worksites within the county.

- 2.1.5 Link housing strategies with the availability of public facilities and public services.

**Response:** Public facilities and services are currently available to the site, including frontage on three public streets: NE 150<sup>th</sup> Avenue to the west, NE 93<sup>rd</sup> Street on the north, and NE 152<sup>nd</sup> Avenue to the east. All three of these streets contain the utilities required for a residential development. Emergency services and public transportation are also available at the site. Public school service is available in the Evergreen School District. Elementary aged children would walk to York Elementary School via existing sidewalks and those created with a future residential development. Middle school aged children would attend Frontier Middle School, with high school aged children attending Heritage High School. Students attending these school from the site would be bussed. Evergreen Public Schools has provided a letter that is included with this application. This policy is met.

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## County 20-Year Planning Policies

Goal: Provide for diversity in the type, density, location and affordability of housing throughout the county and its cities. Encourage and support equal access to housing for rental and homeowners and protect public health and safety.

### 2.2 Policies

#### 2.2.1 Ensure that implementation measures recognize variety of family structure.

**Response:** While the final housing product that will result from the proposed annual review and zone change is undetermined, the proposed R1-6 zone will allow for single-family and duplex residences, as well as townhomes if part of a Planned Unit Development, according to CCC 40.220.010(B). This policy is met.

#### 2.2.2 Encourage a variety of housing types and densities, including mixed-use centers, services and amenities.

**Response:** While the final housing product that will result from the proposed annual review and zone change is undetermined, the proposed R1-6 zoning would match the adjacent zoning of R1-6, allowing for single-family and duplex residences, as well as townhomes if part of a Planned Unit Development. This policy is met.

#### 2.2.4 Develop a fair share housing allocation that provides low and moderate income housing targets for cities and urban growth areas. The program should include a housing inventory, incentives and financing mechanisms.

**Response:** The proposed zone change would provide moderate income housing. This policy is met.

#### 2.2.5 Preserve the character of stable residential neighborhoods through selective and innovative zoning techniques.

**Response:** The proposed zone change to residential would preserve the character of the established residential neighborhood that surrounds the site. A commercial development as permitted under the current CC zone would change the character of the surrounding neighborhood. This policy is met.

#### 2.2.6 Encourage a variety of housing types and densities in residential neighborhoods.

**Response:** The proposed zone of R1-6 is consistent with the residential zoning to the east and west and maintains the variety with the adjacent R1-10 zone to the north.

#### 2.2.8 Assure that policies, codes and ordinances promote neighborhood designs that are pedestrian and transit friendly and discourage reliance upon the automobile.

**Response:** Current code for R1-6 provides for a neighborhood that is pedestrian and bicycle friendly. With the completion of the NE 152<sup>nd</sup> Avenue TIP project, pedestrians will have a direct connection to the multi-use pathway along Padden Parkway. Cyclists can choose to use NE 152<sup>nd</sup> Avenue, however no bike lanes will exist on NE 152<sup>nd</sup> Avenue. Bicycles can also use NE 91<sup>st</sup> Street to connect to NE 137<sup>th</sup> Avenue down to the Padden Parkway multi-use pathway for a more bicycle friendly route. The subject site is also along a public transit route that connects the neighborhood to the Vancouver Transit Center. The methods of public transit, pedestrian, and cycling options create an ease of use for transportation options that do not rely on the automobile. This policy is met.



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Goal: Support diversity in the mix of housing types in the community, while improving home ownership tenure.

## 2.7 Policies

2.7.1 Provide opportunities for new development to occur. There shall be no more than 75 percent of any single product type of housing in any jurisdiction (e.g., single-family detached residential). Strategies to achieve these opportunities include but are not limited to:

- Minimum density for single family. These should average: eight dwelling units per acre within the Vancouver urban growth area, six units per acre with the Battle Ground, Camas, Ridgefield and Washougal urban growth area and four units per acre within the La Center urban growth area.

**Response:** According to the Clark County Buildable Lands Report (June 2015 and Amended September 2017) a total of 65% of the entire county is single-family residential, which is 5.7 units per acre. Within the Vancouver urban growth area, 61% of the lands are single-family, which is seven units per acre. The proposed zone change will not increase the single-family percentage above 75%, and it will help increase the Vancouver urban growth area closer to the goal of eight units per acre. This policy is met.

- Provisions for Accessory Dwelling Units.

**Response:** While the final housing product that will result from the proposed annual review and zone change is undetermined, accessory dwelling units are allowed in the proposed R1-6 zone with review and approval, according to CCC 40.220.010(B). This policy is met.

- Provision for duplexes in single family.

**Response:** While the final housing product that will result from the proposed annual review and zone change is undetermined, duplexes are permitted under certain circumstances within the R1-6 zone, according to CCC 40.220.010(B). This policy is met.

- Provisions for townhouses/row houses.

**Response:** While the final housing product that will result from the proposed annual review and zone change is undetermined, townhouses are allowed in the proposed R1-6 zone as part of a Planned Unit Development, according to CCC 40.220.010(B). This policy is met.

- Allowance of manufactured home parks.

**Response:** Manufactured home parks are not allowed in the proposed R1-6 zone, according to CCC 40.220.010(B). However, other residential zones within the county allow for manufactured home parks.

- Provision for diversified housing types allowed as part of a Planned Unit Development.

**Response:** Planned Unit Developments are allowed in the proposed R1-6 zone, allowing for a diversity of housing types. This policy is met.

- Recognition of the flexibility allowed in housing types as part of a Mixed Use Development (e.g. living units above commercial areas).

**Response:** The proposed zone change is from Commercial to Low Density Residential. This policy does not apply.



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- Recognition of Assisted Living Units as a housing type.

**Response:** While the final housing product that will result from the proposed annual review and zone change is undetermined, assisted living options are either permitted outright or conditionally within the proposed R1-6 zone according to CCC 40.220.010(B). This policy is met.

- Provision for diversified housing types allowed as part of a mixed use development.

**Response:** The proposed zone change is from Commercial to Low Density Residential. This policy does not apply.

- Recognition of Senior Housing Units as a housing type.

**Response:** While the final housing product that will result from the proposed annual review and zone change is undetermined, senior housing options are either permitted outright or conditionally within the proposed R1-6 zone, according to CCC 40.220.010(B). This policy is met.

### 2.7.3 Encourage housing that is created using the principles of Universal Design.

**Response:** Any housing development that results from the approval of this annual review and zone change will have housing built that meets the requirements of Clark County Code. This policy is met.

## Chapter 9 – Economic Development Element

### Goals and Policies

#### 9.0 Clark County Economic Development Vision Statement:

“Clark County will grow as a high-wage economy that creates jobs at a rate in excess of population growth and an increasing percentage of the population will both live and work in Clark County. There will be an emphasis on emerging clusters that have a significant knowledge-based component.

#### 9.1 Countywide Planning Policies

9.1.1 The county and cities will demonstrate their commitment to long-term economic growth by promoting a diverse economic base, providing opportunity for all residents, including unemployed and disadvantaged persons. Growth which helps to measurably raise the average annual wage rate of community residents and preserves the environmental quality and livability of our community, is viable growth and will improve the lifestyle of Clark County residents.

**Response:** While the proposed application will rezone commercial land to residential, it is not likely to have an impact on the long-term economic growth in the County. Currently the Vancouver UGA is over-zoned for employment and under-zoned for single-family residential uses. Without housing, it is more difficult to attract labor force. Providing more single-family housing will improve opportunities for added employment in Clark County by better providing workforce housing ownership opportunity.

9.1.3 The county and cities will encourage long-term growth of businesses of all sizes, because economic diversification and stratification are important factors in overall job growth for the county and cities.

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**Response:** While the proposed application will rezone commercial land to residential, it is not likely to have an impact on the long-term economic growth in the County. Currently the Vancouver UGA is over-zoned for employment and under-zoned for single-family residential uses. Without housing, it is more difficult to attract labor force. Providing more single-family housing will improve opportunities for added employment in Clark County by better providing workforce housing ownership opportunity. Employers are more likely to expand to areas that have adequate and appropriately priced housing.

9.1.7 The county and cities will plan for long-term economic growth, which enhances the capacity of existing air shed for job-generating activities.

**Response:** While the proposed application will rezone commercial land to residential, it is not likely to have an impact on the long-term economic growth in the County. Currently the Vancouver UGA is over-zoned for employment and under-zoned for single-family residential uses. Without housing, it is more difficult to attract labor force. Providing more single-family housing will improve opportunities for added employment in Clark County by better providing workforce housing ownership opportunity. Employers are more likely to expand to areas that have adequate and appropriately priced housing.

9.1.8 The county and cities will provide for orderly long-term commercial and industrial growth and an adequate supply of land suitable for compatible commercial and industrial development.

**Response:** While the proposed application will rezone commercial land to residential, the subject site can be considered a second or third-tier site for commercial development due to its location away from a major thoroughfare, without good east-west commercial access. The site has also remained undeveloped since 1994. It is unlikely that the proposed zone change will impact the long-term supply of suitable commercial land.

9.1.9 The county and cities will encourage the recruitment of new business employers to absorb the increasing labor force and to supply long-term employment opportunities for county's residents who are currently employed outside of the State.

**Response:** While the proposed application will rezone commercial land to residential, employers wanting to expand or relocate are looking for areas that have adequate and appropriately priced housing. If a commercial use were to develop, it would likely comprise lower wage jobs as with convenience retail and/or service commercial.

9.1.12 Encourage use of a multi-modal transportation system that facilitates the reduction of travel times and reduces the need for additional road construction within the region.

**Response:** There is a large existing infrastructure connecting the subject site to all portions of the County and the Portland area. There is a C-Tran stop immediately adjacent to the site on NE 152<sup>nd</sup> Avenue, cyclists can use NE 91<sup>st</sup> Street to access the Padden Parkway multi-use path via NE 137<sup>th</sup> Avenue. Pedestrians can use future sidewalks to be constructed along NE 152<sup>nd</sup> Avenue to gain access to the multi-use pathway along Padden Parkway.

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## County 20-Year Planning Policies

### Unincorporated County

The following goals and policies are not countywide and apply only to the unincorporated areas.

**Goal:** Provide commercial and industrial employment opportunities to meet the needs of Clark County citizens.

#### 9.2 Policies

- 9.2.1 Encourage long-term business investments that generate net fiscal benefits to the region, protect environmental quality and are consistent with the objective of higher wage jobs for Clark County residents.

**Response:** Due to the location of the subject site, it would be more likely to develop with commercial uses that comprise lower wage jobs, as with convenience retail and/or service-commercial.

- 9.2.3 Promote a diverse economic base, providing economic opportunity for all residents.

**Response:** The site has remained vacant since being zoned CC in 1994 (per Clark County) and given its location away from a major thoroughfare with no good east-west commercial access the site has limited marketability for a commercial use. Converting the site to a marketable use (R1-6) essentially means no net loss of commercial activity for the reasonable or foreseeable future.

**Goal:** Provide contextually-appropriate commercial sites adequate to meet a diversity of needs for retail, service and institutional development in Clark County.

#### 9.4 Policies

- 9.4.1 In cooperation with local jurisdictions, maintain an adequate supply of commercial lands within designated urban growth areas, based on average absorption rates of the last five years plus an appropriate market factor.
- Designate sufficient commercial land for the 20-year planning period, located within designated urban growth areas;
  - Discourage removal of commercial land from the inventory that results in a less than 10-year supply of commercial sites;
  - Update inventories of commercial lands at least every ten years; and,
  - Encourage infill and redevelopment of underutilized commercial sites.

**Response:** The site has remained vacant since being zoned CC in 1994 (per Clark County) and given its location away from a major thoroughfare with no good east-west commercial access, the site does not represent a competitive contribution to commercial land inventory. Conversion from a commercial zone to a residential zone will not affect the 10-year supply of suitable commercial sites in Clark County.

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- 9.4.2 Locate convenience-oriented retail and service developments adjacent to residential neighborhoods; encourage small-scale neighborhood commercial uses directly within residential areas.

**Response:** The site currently has approved engineering and site plan to construct a storage facility under DEV2017-00125. If the Annual Review and Zone Change application is not approved, it is possible that no convenience-oriented retail or service will be developed on this site if the applicant moves forward with construction of the storage facility.

- 9.4.3 Encourage commercial and mixed-use developments located on current or planned transit corridors; encourage transit-oriented site planning and design.

**Response:** The site currently has approved engineering and site plan to construct a storage facility under DEV2017-00125. If the Annual Review and Zone Change application is not approved, it is possible that no convenience-oriented retail or service will be developed on this site.

## Chapter 10 – School Element

### Goals and Policies

#### 10.1 Countywide Planning Policies

- 10.1.1 The county and each city shall give full consideration to the importance of school facilities and encourage development of sustainable learning environments through the adoption and implementation of county and city comprehensive land use plan policies and development regulations.

**Response:** There is an existing public elementary school located adjacent to the site across NE 152<sup>nd</sup> Avenue. The proposed zone change will allow for a development more suited to being adjacent to an elementary school. Evergreen Public Schools as provided a letter addressing the proposed project. School impact fees will be paid with future development to help offset the additional children added to the school system.

- 10.1.4 Large residential development should confer with school districts on school impacts.

**Response:** A letter from the Evergreen School District has been provided with this application. School impact fees will be paid with the development to help offset impacts to the schools. This policy is met.

#### County 20-Year Planning Policies

Goal: Support co-locating facilities where co-location is feasible and provides more efficient use of public facilities.

#### 10.3 Policies

- 10.3.3 Develop pedestrian and bicycle corridors between schools and housing, within neighborhoods and rural centers.

**Response:** RCW 58.17 requires subdivisions to provide safe walking routes to schools for children that only walk to school. Pedestrian facilities will be constructed with a new residential development that will allow the connection from the subject site to the adjacent York Elementary School via a crosswalk at NE 93<sup>rd</sup> Street. If children choose to ride bicycles, they can use the same sidewalks to get to the elementary school. This policy is met.

Goal: Require new development that places added demands on school facilities to pay a portion of the cost for school facilities through impact fees or other alternative mechanisms authorized by State Law.

#### 10.5 Policies

- 10.5.1 Provide for the use of School Impact Fees as a funding source for school capital facilities.

**Response:** A residential development that will result from the proposed zone change will provide school impact fees to the school district. This policy is met.

### CLARK COUNTY UNIFIED DEVELOPMENT CODE

#### Title 40 – Clark County, Washington, Unified Development Code

##### SUBTITLE 40.2 LAND USE DISTRICTS

##### Chapter 40.220 Urban Residential Districts

##### 40.220.010 Single-Family Residential Districts (R1-20, R1-10, R1-7.5, R1-6 and R1-5)

##### A. Purpose.

2. The R1-6 and R1-5 districts are intended to provide for higher single and duplex densities where a full range of community services and facilities are present or will be present at the time of development.

**Response:** The subject site is located adjacent to R1-6 zoned properties to the east and west, with R1-10 zone properties to the north. There is also an airport zoned property to the south and public facilities zoned property to the east. The site has frontage on three public streets: NE 152<sup>nd</sup> Avenue to the east, NE 93<sup>rd</sup> Street to the north, and NE 150<sup>th</sup> Avenue to the west. The site is also served by public transit, with emergency services available to the site. Therefore, the proposed zone change meets the criteria for an R1-6 zone designation for the subject site. This standard is met.

##### C. Development Standards.

1. New lots and structures and additions to structures subject to this chapter shall comply with the applicable standards for lots, building height and setbacks in Tables 40.220.010-2 and 40.220.010-3, subject to the provisions of Chapter 40.200 and Section 40.550.020.

Table 40.220.010-2. Lot Requirements					
Zoning District	Residential Density for PUDs (d.u./acre)	Minimum Lot Area (sq. ft.)	Maximum Average Lot Area (sq. ft.)	Average Minimum Lot Width (feet)	Average Minimum Lot Depth (feet)
R1-20	2.2 – 1.4	20,000	30,000	100	100
R1-10	4.4 – 2.9	10,000	15,000	80	90
R1-7.5	5.8 – 4.1	7,500	10,500	50	90
R1-6	7.3 – 5.1	Average 6,000; 5,000 per duplex unit	8,500	50	90
R1-5	8.7 – 6.2	Average 5,000; 4,000 per duplex unit	7,000	45	65

Table 40.220.010-3. Setbacks, Lot Coverage and Building Height						
Zoning District	Minimum Setbacks				Maximum Lot Coverage	Maximum Building Height (feet)
	Front <sup>3</sup> (feet)	Side <sup>4,5,10,11</sup>		Rear <sup>4,5,10,11</sup> (feet)		
		Street (feet)	Interior (feet)			
R1-20	10 <sup>8</sup>	10	10 <sup>9</sup>	20	50% <sup>1</sup>	35 <sup>7</sup>
R1-10	10 <sup>8</sup>	10	7 <sup>9</sup>	15	50% <sup>1</sup>	35 <sup>7</sup>
R1-7.5	10 <sup>8</sup>	10	5	10	50% <sup>1</sup>	35 <sup>7</sup>
R1-6	10 <sup>8</sup>	10	5	10	50% <sup>2</sup>	35 <sup>7</sup>
R1-5	10 <sup>8</sup>	10	5	10	50% <sup>2</sup>	35 <sup>7</sup>

**Response:** The subject site is approximately 7.68 acres in gross area. Assuming a dedication of approximately 15% to right-of-way, there will be approximately 6.53 acres of land available to subdivide. Given the available area, it is feasible that the subject site is able to meet the requirements of Table 40.220.010-2 with lots having a minimum average lot area of 6,000 square feet and maximum average lot are of 8,500 square feet. Lots will also be able to meet the minimum width and depth requirements, along with all lot coverage and building setbacks as shown in Table 40.220.010-3. This standard is met.

#### SUBTITLE 40.5 PROCEDURES

##### Chapter 40.500 Overview of Procedures

**Response:** The application is proposing a zone change from Commercial to R1-6 Residential, requiring a Comprehensive Plan Designation change. The Annual Review and Zone Change process requires a Type IV decision-making procedure and public notice of the application.

##### Chapter 40.560 Plan and Code Amendments

##### 40.560.010 Plan Amendment Procedures

##### B. Overall Method of Review.

Proposed plan amendments that are submitted for review shall be subject to the applicable criteria of this section. The review shall be processed by Type IV procedures in Section 40.510.040. Applications for plan map amendments are generally processed in conjunction with concurrent rezone requests. Zoning map amendments must be to a zone corresponding to the requested comprehensive plan map designation. Concurrent zoning map amendments must meet all the approval criteria of this chapter and zone changes consistent with the comprehensive plan map shall be considered subject to the approval criteria of Section 40.560.020.

**Response:** This narrative is part of a Type IV application for Annual Review and Zone Change. All materials required by code, and as required in the pre-application conference report are included. This standard is met.

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C. Applicability.

The criteria and requirements of this section shall apply to all applications or proposals for changes to the comprehensive plan text, policies, map designations, zoning map or supporting documents. For the purposes of establishing review procedures, criteria and timelines, amendments shall be distinguished as follows:

2. Comprehensive plan map changes not involving a change to UGA boundaries;

**Response:** This application is for an Annual Review with associated Zone Change and does not involve changes to the UGA boundaries. This standard is met.

D. Plan Map Changes – Procedure.

2. Site-specific plan map amendments (annual reviews) requested by private parties shall be considered legislative actions, subject to Type IV procedures of Section 40.510.040.

**Response:** This narrative is part of a Type IV application for Annual Review and Zone Change requested by a private party. All materials required by code, and as required in the pre-application conference report are included. This standard is met.

3. Submittal Requirements and Timelines of the Annual Review. All applications for site-specific plan map amendments not involving a change to UGA boundaries requested by parties other than the county shall be submitted as follows:

- a. Between October 1st and November 30th, applicants shall submit a pre-application form containing all of the following information:

- (1) The pre-application fee, as specified in county fee ordinance;
- (2) Application form signed by the owner(s) of record;
- (3) Description of request;
- (4) GIS packet;
- (5) Related or previous permit activity; and
- (6) A statement on how the plan/zone change request is consistent with all of the applicable policies and criteria in the comprehensive plan and this chapter.

- b. Between October 15th and December 31st, county staff and applicants shall complete pre-application meetings.

**Response:** The Applicant submitted a pre-application to the County on October 1, 2018 and a pre-application conference was held on November 15, 2018. This standard is met.



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- c. Between January 1st and January 31st, applicants shall submit an application form containing all of the following, including the information required by Section 40.510.030(C)(3):
- (1) The applicable comprehensive plan and rezone application fees;
  - (2) SEPA checklist and applicable fee;
  - (3) Copy of deed, real estate contract or earnest money agreement;
  - (4) A full analysis of how the plan/zone change request is consistent with the applicable policies and criteria in the comprehensive plan and this chapter;
  - (5) A market analysis and a transportation analysis; and
  - (6) Any additional information the applicant believes is necessary to justify the amendment.

**Response:** This narrative is part of a Type IV application for Annual Review and Zone Change and has been submitted by January 31<sup>st</sup>, 2019. All materials required by code, and as required in the pre-application conference report are included. This standard is met.

4. Annual review applications will not be accepted for properties within an urban growth boundary which are in the process of being annexed.

**Response:** The subject site is not currently in the process of being annexed. This standard is met.

**G. Criteria for All Map Changes.**

Map changes may only be approved if all of the following are met:

1. The proponent shall demonstrate that the proposed amendment is consistent with the Growth Management Act and requirements, the countywide planning policies, the community framework plan, comprehensive plan, city comprehensive plans, applicable capital facilities plans and official population growth forecasts; and

**Response:** The plan map change is consistent with the Growth Management Act because it will encourage development in an urban area where public facilities exist; it will help reduce sprawl by developing low density residential in a location surrounded by low density residential; and it will allow the Applicant to provide in-demand housing for middle-class wage earners. The plan map change is consistent with the Community Framework Plan and Comprehensive Plan because it will acknowledge the existing residential character of the surrounding community, help to meet the density goals of Clark County, and provide in-demand housing for middle-income wage earners. The plan map change is consistent with the capital facilities plan because all capital facilities and utilities are currently available at the site and can be expanded to meet the needs of a low-density residential zone. The plan map change is consistent with the official population growth because the Comprehensive Plan states Clark County is anticipated to need an additional 48,340



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households by the year 2035 and this plan change will help meet the needs of the growing County by increasing the number of available housing units.

2. The proponent shall demonstrate that the designation is in conformance with the appropriate locational criteria identified in the plan; and

**Response:** The subject site is located in an area almost entirely zoned Urban Low Density Residential with R1-10 zoned properties to the north, R1-6 and PF zoned properties to the east, R1-6 zoned properties to the west, and Airport zoned property to the south. All R1-6 and R1-10 properties are developed with single family residences, with York Elementary School on the PF zoned parcel, and a single-family residence with small plane airport on the Airport zoned property. The site is proposed to be rezoned to R1-6, which fits with the surrounding zoning and land uses. The site can meet the density requirements of the R1-6 zone and will maintain the character of the community surrounding the site. Transportation services and utilities are currently available at this site.

3. The map amendment or site is suitable for the proposed designation and there is a lack of appropriately designated alternative sites within the vicinity; and

**Response:** The subject site is currently vacant. The land surrounding the site is developed with multiple subdivisions that meet the density standards for the Urban Low Density Residential zone. The proposed plan map change will allow the site to be developed to the Urban Low Density Residential standards, helping the County meet the density goals of the Comprehensive Plan and providing a use that is compatible with the existing residential and school uses adjacent to the site.

While the majority of the surrounding area is zoned for Urban Low Density Residential, all parcels zoned R1-6 and R1-10 within the vicinity of the site are developed with residential uses. Therefore, there is a lack of available appropriately DESIGNATED land to be used as an alternative site.

4. The plan map amendment either: (a) responds to a substantial change in conditions applicable to the area within which the subject property lies; (b) better implements applicable comprehensive plan policies than the current map designation; or (c) corrects an obvious mapping error; and

**Response:** The proposed plan map amendment better implements the applicable comprehensive plan policies because the existing Commercial zone is isolated among the surrounding Urban Low Density Residential zone. A commercial development at this location would be out of character for the surrounding residential uses.

5. Where applicable, the proponent shall demonstrate that the full range of urban public facilities and services can be adequately provided in an efficient and timely manner to serve the proposed designation. Such services may include water, sewage, storm drainage, transportation, fire protection and schools. Adequacy of services applies only to the specific change site.

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**Response:** The site is bound by NE 152<sup>nd</sup> Avenue to the east, NE 93<sup>rd</sup> Street to the north, and NE 150<sup>th</sup> Avenue to the west. NE 152<sup>nd</sup> Avenue connects to Padden Parkway to the south and NE 99<sup>th</sup> Street to the north, providing adequate access to the site. All utilities and services, including C-Tran, Evergreen Public Schools, City of Vancouver water and sewer, and police and fire protection are available to the site.

**H. Additional Criteria for Commercial Map Changes.**

Amendments to the plan map for designation of additional commercial land or for changing the zoning from one commercial district to another shall meet the following additional requirements:

**Response:** The proposed plan map change is from commercial to residential. This standard does not apply.

**I. Additional Criteria for Rural Map Changes.**

**Response:** The proposed plan map change is within the urban growth area. This standard does not apply.

**J. Additional Criteria for Rural Major Industrial Map Changes.**

**Response:** The proposed plan map change is from commercial to residential, within the urban growth area. This standard does not apply.

**K. Rezones/Zone Changes.** Rezone applications considered with a plan map amendment request shall be reviewed consistent with the plan matrix table and according to the procedures and timing specifications for plan map amendment specified in this section and shall comply with Section 40.560.020 and Chapter 40.510. Rezone applications proposing a change from urban holding to an urban zoning district that is consistent with the comprehensive plan map designation shall be processed through a Type IV process initiated by the county and consistent with the procedures and criteria identified in the special implementation procedures section in Chapter 13 of the comprehensive plan. See also Section 40.560.020(G).

**Response:** This narrative is part of a Type IV application for Annual Review and Zone Change. All materials required by code, and as required in the pre-application conference report are included. This standard is met.

**L. Mixed Use Designation Zone Change Requests.**

**Response:** The proposed zone change is from commercial to residential. This standard does not apply.

**M. Additional Required Criteria Specific to Urban Growth Area (UGA) Boundary Map Changes.**

**Response:** The proposed plan map change is from commercial to residential within the UGA. This standard does not apply.

**T. Cumulative Impact.**

In reviewing all prospective comprehensive plan changes, the county shall analyze and assess the following to the extent possible:

- 
1. The cumulative impacts of all plan map changes on the overall adopted plan, plan map and relevant implementing measures, and adopted environmental policies;

**Response:** As previously discussed, the proposed zone change from CC to R1-6 will have minimal impact on the overall adopted plan. The zone change will help the county reach the overall residential density goal for the county, while providing the single-family housing employers look for, as well as providing additional opportunities for the workforce to purchase a home. There are no environmentally sensitive areas on or adjacent to the site, therefore there will be no impact to adopted environmental policies.

2. The cumulative land use environmental impacts of all applications on the applicable local geographic area and adopted capital facilities plans; and

**Response:** There are no environmentally sensitive areas on or adjacent to the site, therefore there will be no impact to adopted environmental policies. All required capital facilities currently exist at the site, therefore there will be minimal impact on the capital facilities plan.

3. Where adverse impacts are identified, the county may require mitigation. Conditions which assure that identified impacts are adequately mitigated may be proposed by the applicant and, if determined to be adequate, imposed by the county as a part of the approval action.

**Response:** No adverse impacts are anticipated to occur from the approval of this Annual Review and Zone Change application.

**U. Fees.**

**Response:** All applicable fees have been, or will be, paid by the Applicant. This standard is met.

**40.560.020 Changes to Districts, Amendments, Alterations**

**A. Procedure, General. The UDC may be amended in any of the following ways:**

2. By changing the boundaries of districts through a Type IV comprehensive plan map and zoning map amendment pursuant to Section 40.560.010; or

**Response:** The proposed application is for an Annual Review and Zone Change. This narrative is part of a Type IV application submitted for this purpose. The Applicant is proposing a change from Community Commercial to Residential (R1-6). This standard is met.

**B. Application.**

2. An application for amendment by a property owner or his authorized agent shall be filed with the responsible official. The application shall be made on forms provided by the county, accompanied by a site plan drawn to scale showing the property involved and adjacent land. A fee shall be paid to the county at the time of filing the application in accordance with the provisions of the county fee schedule.

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**Response:** The Applicant has submitted a Type IV application with the appropriate fees paid to the County. This standard is met.

C. Public Hearings.

2. Type IV Text Amendments.

- a. Before taking final action on a proposed amendment, the planning commission shall hold a public hearing thereon. After receipt of the report on the amendment from the planning commission, the board shall hold a public hearing on the amendment. Public hearings by the planning commission shall be held in accordance with the provisions of Section 40.510.040.

**Response:** A public hearing will be held for this Annual Review and Zone Change application. This standard is met.

E. Rezone Agreements.

2. Concomitant Rezone Agreements.

- b. Applicability. This agreement process will not generally be used for rezones to R1-6, R1-7.5, R1-10 or R1-20. It may, however, be used for any situation where extraordinary potential adverse impacts from a proposed rezone may be neutralized by the agreement. The agreement process may be employed for rezones in sensitive geographic areas such as critical transportation corridors. The agreement process will generally be used for rezones to commercial, industrial, and non-single-family residential not specifically identified by the comprehensive plan map. Airport zoning shall also generally be by concomitant rezone agreement. The intent is that concomitant rezone agreements shall only be used when normal review and approval procedures are not adequate to resolve the specific issues involved in the rezone proposal.

**Response:** This application is for a zone change to R1-6. The above standard applies; therefore, a concomitant rezone agreement should not be necessary.

G. Approval Criteria.

Zone changes may be approved only when all of the following are met:

1. Requested zone change is consistent with the comprehensive plan map designation.

**Response:** This application is for Annual Review and Zone Change. When approved, the annual review will change the comprehensive plan map designation to residential. This will make the zone change consistent with the comprehensive plan map designation.

- 
2. The requested zone change is consistent with the plan policies and locational criteria and the purpose statement of the zoning district.

**Response:** The zone change is consistent with the plan policies because it will encourage development in an urban area where public facilities exist; it will help reduce sprawl by developing low density residential in a location surrounded by low density residential; and it will allow the Applicant to provide in-demand housing for middle-class wage earners. The zone change is consistent with the Community Framework Plan and Comprehensive Plan because it will acknowledge the existing residential character of the surrounding community, help to meet the density goals of Clark County, and provide in-demand housing for middle-income wage earners. The zone change is consistent with the capital facilities plan because all capital facilities and utilities are currently available at the site and can be expanded to meet the needs of a low-density residential zone.

The subject site is located in an area almost entirely zoned Urban Low Density Residential with R1-10 zoned properties to the north, R1-6 and PF zoned properties to the east, R1-6 zoned properties to the west, and Airport zoned property to the south. All R1-6 and R1-10 properties are developed with single family residences, with York Elementary School on the PF zoned parcel, and a single-family residence with small plane airport on the Airport zoned property. The site is proposed to be rezoned to R1-6, which fits with the surrounding zoning and land uses. The site can meet the density requirements of the R1-6 zone and will maintain the character of the community surrounding the site. Transportation services and utilities are currently available at this site.

The zone change meets the purpose (CCC 40.220.010(A)(2)) of the R1-6 zone by providing land to be developed with higher single densities with a full range of services currently available to the site and able to be extended through the site.

3. The zone change either:
- a. Responds to a substantial change in conditions applicable to the area within which the subject property lies;
  - b. Better implements applicable comprehensive plan policies than the current map designation; or
  - c. Corrects an obvious mapping error.

**Response:** The proposed plan map amendment better implements the applicable comprehensive plan policies because the existing Commercial zone is isolated among the surrounding Urban Low Density Residential zone. A commercial development at this location would be out of character for the surrounding residential uses.

4. There are adequate public facilities and services to serve the requested zone change.

**Response:** The site currently has frontage on three public streets: NE 152<sup>nd</sup> Avenue, NE 93<sup>rd</sup> Street, and NE 150<sup>th</sup> Avenue. Public water and sanitary sewer are available in all three streets, with City of Vancouver as the purveyor. Other utilizes, including electricity, communications, and natural gas are also available at the site. C-Tran provides service

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directly to the site with Route 72, which has a stop on NE 152<sup>nd</sup> Avenue on the east side of the property. Police and fire service are also currently available and the site.

**Chapter 40.570 State Environmental Policy Act (SEPA)**

**Response:** This application is subject to a SEPA checklist per Washington Administrative Code (WAC) 197-11. A SEPA Checklist accompanies this application. This standard is met.

**40.570.080 SEPA and County Decisions**

**C. SEPA Policies.**

3. The county designates the following policies applicable to the major elements and selected subelements of the environment as defined by WAC 197-11-444, and incorporates by reference the policies in the cited county codes, ordinances, resolutions and plans, and all amendments to them in effect prior to the date of application of any building permit or preliminary plat, or prior to issuance of a DNS or DEIS for any other action:

**k. Historic and Cultural Preservation.**

**Response:** An Archaeological Predetermination is not required for this application per Table 40.570.080-1. However, an Archaeological Predetermination was performed by the Applicant's Archaeological Consultant, Applied Archaeological Research, Inc. as part of the previous site plan application (PSR2017-00038). The predetermination determined that no further archaeological work was needed. DAHP has been provided with the Archaeological Predetermination Report. This standard is met.

**SUBTITLE 40.6 DEVELOPMENT IMPACT FEES**

**Chapter 40.610 Development Impact Fees – General Provisions**

**40.610.040 Imposition of Impact Fee**

**Response:** Future development of the site will require payment of impact fees. This standard will be met.

**IV. Conclusion**

In conclusion, the proposed plan map change and zone change will allow the Applicant to provide an in-demand housing product to help meet the growth projections of the Clark County Comprehensive Plan. The plan map change is consistent with the character of the community that surrounds the site. The site is currently served by public roads and utilities, as well as C-Tran and Evergreen Public School District. Therefore, the plan map change and zone change meet all applicable criteria.

The submittal requirements have been met and the required findings made for all applicable approval criteria. These findings serve as the basis for the County to approve the application and are supported by substantial evidence in the application materials. Therefore, the Applicant respectfully requests approval of the proposed Annual Review and Zone Change (NE 152<sup>nd</sup> Avenue TSR Property).

## 8. School District Letter

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## Evergreen Public Schools

November 14, 2018

Michael Andreotti, RLA  
AKS Engineering & Forestry, LLC  
9600 NE 126<sup>th</sup> Avenue, Suite 2520  
Vancouver WA 98682

RE: 9000 NE 152<sup>nd</sup> Avenue, Vancouver WA 98682  
Parcel 154246-000

Dear Michael,

In response to your request, the following information reflects high school, middle school, and elementary schools that would potentially be affected by the proposed project site. These figures do not reflect the cumulative impact of previously approved, unoccupied building lots. That information should be considered as part of the review process.

School	Previously Approved Unoccupied Lots *	Current Proposed Lots	Total Cumulative Lots (SFR + MFR)	Projected # of Students **
York Elementary	58 SFR	50 SFR	108	24
Frontier Middle	987 SFR / 178 MFR	50 SFR	1,215	119
Heritage High	387 SFR / 108 MFR	50 SFR	545	70
	October 2018 Enrollment	Total Enrollment (Current and Projected)	Enrollment Capacity Including Portables ***	Enrollment Over (Under) Capacity
York Elementary	530	554	564	(10)
Frontier Middle	827	946	1069	(123)
Heritage High	1700	1,770	2062	(292)

\*This information is based on developments we are currently tracking. Other developments may be underway that we are not yet aware of and should be considered as part of the review process.

\*\*Projected number of students is based on the District's "student factor" (the number of students historically generated by a dwelling unit in the District).

\*\*\* The capacity of the elementary schools is based on a current program with an average student-to-teacher ratio of 20:1 in regular classrooms and 12:1 in special education classes. Capacity at Secondary schools is based on room utilization reflecting one unoccupied period per day and includes the maximum addition of portable classrooms.



Historically, Evergreen Public Schools has provided portable classrooms when enrollment exceeded the capacity of a school's permanent facility. Evergreen currently houses students in portable classrooms at all but three of its thirty-one (31) comprehensive schools. It is imperative that developers and/or builders share this information with buyers. It would not be our preference to use portable or temporary classroom facilities. However, they are necessary to accommodate the temporary overload. The State Superintendent of Public Instruction does not consider portables to be equal to permanent facilities.

Bus transportation is provided for elementary students who live more than 1/2 radius mile from school. Elementary students who live less than 1/2 radius mile will be required to walk unless there are unsafe walking conditions. Bus transportation is provided for secondary students who live more than one radius mile from schools. Secondary students who live less than one radius mile will be required to walk unless there are unsafe walking conditions. Bus stops are determined as parcels are developed.

Please note that approval of a proposed subdivision, when combined with previously approved, unoccupied building lots, may result in a projected enrollment in excess of the mentioned school's enrollment capacity (including portables). We would not be able to add students in excess of the enrollment capacity without negatively affecting the quality of the school's instructional programs. This capacity is also limited by the core facilities such as eating space, restrooms and media center, etc., as well as the County and City impact limitations on the number of portables on each site. As a result, it would be necessary for the district to incur additional costs associated with housing these students elsewhere and the corresponding costs to transport them to this other location. Therefore, it is essential that the developer and prospective residents of this subdivision understand that students residing there may not be allowed to enroll in their neighborhood school.

Please feel free to contact Evergreen Public Schools Facilities Department at (360) 604-4077 if additional information is required.

Sincerely,

  
Susan Steinbrenner  
Director of Facilities

SS/rg



## 9. Airport Notice

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**BEND, OR**  
3052 NW Merchant Way, Suite 100  
Bend, OR 97703  
(541) 317-8429  
[www.aks-eng.com](http://www.aks-eng.com)

**KEIZER, OR**  
4300 Cherry Avenue NE  
Keizer, OR 97303  
(503) 400-6028

**TUALATIN, OR**  
12965 SW Herman Road, Suite 100  
Tualatin, OR 97062  
(503) 563-6151

**VANCOUVER, WA**  
9600 NE 126th Avenue, Suite 2520  
Vancouver, WA 98682  
(360) 882-0419

## Memorandum

**Date:** 1/3/2019  
**To:** Gary Albrecht, Clark County Long Range Planning  
**From:** Michael Andreotti, RLA  
**Project:** NE 152<sup>nd</sup> Avenue TSR Property Annual Review and Zone Change  
**Subject:** Airport Owner Comment  
**Site Location:** 9000 NE 152<sup>nd</sup> Avenue, Vancouver, WA 98682

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I contacted the airport owner, Gary Manley, via phone at (360)-253-4850 on January 3, 2019 and left a message. He returned my call and I informed him of the proposed zone change from commercial to residential and he stated that he did not oppose the change.



**BEND, OR**  
3052 NW Merchant Way, Suite 100  
Bend, OR 97703  
(541) 317-8429  
[www.aks-eng.com](http://www.aks-eng.com)

**KEIZER, OR**  
4300 Cherry Avenue NE  
Keizer, OR 97303  
(503) 400-6028

**TUALATIN, OR**  
12965 SW Herman Road, Suite 100  
Tualatin, OR 97062  
(503) 563-6151

**VANCOUVER, WA**  
9600 NE 126th Avenue, Suite 2520  
Vancouver, WA 98682  
(360) 882-0419

## Memorandum

**Date:** 1/21/2019  
**To:** Gary Albrecht, Clark County Long Range Planning  
**From:** Michael Andreotti, RLA  
**Project:** **NE 152<sup>nd</sup> Avenue TSR Property Annual Review and Zone Change**  
**Subject:** **FAA Comment**  
**Site Location:** 9000 NE 152<sup>nd</sup> Avenue, Vancouver, WA 98682

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Request for comment was sent to Paul Holmquist with the Federal Aviation Administration (FAA) as requested in the pre-application conference. The request was emailed on January 3, 2019, that email is included in this application. At the date of application submittal, no comments have been received from the FAA due to the partial federal government shutdown. The email response stating this information is also included in this application.

## Michael Andreotti

---

**From:** Michael Andreotti  
**Sent:** Thursday, January 03, 2019 9:52 AM  
**To:** 'paul.holmquist@faa.gov'  
**Cc:** Dave Weston; Seth Halling; Susan Weisenborn  
**Subject:** NE 152nd Avenue Property Annual Review and Zone Change

Mr. Paul Holmquist -

We are working on an Annual Review (Comprehensive Plan Change) and Zone Change for a property abutting the northeast portion of the airport at 8807 NE 142<sup>nd</sup> Avenue, Vancouver, WA 98682. The airport name is "Fly For Fun Airport". The property we are working on is Parcel #154246-000, addressed as 9000 NE 152<sup>nd</sup> Avenue, Vancouver, WA 98682.

Currently the property has a Comprehensive Plan designation of Commercial and is zoned Community Commercial. We are proposing to change the Comprehensive Plan Designation to Urban Low Density Residential with a zoning designation of R1-6, because we believe residential will fit the surrounding community better than commercial uses. No structures, construction, or subdivision application are part of this County process.

Please respond to this email with any comments or concerns you may have by January 18, 2019.

Thank you,

**Michael Andreotti, RLA**  
**Land Use Planner**



**AKS ENGINEERING & FORESTRY, LLC**

9600 NE 126<sup>th</sup> Avenue, Suite 2520 | Vancouver, WA 98682

P: 360.882.0419 Ext. 316 | F: 360.882.0426 | [www.aks-eng.com](http://www.aks-eng.com) | [andreottim@aks-eng.com](mailto:andreottim@aks-eng.com)

Offices in: Bend, OR | Keizer, OR | Tualatin, OR | Vancouver, WA

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## Michael Andreotti

---

**From:** Paul.Holmquist@faa.gov  
**Sent:** Thursday, January 03, 2019 9:52 AM  
**To:** Michael Andreotti  
**Subject:** Automatic reply: NE 152nd Avenue Property Annual Review and Zone Change

**EXTERNAL EMAIL:** This email originated from outside of AKS Engineering & Forestry. Do not click links or open attachments unless you recognize the sender and know the content is safe.

*The FAA's Obstruction Evaluation Group is temporarily closed due to a lapse in appropriation. We are unable to accept new or process previously submitted notifications for structures meeting Part 77 criteria. Upon our return, we will begin accepting filings via the website ([oeaaa.faa.gov](http://oeaaa.faa.gov)) and will process notices in the order received. In the event of an emergency notification of a structure that may impact the national airspace system, or processing a NOTAM request, contact us at **404-305-6462***



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(503) 563-6151

**VANCOUVER, WA**  
9600 NE 126th Avenue, Suite 2520  
Vancouver, WA 98682  
(360) 882-0419

## Memorandum

**Date:** 1/21/2019  
**To:** Gary Albrecht, Clark County Long Range Planning  
**From:** Michael Andreotti, RLA  
**Project:** NE 152<sup>nd</sup> Avenue TSR Property Annual Review and Zone Change  
**Subject:** WSDOT Aviation Comment  
**Site Location:** 9000 NE 152<sup>nd</sup> Avenue, Vancouver, WA 98682

---

Request for comment was sent to Patrick Wright with the Washington State Department of Transportation (WSDOT) Aviation as requested in the pre-application conference. The request was emailed on January 3, 2019 and a response was received January 16, 2016, that response is included in this application.

WSDOT Aviation takes issue with the application due to the airport being an “essential public facility”, however, the WSDOT Airport Facilities and Services Report for the Fly for Fun Airport states on page 15 that Clark County and the City of Vancouver do not consider the airport an essential public facility. This report is also included in this application.



**Washington State  
Department of Transportation**

**Aviation Division**  
7702 Terminal St SW  
Tumwater, WA 98501  
360-709-8015 / FAX: 360-709-8009  
Toll Free: 1-800-552-0666  
TTY: 1-800-833-6388  
[www.wsdot.wa.gov](http://www.wsdot.wa.gov)

January 15, 2019

Michael Andreotti, RLA  
Land Use Planner  
AKS ENGINEERING & FORESTRY, LLC  
P: 360.882.0419 Ext. 316

Dear Mr. Andreotti,

Thank you for the opportunity to comment on your proposed development and changes to the Clark County Comprehensive Plan in order to develop the property adjacent to the Fly-For-Fun airport. In order to amend the current Comprehensive Plan, the county must conduct a formal consultation with airport owners and managers, private airport operators, general aviation pilots, ports, and the aviation division of the department of transportation to amend or adopt developmental or zoning regulations.

The Growth Management Act (GMA) recognizes public use general aviation airports as essential public facilities and requires cities and counties to **discourage** incompatible land uses adjacent to them through their comprehensive plan policies and development regulations (RCW 36.70.547 and RCW 36.70A.200). The encroachment of incompatible land uses upon Washington state airports diminishes their ability to function as essential public facilities and often leads to operational impacts and closures.

WSDOT feels that the current impacts of residential development in close proximity to the Fly-For-Fun airport have had detrimental effects on the airport and any future development could impede the full functions of the airport and pose a hazard to the public.

Again, we appreciate the opportunity to offer written comments and am available for any questions or concerns you may have. Please don't hesitate to contact me at 360-709-8019 or [wrightp@wsdot.wa.gov](mailto:wrightp@wsdot.wa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Patrick T. O. Wright'.

Patrick T. O. Wright  
WSDOT Aviation Division





## **Airport Facilities and Services Report**

**Provides a full listing of airport facility and services information for the year 2019, as captured in WSDOT's Aviation System Plan Database**

<b>Airport Identification Information</b>	
Airport Name	Fly For Fun
FAA Site Number	26444.4A
Airport Identifier	W56
MPO	Southwest Washington Regional Transportation Council
RTPO	Southwest Washington Regional Transportation Council
Special Emphasis Region	Southwest Washington
FAA Associated City	Vancouver
Proximity to Associated City	7 Mile(s)
Owner/Sponsor	George Manley
Owner Type	Privately Owned
Physical Airport Address	8807 NE 142nd Avenue
City, State, Zip	Vancouver, WA 98682
County	Clark
Affected Legislative District	17th District
Affected Congressional District	3rd District



## **Airport Facilities and Services Report**

### **Airport Identification Information**

Phone (360) 253-4850  
Alternate Phone  
FAX Number  
  
Owner Street Address 8807 NE 142nd Avenue  
City, State, Zip Vancouver, WA 98682  
Website  
Directions to the Airport Airport is located approx. 1/2 to SR 503, 1.5 mile

### **Facilities and Services**

Total Acreage of the Airport (Estimate)	20
Estimated Aeronautical Use Area (Acres)	10
Total Aircraft Storage Area (Acres)	
Air Cargo Processing Building Area (sq ft)	0
Air Cargo Apron Area (sq ft)	0
Aircraft Parking Apron Area (sq ft)	20,000
Tiedowns for Based Aircraft	5
Tiedowns for Transient Aircraft	2
Publicly Owned Hangar Units (Small Aircraft)	1
Privately Owned Hangar Units (Small Aircraft)	
Publicly Owned Hangar Units (Large Aircraft)	0
Privately Owned Hangar Units (Large Aircraft)	
Aircraft Rescue and Fire Fighting Facility (ARFF)	No



## **Airport Facilities and Services Report**

<b>Fuel Storage Availability</b>	
<b>Fuel Type</b>	<b>Fuel Tank Capacity Range</b>
<b>Utilities Available</b>	
Water	
Electric Power	
<b>Facilities Available</b>	
Wildlife Fencing	
Security Fencing	
<b>Weather Reporting Services Available</b>	
None	
<b>Fixed Base Operator Services</b>	
Number of FBOs	
<b>Services Available</b>	
<b>Aviation Activities</b>	
<b>Transient Aviation Activities</b>	
<b>Other Significant Activities and Services</b>	



## **Airport Facilities and Services Report**

<b>Airport Activity</b>	
<b>Based Aircraft</b>	
Single Engine	9
Multi Engine	0
Jet	0
Helicopter	0
Glider	0
Military	0
Ultralight	0
Seaplane	0
<b>Total</b>	<b>9</b>
<b>Annual Operations</b>	
<u>General Aviation</u>	
Local	3,300
Itinerant	50
<u>Commercial</u>	
Air Carrier	0
Air Taxi/Commuter	0
<u>Military</u>	
Local	0
Itinerant	
<b>Total</b>	<b>3,350</b>



## **Airport Facilities and Services Report**

### **Annual Operations**

Number of Peak Hour Operations

Percent that were Instrument Approaches

0

Percent that were Air Cargo Operations

### **Passenger Terminal**

Capacity

Demand

Percent of Utilization

### **Aircraft Storage**

Capacity

Demand

9

Percent of Utilization

### **Airfield Operations**

Capacity

Demand

Percent of Utilization

### **Air Cargo Operations**

Capacity

Demand

Percent of Utilization

### **Air Cargo**

Is there Air Cargo Activity?

Yes

Annual Air Cargo



## **Airport Facilities and Services Report**

### Air Cargo Volume (Tons)

Total Volume

Enplaned

Deplaned

Domestic

International

Freight

Express

Mail

Belly Cargo

All Cargo

Large Widebody

Medium Widebody

Narrow Body

Small

### **Air Cargo Operations**

#### All Cargo Operations

Large Widebody

Medium Widebody

Narrow Body

Small

**Total**

**0**



## Airport Facilities and Services Report

### Other Cargo Information

Number of Cargo Carriers

0

Other Cargo Activity

None

### Types of Cargo Activity at the Airport

Commodities which are shipped from the airport:

% of Total Volume (Estimated)

### Commercial Activity

Does the Airport have Commercial Activity

No

### Commercial Airlines Annual Emplanements

Airline Name

Annual Emplanements

### Airport Infrastructure Information

#### Runways

Approved	Designation	Type	Length	Width	Design Strength	Surface Type	Lighting
Yes	07/25	Primary Runway	2,434	50		Turf	No Edge Lighting

#### Taxiways

Approved	Designation	Surface Type	Taxiway Type	Length	Width
Design Strength					Lighting

#### Aprons

Approved	Designation	Area	Surface Type	Tiedowns
No	AP1	8,000	Turf	3



## **Airport Facilities and Services Report**

<b>Airport Reference Code</b>			
	Aircraft Approach Category	Airplane Design Group	Critical Aircraft
Existing	A: < 91 knots	Small Aircraft (< 12,500 lbs) - < 49' (15m); < 20' (6.1m)	
Future	A: < 91 knots	Small Aircraft (< 12,500 lbs) - < 49' (15m); < 20' (6.1m)	
<b>Airport Location</b>			
Elevation	276		
Latitude			
Longitude	-122.521853056		
<b>Airport Reference Guide Notes</b>			
<b>Airport Communications</b>			
Name	Frequency	Description	
UNICOM		Radio Advisory	





## **Airport Facilities and Services Report**

<b>Runway Design Standards</b>			
	<b>Design Standard</b>	<b>Existing Condition</b>	<b>Compliant</b>
<b>Runway Designation -- 07/25</b>			
Distance from Runway Centerline to Parallel Runway Centerline	0	0	N/A for this airport/runway
Distance from Runway Centerline to Parallel Taxiway Centerline	150	0	N/A for this airport/runway
Distance from Runway Centerline to Aircraft Parking Line	125	90	Does not meet Standards
Required Runway Shoulder Width	10	10	Meets Standards
Required Blast Pad Width	0		
Required Blast Pad Length	0		
Required Runway Safety Area Width	120		
Required Runway Safety Area Length	240		
Required Object Free Area Width			
Required Object Free Area Length	240		
Required Turnaround Radius			



## Airport Facilities and Services Report

### Runway Ends, Part 77 and Controlling -- Design vs. Existing

	Design Standard	Existing Condition	Compliant
<b>Runway 07/25 -- End Number 07</b>			
Blast Pad Width	0	0	N/A for this airport/runway
Blast Pad Length	0		
Runway Safety Area Width	120	80	
Runway Safety Area Length	240	80	Does not meet Standards
Object Free Area Width			
Object Free Area Length	240	80	Does not meet Standards
Hold Line Distance	125	0	N/A for this airport/runway
Turnaround Radius			
<b>Runway 07/25 -- End Number 25</b>			
Blast Pad Width	0	0	N/A for this airport/runway
Blast Pad Length	0		
Runway Safety Area Width	120	470	
Runway Safety Area Length	240	470	Meets Standards
Object Free Area Width			
Object Free Area Length	240	470	Meets Standards
Hold Line Distance	125	0	N/A for this airport/runway
Turnaround Radius			

### Runway Ends, Parts 77 & Controlling -- Basic Information

#### Runway 07/25 -- End Number 07

Dimension for Runway Protection Zone



## Airport Facilities and Services Report

### Runway Ends, Parts 77 & Controlling -- Basic Information

Airport Ownership of the RPZ	None
Is the RPZ protected by zoning or an aviation easement?	
Elevation	273
Latitude	45.687251193
Longitude	-122.526614917
Displaced Threshold	
Relocated Threshold	

### Approach Information

Does the airport have an instrument approach?	No
Does the airport have Runway End Identification Lights (REIL)?	No
Is there a visual guidance system?	
What is the controlling obstruction?	Power Lines
Height of Obstruction	293
Distance of Obstruction from Runway End	17
Approach Type	Visual
Approach Category	B: 91 to < 121 knots
Visibility Minimum	1 mile
Required Slope	20:1
Actual Slope	0:1
Supports 50:1	No
Which approach requirements apply to the standard threshold siting surface for the airport?	
Is the approach compliant?	No

### Runway 07/25 -- End Number 25



## **Airport Facilities and Services Report**

### **Runway Ends, Parts 77 & Controlling -- Basic Information**

Dimension for Runway Protection Zone

Airport Ownership of the RPZ None

Is the RPZ protected by zoning or an aviation easement?

Elevation 276

Latitude 45.687308694

Longitude -122.518333333

Displaced Threshold

Relocated Threshold

#### *Approach Information*

Does the airport have an instrument approach? No

Does the airport have Runway End Identification Lights (REIL)? No

Is there a visual guidance system?

What is the controlling obstruction?

Height of Obstruction 281

Distance of Obstruction from Runway End 317

Approach Type Visual

Approach Category B: 91 to < 121 knots

Visibility Minimum 1 mile

Required Slope 20:1

Actual Slope 0:1

Supports 50:1 No

Which approach requirements apply to the standard threshold siting surface for the airport?

Is the approach compliant? No



## **Airport Facilities and Services Report**

### **Runway Ends, Parts 77 & Controlling -- Basic Information**

--

### **Taxiway Design Standards**

	Design Standard	Existing Condition	Compliant

### **Apron Facilities**

#### **Apron AP1**

Area	8,000
Surface Type	Turf
Number of Tiedowns	3

### **Capital Improvement Program Tracking**

--



## **Airport Facilities and Services Report**

<b>Environmental Information</b>	
Are there wetlands on airport property?	No
How many acres of wetlands?	0
Source of Wetland Classification	none
Have noise contours been prepared for the airport?	No
If so, for what year?	
Does the 65 DNL contour extend beyond the airport property?	No
Is there a Stormwater Management System at the airport?	No
Primary Stormwater Facility Type	
Does the system utilize best management practices as defined in the Stormwater Guidance Manual?	No
Are there underground storage tanks?	No
Is there a washdown pad?	No
Washdown System Description	
Other Environmental Comments	N/A

<b>Land Use Planning</b>	
Is a FAR Part 77 map prepared?	No
Predominant Zoning Classification	
Actual Zoning Classification	
Is the airport within an urban growth boundary?	No
Does the airport have aviation easements?	Yes



## Airport Facilities and Services Report

### City Jurisdictions

#### The City of Vancouver:

Recognizes the Airport as an Essential Public Facility	No
Includes the Airport in the Transportation System Inventory	No
Recognizes the significance of the airport for economic development	No
Includes policies that discourage the development of incompatible land uses	No
Has zoning in place to discourage the development of incompatible land uses	No
Has zoning in place to regulate height hazards	No
Has regulations to prohibit penetration of FAR Part 77 surfaces	No
Requires an Aviation Activity Notice	No

### County Jurisdictions

#### Clark County

Recognizes the Airport as an Essential Public Facility	No
Includes the Airport in the Transportation System Inventory	Yes
Recognizes the significance of the airport for economic development	No
Includes policies that discourage the development of incompatible land uses	No
Has zoning in place to discourage the development of incompatible land uses	No
Has zoning in place to regulate height hazards	No
Has regulations to prohibit penetration of FAR Part 77 surfaces	No
Requires an Aviation Activity Notice	No

### Affected Tribes



## Airport Facilities and Services Report

### Ground Transportation

#### Available Ground Transportation Services

Other Ground Transport Service Available

#### Airport Access

Type of Major Highway Closest to the Airport	US Highway
Name of the Closest Highway	Interstate 205
Distance from the Airport (Miles)	3
Type of Road Providing Direct Primary Access to the Airport	Other Local Road
Name of the Primary Direct Access Road	142nd Ave.

### Airport Fees

#### Hangar Rental Information

Average Rate / Month (Including Leasehold Tax)

<50' Individual Hangar

>=50' Individual Hangar

Remarks

Average Rate / Month (Including Leasehold Tax)

<50' Open Hangar

>=50' Open Hangar

Remarks

How many people on waiting list?

Waiting List Fee





## **Airport Facilities and Services Report**

### **Land Lease Information**

Aeronautical Land (Price/Sq Ft/Year)

Standard Lease Terms

Standard Lease Rate Policy

Comments

Industrial/Commercial Non-aeronautical Land  
(Price/Sq Ft/Year)

Standard Lease Terms

Standard Lease Rate Policy

Comments

### **Landing Fees**

Minimum Landing Fee \$0.00

Fee Per 1,000# (MCGLW)

Fee Per 12,500# (Non Commercial)

Comments

### **Tiedown Fees**

Single Engine (Daily) \$1.00

Single Engine (Weekly)

Single Engine (Monthly) \$25.00

Single Engine (Annual)

Multi Engine (Daily)

Multi Engine (Weekly)

Multi Engine (Monthly)

Multi Engine (Annual)



**Washington State  
Department of Transportation**

## **Airport Facilities and Services Report**

Comments

## 10. Neighborhood Association Notice

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**BEND, OR**  
3052 NW Merchant Way, Suite 100  
Bend, OR 97703  
(541) 317-8429  
[www.aks-eng.com](http://www.aks-eng.com)

**KEIZER, OR**  
4300 Cherry Avenue NE  
Keizer, OR 97303  
(503) 400-6028

**TUALATIN, OR**  
12965 SW Herman Road, Suite 100  
Tualatin, OR 97062  
(503) 563-6151

**VANCOUVER, WA**  
9600 NE 126th Avenue, Suite 2520  
Vancouver, WA 98682  
(360) 882-0419

## Memorandum

**Date:** 1/21/2019  
**To:** Gary Albrecht, Clark County Long Range Planning  
**From:** Michael Andreotti, RLA  
**Project:** **NE 152<sup>nd</sup> Avenue TSR Property Annual Review and Zone Change**  
**Subject:** **Neighborhood Association Notice Response**  
**Site Location:** 9000 NE 152<sup>nd</sup> Avenue, Vancouver, WA 98682

---

Request for comment was sent to Christie Brownsilva with the Sifton Neighborhood Association as requested in the pre-application conference. The request was emailed on January 3, 2019, that email is included in this application. At the date of application submittal, no comments have been received from the Neighborhood Association.

## Michael Andreotti

---

**From:** Michael Andreotti  
**Sent:** Thursday, January 03, 2019 9:52 AM  
**To:** 'siftonneighborhood@gmail.com'  
**Cc:** Dave Weston; Seth Halling; Susan Weisenborn  
**Subject:** NE 152nd Avenue Property Annual Review and Zone Change

Mrs. Christie Brownsilva –

We are working on an Annual Review (Comprehensive Plan Change) and Zone Change for a property in the Sifton neighborhood. The property is Parcel #154246-000, addressed as 9000 NE 152<sup>nd</sup> Avenue, Vancouver, WA 98682.

Currently the property has a Comprehensive Plan designation of Commercial and is zoned Community Commercial. We are proposing to change the Comprehensive Plan Designation to Urban Low Density Residential with a zoning designation of R1-6, because we believe residential will fit the surrounding community better than commercial uses. A subdivision application is not part of this County process.

Please respond to this email with any comments or concerns you may have by January 18, 2019.

Thank you,

**Michael Andreotti, RLA**  
**Land Use Planner**



**AKS ENGINEERING & FORESTRY, LLC**

9600 NE 126<sup>th</sup> Avenue, Suite 2520 | Vancouver, WA 98682

P: 360.882.0419 Ext. 316 | F: 360.882.0426 | [www.aks-eng.com](http://www.aks-eng.com) | [andreottim@aks-eng.com](mailto:andreottim@aks-eng.com)

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## 11. CREDC Letter

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October 18, 2018

Marc Boldt  
Clark County Council Chair  
Public Service Center  
1300 Franklin Street  
Vancouver, WA 98660

**RE: NE 152<sup>nd</sup> Avenue TSR Property Zone Change**

Dear Chair Boldt:

We appreciate the opportunity to provide feedback around the employment viability of the vacant tax lot totaling approximately 7.68 acres located west of NE 152<sup>nd</sup> Avenue and south of NE 93<sup>rd</sup> Street. We understand that the Clark County Council is considering zone changes from Community Commercial (CC) to Residential (R1-5) requiring a comprehensive plan zone change from Commercial to Urban Low Density Residential on the following parcel: 154246-000.

Land is a limited resource and the conversion of land from one use to another reflects the changes in regional market demands. Recognizing that Clark County must make connections between current land use trends, market demands, housing affordability, and long-term economic vitality, the Columbia River Economic Development Council (CREDC) Lands for Jobs Committee recommends a comprehensive and continued long-term pipeline of employment land when considering zone changes.

After a careful review recently, CREDC's Lands for Jobs Committee does not consider this parcel to be a key employment site; therefore, we do not see this zone change as a limiting factor to our efforts to recruit businesses to the region. Due to its current community commercial zoning, adjacent York Elementary School and residential properties, the site does not tend to attract strategic traded sector employers. Furthermore, at this time, CREDC has not received inquiries for this site from prospective businesses or site selection consultants.

Due to our recently adopted Clark County Comprehensive Economic Development Plan, CREDC is focusing on a balance of land uses to support economic vitality throughout all of our communities that define and actively grow distinct places unique to current and potential residents' values.

Thank you for your attention to this important discussion and for allowing CREDC the opportunity to share our feedback.

Sincerely,



Max Ault  
Interim President, CREDC

## 12. Traffic Memo

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## Technical Memorandum

**To:** Gary Rademacher  
TSR Investments, LLC

**From:** Daniel Stumpf, EI  
William Farley, PE

**Date:** January 22, 2019

**Subject:** NE 152nd Avenue Zone Change  
Trip Generation & Distribution Analysis



1/22/2019

*Le*

**LANCASTER  
ENGINEERING**

321 SW 4th Ave., Suite 400  
Portland, OR 97204  
phone: 503.248.0313  
fax: 503.248.9251  
lancasterengineering.com

The proposed NE 152<sup>nd</sup> Avenue project will include the change in zoning of a single property (assessor parcel #154246000), located south of NE 93<sup>rd</sup> Street, east of NE 150<sup>th</sup> Avenue, and west of NE 152<sup>nd</sup> Avenue in unincorporated Clark County, Washington. Specifically, the property is proposed for a rezone from *Community Commercial* (CC) to *Urban Low Density Residential* (R1-6). This report addresses the potential impacts of the proposed zone change on the nearby street system. Based on a review of the pre-application conference notes, dated November 15<sup>th</sup>, 2018, the report conducts the following analyses for present day and future conditions:

1. Compare the trip generation potential of the site between existing and proposed conditions;
2. Determine the modal split of potential site trips generated; and
3. Evaluate site trip distribution.

The purpose of this study is to determine whether the transportation system within the vicinity of the site is capable of supporting potential development of the site under R1-6 zoning and to determine any mitigation that may be necessary to do so. Detailed information on trip generation calculations is included as an attachment to the memorandum.

### *Project and Location Description*

The project site is located south of NE 93<sup>rd</sup> Street, east of NE 150<sup>th</sup> Avenue, and west of NE 152<sup>nd</sup> Avenue in unincorporated Clark County, Washington. The subject site is located within a developing residential area of the County, with single-family houses to the north, southeast, and west; undeveloped land to the south; and York Elementary School to the northeast. The site consists of a single property (assessor parcel #154246000) which encompasses an approximate total of 7.56 acres and is currently undeveloped.

### *Vicinity Streets*

The proposed development is expected to primarily impact three nearby vicinity roadways. Table 1 provides a description of each of the vicinity roadways.



January 22, 2019  
Page 2 of 8

Table 1: Vicinity Roadway Descriptions

Roadway	Jurisdiction	Functional Classification	Cross-Section	Speed	On-street Parking	Bicycle Lanes	Curbs	Sidewalks
NE 93rd Street	Clark County	Local Street	2 Lanes	25 mph Posted	Permitted North Side	None	North Side	North Side
NE 150th Avenue	Clark County	Local Street	2 Lanes	25 mph Statutory	Partially Permitted	None	Partial Both Sides	Partial Both Sides
NE 152nd Avenue	Clark County	Collector	2 Lanes	35 mph Posted	Partially Permitted	Partial Both Sides	Partial Both Sides	Partial Both Sides

Notes: Functional classification based on Clark County 2016 Arterial Atlas.

Statutory speed based on Washington State Code Section RCW 46.61.400.

Figure 1 below presents an aerial image of the nearby vicinity with the project site outlined in yellow.



Figure 1: Aerial Photo of Site Vicinity (Image from Google Earth)



## **Transit**

The project site is located near a single transit line that has stops along NE 152<sup>nd</sup> Avenue, the nearest being adjacent to the site at the intersection of NE 91<sup>st</sup> Street at NE 152<sup>nd</sup> Avenue. *Route #72 – Orchards*, provides service between the Orchards Neighborhood and Vancouver Mall Transit Center, with notable stops near Kaiser Clinic, Heritage High School, Mabry Center, and Covington Middle School. Weekday service is scheduled from approximately 5:00 AM and 9:45 PM and has headways of approximately 30 to 60 minutes. Saturday service is scheduled from approximately 8:00 AM to 7:45 PM and has headways of approximately 60 minutes. Sunday and Holiday service is scheduled from approximately 9:00 AM to 5:45 PM and has headways of approximately 60 minutes.

## **Site Trips**

### **Trip Generation**

The subject site is currently zoned as *Community Commercial* (CC) and is proposed for a change in zoning to *Urban Low Residential* (R1-6). To determine the potential impacts of the proposed zone change, reasonable “worst-case” development scenarios for the existing and proposed zones were determined utilizing data for the most traffic-intensive uses permitted within each zone.

#### **Existing CC Zone**

To determine a reasonable “worst-case” development scenario under the existing CC zone, Clark County’s Unified Development Code 40.230.010 *Commercial Districts* (NC, CC, GC) was referenced and compared to a variety of land uses provided within the *Trip Generation Manual*<sup>1</sup>. Based on an assessment of permitted uses under the CC zone that could reasonably be developed within the 7.56-acre (329,300 square-foot) lot, data from the following two land uses were referenced and compared to one another based on the square-footage of gross building floor area:

- *Office Park* (750); and
- *Shopping Center* (820).

Upon reviewing Clark County Codes 40.320 *Landscaping and Screening*, 40.230.010 *Commercial Districts* (NC, CC, GC), and 40.200 *Land Use Districts – General Provisions*, there are no specific design criteria regarding the minimum or maximum floor area ratio (FAR) or lot coverages for uses within a CC zone. Therefore, it is assumed that a reasonable maximum total building footprint for either an *Office Park* or *Shopping Center* would cover approximately 30 percent of the developable area. The remaining developable area is considered as space necessary to accommodate parking, street right-of-way improvements, public space, landscaping, etc.

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<sup>1</sup> Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 10<sup>th</sup> Edition, 2017.



Based on this assumption, a reasonable “worst-case” development scenario under the existing zoning may include the construction of approximately 98,800 square feet of either *Office Park* or *Shopping Center*.

Of the two analyzed land uses, land use code 820 consists of retail uses, which generally attract pass-by and diverted trips. Pass-by trips are trips that leave the adjacent roadway to patronize a land use and then continue in their original direction of travel. Similar to pass-by trips, diverted trips are trips that divert from nearby roadways not adjacent to the site to patronize a land use before continuing to their original destination. Pass-by trips do not add additional vehicles to the surrounding transportation system; however, they do add additional turning movements at site access intersections. Diverted trips may add turning movements at both site access and other nearby intersections.

Pass-by and diverted trips rates were determined using data provided within the *Trip Generation Handbook*<sup>2</sup>. Data from land use code 820 was used to determine an evening peak hour pass-by rate. It is assumed that the morning peak hour and weekday rates would approximately match the evening peak hour rate. For the purposes of this analysis, diverted trips were treated as primary trips.

Table 2 presents a comparison of trip generation for each land use which was analyzed under the existing CC zone.

**Table 2: Existing CC Zone Trip Generation Comparison**

	ITE Code	Size & Rate	Morning Peak Hour			Evening Peak Hour			Weekday Total
			Enter	Exit	Total	Enter	Exit	Total	
Office Park	750	98,800 sq.ft.	126	16	142	7	99	106	1,094
Shopping Center	820	98,800 sq.ft.	58	35	93	180	196	376	3,730
<i>Pass-by Trips</i>	<i>820</i>	<i>34%</i>	<i>16</i>	<i>16</i>	<i>32</i>	<i>64</i>	<i>64</i>	<i>128</i>	<i>1,268</i>
Net New Trips			42	19	61	116	132	248	2,462

Based on the trip generation analysis, as detailed in Table 2, the *Office Park* is projected to generate the highest number of trips during the morning peak hour while the *Shopping Center* generates the highest number of trips during the evening peak hour and over an average weekday. Since either use could reasonably be developed within the site, the reasonable “worst-case” development scenario was analyzed utilizing data from each of the potential land uses.

<sup>2</sup> Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 3rd Edition, 2014.



### *Proposed R1-6 Zone*

To determine a reasonable “worst-case” development scenario under the proposed R1-6 zoning, Clark County’s Unified Development Code *40.220.010 Single-Family Residential Districts (R1-20, R1-10, R1-7.5, R1-6 and R1-5)* was referenced and compared to a variety of land uses provided within the *Trip Generation Manual*. Based on an assessment of permitted uses under the R1-6 zone, data from land use codes 210, *Single-Family Detached Housing*, and 565, *Day Care Center*, was used to estimate the proposed trip generation potential of the site based on the number of dwelling units and the square-footage of gross building floor area, respectively.

To determine a dwelling unit count within the site, a maximum density rate of 5.8 dwelling units per acre within a R1-6 zone was referenced from *Table 40.220.010-4 Density Transfers*. Based on a total area of 7.56 acres, the site may be developed with up to 43 dwelling units. To estimate a reasonable size for a day care facility, it is assumed that a single-family house may be converted and utilized for day care services.

Accordingly, a reasonably sized day care that could be developed would be approximately 3,000 square feet. Since one house could be converted to a day care facility, the net dwelling unit count would be reduced to 42 houses.

### *Analysis Results*

The trip generation calculations show that under the existing CC zone, the subject site could reasonably generate up to 142 morning peak hour trips, 248 net new evening peak hour trips, and 2,462 net new average weekday trips. Under the proposed R1-6 zone, the site could reasonably generate up to 64 morning peak hour trips, 75 evening peak hour trips, and 538 average weekday trips. Accordingly, the net change in the trip generation potential of the site after the proposed rezone is projected to decrease by 78 morning peak hour trips, 173 evening peak hour trips, and 1,924 average weekday trips.

The trip generation estimates are summarized in Table 3. Detailed trip generation calculations are included as an attachment to this memorandum.



**Table 3: Trip Generation Summary**

	ITE Code	Size	Morning Peak Hour			Evening Peak Hour			Weekday Total
			Enter	Exit	Total	Enter	Exit	Total	
Existing CC Zone									
Office Park	750	98,800 sq.ft.	126	16	142	-	-	-	-
Shopping Center	820	98,800 sq.ft.	-	-	-	116	132	248	2,462
Maximum Potential of Trips Generated			126	16	142	116	132	248	2,462
Proposed R1-6 Zone									
Single-Family Housing	210	42 units	8	23	31	26	16	42	396
Day Care Center	565	3,000 sq.ft.	17	16	33	16	17	33	142
Total Trips			25	39	64	42	33	75	538
Net Change in Site Trip Generation Potential									
			-101	23	-78	-74	-99	-173	-1,924

Since the proposed zone change will result in a net decrease in the trip generation potential of the site, the zone change may be considered a down-zone with regard to traffic intensity. Accordingly, the proposed zone change will have no significant impact on the operation of area streets and intersections since it does not result in an increase in the peak hour or daily trip generation potential of the site.

### ***Trip Distribution***

The trip distribution of the proposed development was derived using the Southwest Washington Regional Transportation Council (RTC) transportation system model. The project site is located adjacent to Transportation Analysis Zone (TAZ) #357 for which a select zone analysis was run to determine the distribution of site trips entering and exiting the zone.

Using information from the RTC model, the following trip distribution is projected for existing year 2019 conditions and future year 2039 conditions:





January 22, 2019  
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#### Year 2019 Existing Conditions

- Approximately 39 percent of site trips will travel to/from the southwest along NW Ward Road;
- Approximately 19 percent of site trips will travel to/from the south along NE 162<sup>nd</sup> Avenue;
- Approximately 18 percent of site trips will travel to/from the west along NE Padden Parkway;
- Approximately 8 percent of site trips will travel to/from the north along NE 152<sup>nd</sup> Avenue;
- Approximately 3 percent of site trips will travel to/from the west along NE 99<sup>th</sup> Street;
- Approximately 2 percent of site trips will travel to/from the northeast along NE Ward Road;
- Approximately 1 percent of site trips will travel to/from the east along NE 99<sup>th</sup> Street; and
- Approximately 10 percent of site trips will travel to/from locales within the immediate site vicinity.

#### Year 2039 Future Conditions

- Approximately 35 percent of site trips will travel to/from the southwest along NW Ward Road;
- Approximately 16 percent of site trips will travel to/from the south along NE 162<sup>nd</sup> Avenue;
- Approximately 15 percent of site trips will travel to/from the west along NE Padden Parkway;
- Approximately 11 percent of site trips will travel to/from the north along NE 152<sup>nd</sup> Avenue;
- Approximately 7 percent of site trips will travel to/from the west along NE 99<sup>th</sup> Street;
- Approximately 4 percent of site trips will travel to/from the northeast along NE Ward Road;
- Approximately 1 percent of site trips will travel to/from the east along NE 99<sup>th</sup> Street; and
- Approximately 11 percent of site trips will travel to/from locales within the immediate site vicinity.

#### *Modal Split*

The surrounding site vicinity provides a variety of multi-modal opportunities for travel to/from the site. Under existing conditions, sidewalks are provided along the north side of NE 93<sup>rd</sup> Street; along both sides of NE 150<sup>th</sup> Avenue and NE 152<sup>nd</sup> Avenue north of NE 93<sup>rd</sup> Street; along the west side of NE 150<sup>th</sup> Avenue south of NE 93<sup>rd</sup> Street; and intermittently along both sides of NE 152<sup>nd</sup> Avenue south of NE 93<sup>rd</sup> Street. Bicycle lanes are intermittently provided along NE 152<sup>nd</sup> Avenue, while low traffic volumes and travel speeds along local streets, such as NE 150<sup>th</sup> Avenue and NE 93<sup>rd</sup> Street, allow bicyclist the ability to safely and comfortably share the roadway with motor vehicle traffic. In addition, a bus stop serving Route #72 – *Orchards* is located adjacent to the site, near the intersection of NE 91<sup>st</sup> Street at NE 152<sup>nd</sup> Avenue.

Upon assessing the types of uses that could be developed under an R1-6 zone and CC zone and the fact that the land uses permitted within the proposed R1-6 zone are consistent with the residential nature of the



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surrounding site vicinity, it is expected that the multi-modal splits between the two zones and the overall multi-modal splits of the surrounding area will not vary significantly between existing and future conditions.

## ***Conclusions***

The trip generation calculations show that the net change in the trip generation potential of the site after the proposed rezone is projected to decrease by 78 morning peak hour trips, 173 evening peak hour trips, and 1,924 average weekday trips. Since the proposed zone change will result in a net decrease in the trip generation potential of the site, the zone change may be considered a down-zone with regard to traffic intensity.

The proposed NE 152<sup>nd</sup> Avenue zone change project is not anticipated to cause any significant impacts to the transportation system upon implementation since the zone change does not result in an increase in the peak hour or daily trip generation potential of the site. Accordingly, no significant traffic delays or congestion is expected to result due to the zone change.

If you have any questions regarding this technical memorandum, please don't hesitate to contact us.





## TRIP GENERATION CALCULATIONS

### Existing CC Zone

*Land Use:* Office Park  
*Land Use Code:* 750  
*Setting/Location* General Urban/Suburban  
*Variable:* 1,000 Sq. Ft. of GFA  
*Variable Value:* 98.8

#### AM PEAK HOUR

*Trip Rate:* 1.44

	Enter	Exit	Total
Directional Distribution	89%	11%	
Trip Ends	<b>126</b>	<b>16</b>	<b>142</b>

#### PM PEAK HOUR

*Trip Rate:* 1.07

	Enter	Exit	Total
Directional Distribution	7%	93%	
Trip Ends	<b>7</b>	<b>99</b>	<b>106</b>

#### WEEKDAY

*Trip Rate:* 11.07

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	<b>547</b>	<b>547</b>	<b>1,094</b>

#### SATURDAY

*Trip Rate:* 1.64

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	<b>81</b>	<b>81</b>	<b>162</b>



## TRIP GENERATION CALCULATIONS

### Existing CC Zone

*Land Use:* Shopping Center  
*Land Use Code:* 820  
*Setting/Location* General Urban/Suburban  
*Variable:* 1,000 Sq. Ft. GFA  
*Variable Value:* 98.8

#### AM PEAK HOUR

*Trip Rate:* 0.94

	Enter	Exit	Total
Directional Distribution	62%	38%	
Trip Ends	<b>58</b>	<b>35</b>	<b>93</b>

#### PM PEAK HOUR

*Trip Rate:* 3.81

	Enter	Exit	Total
Directional Distribution	48%	52%	
Trip Ends	<b>180</b>	<b>196</b>	<b>376</b>

#### WEEKDAY

*Trip Rate:* 37.75

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	<b>1,865</b>	<b>1,865</b>	<b>3,730</b>

#### SATURDAY

*Trip Rate:* 46.12

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	<b>2,278</b>	<b>2,278</b>	<b>4,556</b>



## TRIP GENERATION CALCULATIONS

### Proposed R1-6 Zone

*Land Use:* Single-Family Detached Housing  
*Land Use Code:* 210  
*Setting/Location* General Urban/Suburban  
*Variable:* Dwelling Units  
*Variable Value:* 42

#### AM PEAK HOUR

*Trip Rate:* 0.74

	Enter	Exit	Total
Directional Distribution	25%	75%	
Trip Ends	8	23	31

#### PM PEAK HOUR

*Trip Rate:* 0.99

	Enter	Exit	Total
Directional Distribution	63%	37%	
Trip Ends	26	16	42

#### WEEKDAY

*Trip Rate:* 9.44

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	198	198	396

#### SATURDAY

*Trip Rate:* 9.54

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	200	200	400



## TRIP GENERATION CALCULATIONS

### Proposed R1-6 Zone

*Land Use:* Day Care Center  
*Land Use Code:* 565  
*Setting/Location:* General Urban/Suburban  
*Variable:* 1,000 Sq Ft Gross Floor Area  
*Variable Value:* 3

#### AM PEAK HOUR

*Trip Rate:* 11.00

	Enter	Exit	Total
Directional Distribution	53%	47%	
Trip Ends	<b>17</b>	<b>16</b>	<b>33</b>

#### PM PEAK HOUR

*Trip Rate:* 11.12

	Enter	Exit	Total
Directional Distribution	47%	53%	
Trip Ends	<b>16</b>	<b>17</b>	<b>33</b>

#### WEEKDAY

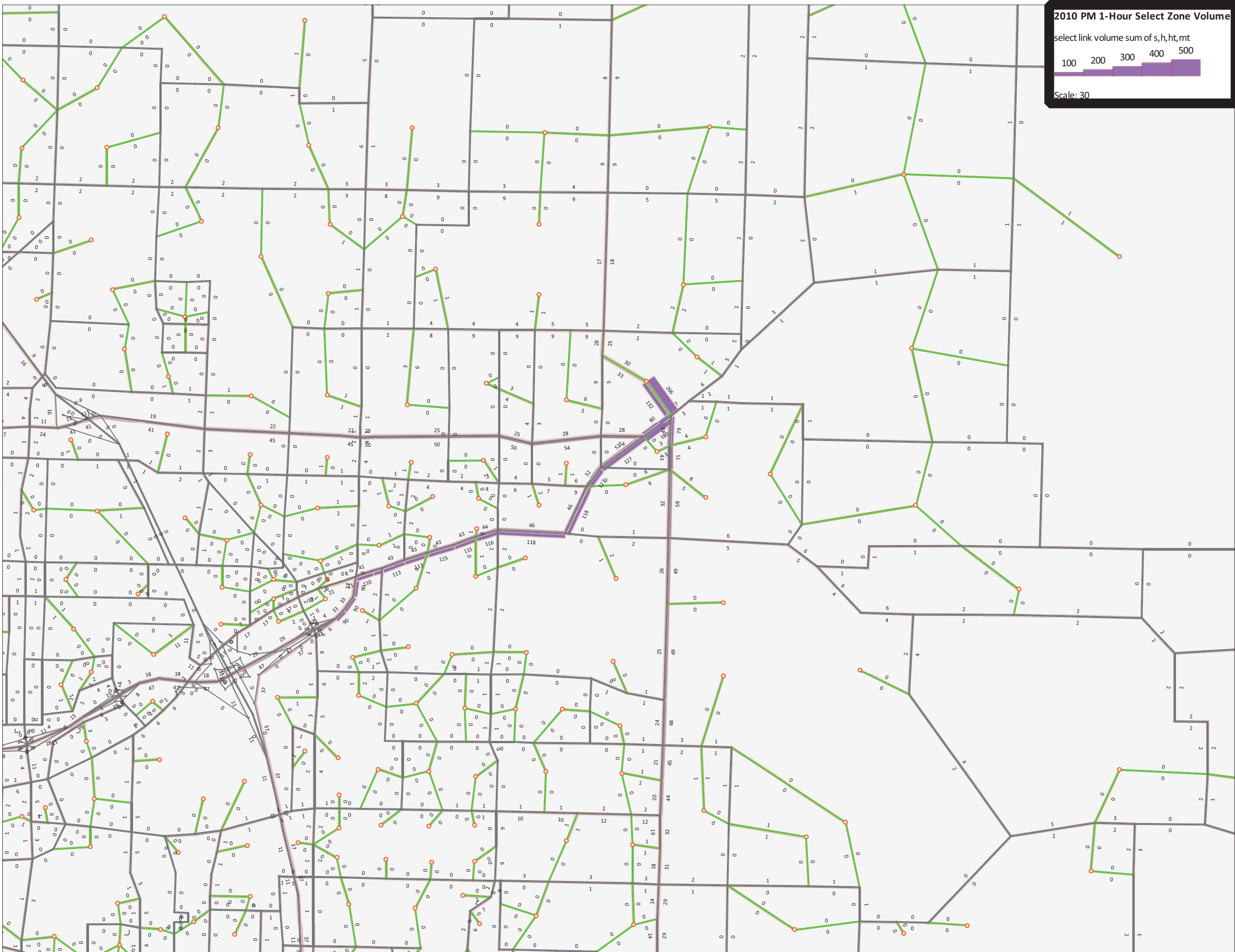
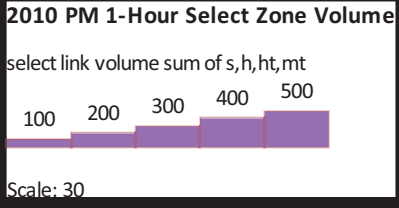
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Trip Ends	<b>71</b>	<b>71</b>	<b>142</b>

#### SATURDAY

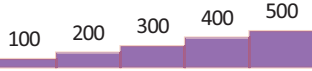
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Directional Distribution	50%	50%	
Trip Ends	<b>9</b>	<b>9</b>	<b>18</b>

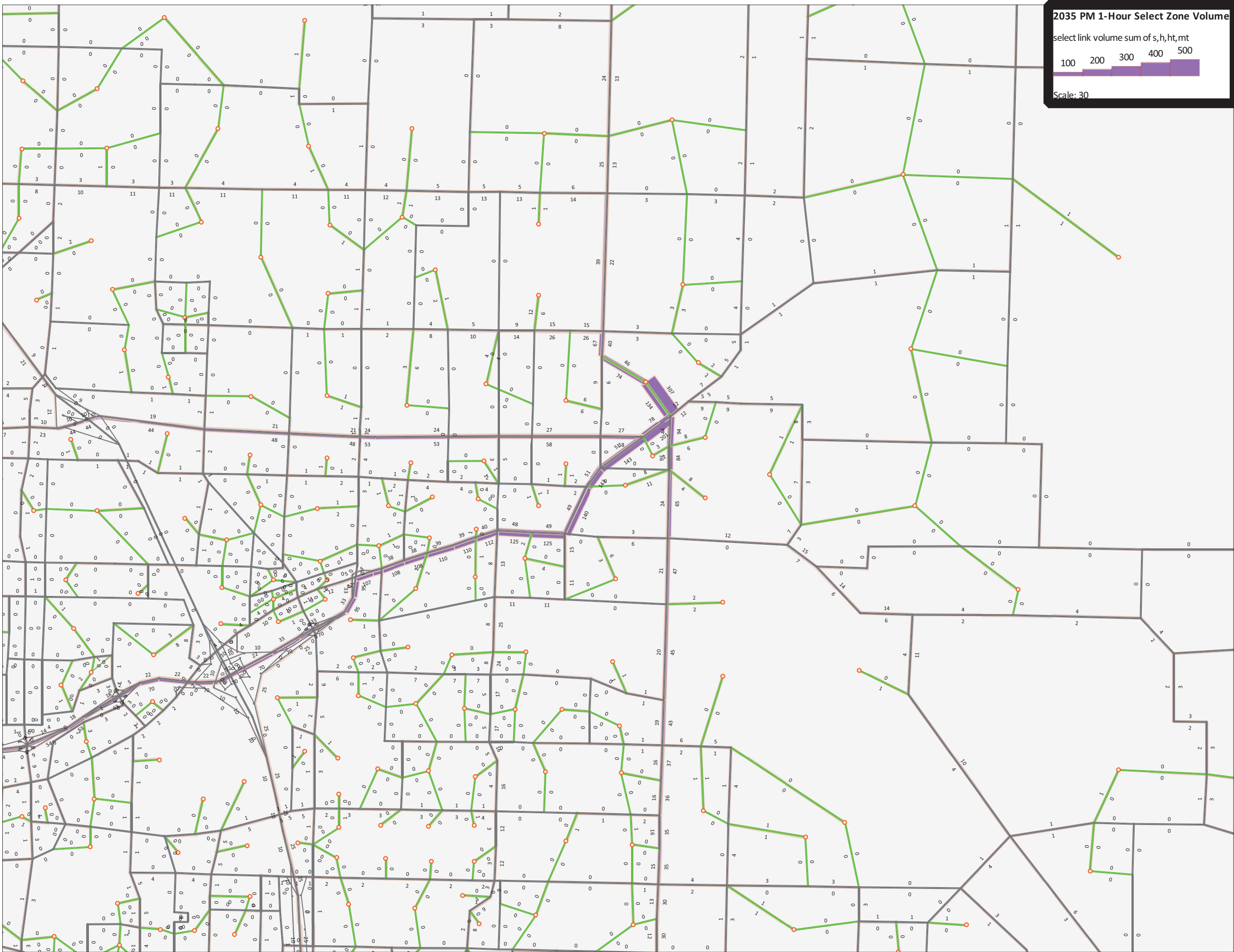


2035 PM 1-Hour Select Zone Volume

select link volume sum of s,h,ht,mt

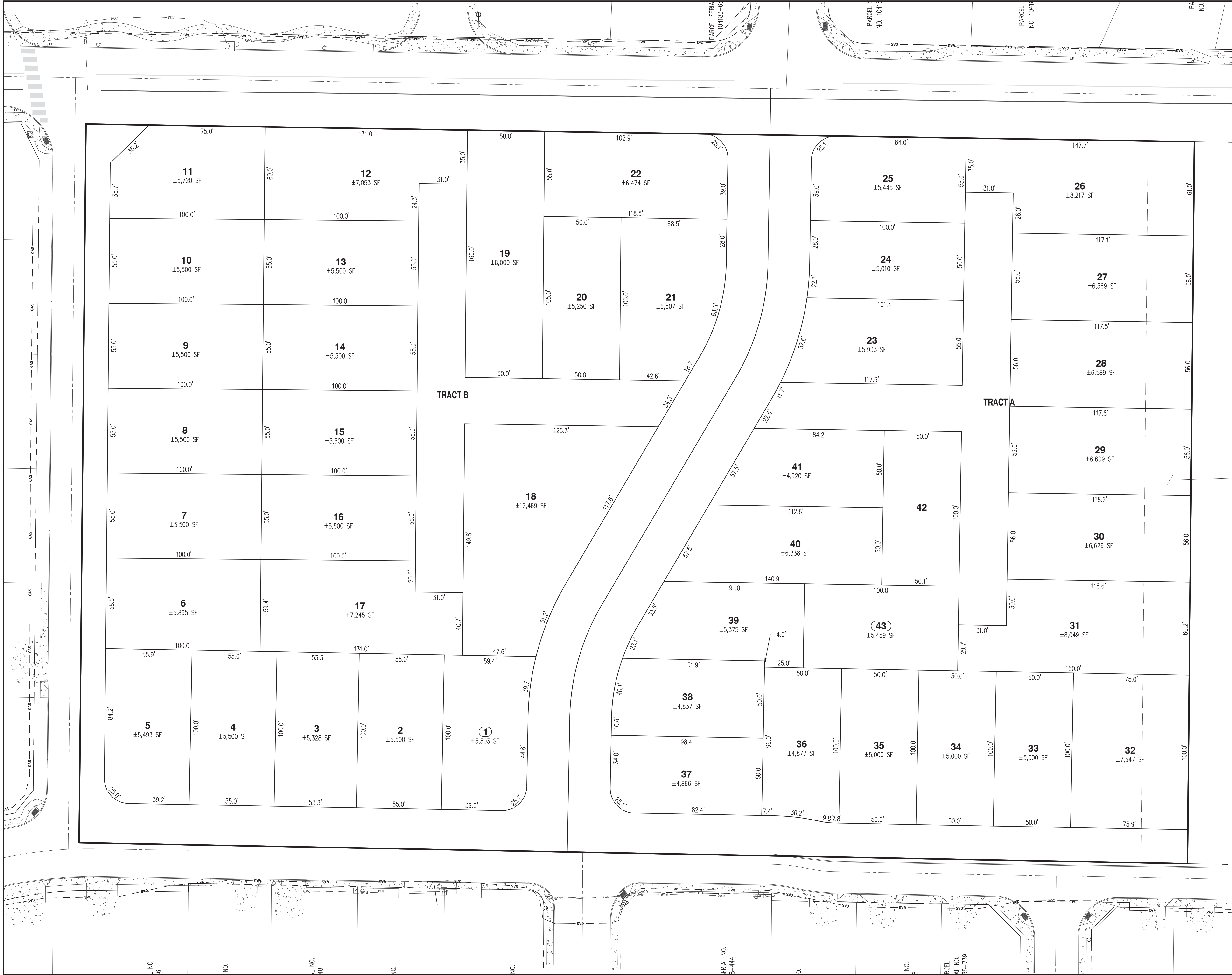


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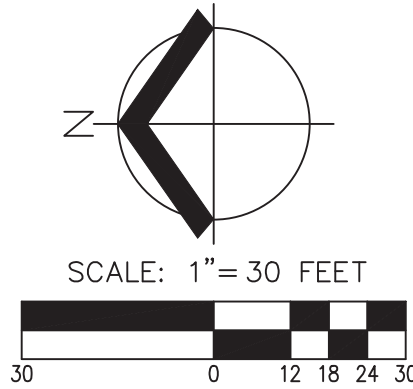


AKS DRAWING FILE: 5974 20190213 LAYOUT 1.DWG | LAYOUT: LAYOUT1



EX. 30' SANITARY  
SEWER EASEMENT

NOTE:  
CONCEPTUAL LAYOUT  
IS FOR REFERENCE  
PURPOSES ONLY



AKS  
AKS ENGINEERING & FORESTRY, LLC  
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9000 NE 152ND AVENUE  
CLARK COUNTY  
WASHINGTON

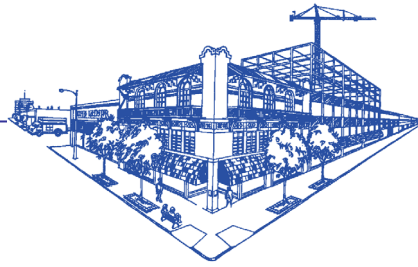
R1-6  
LAYOUT 1

DESIGNED BY:	DAW
DRAWN BY:	DAW
CHECKED BY:	SMH
SCALE:	AS NOTED
DATE:	2/13/19

REVISIONS
JOB NUMBER 5974
SHEET L-1

# E. D. Hovee & Company, LLC

Economic and Development Services



## MEMORANDUM

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To: Gary Rademacher – TSR Investments LLC  
From: Eric Hovee  
Subject: Economic Analysis of Proposed Land Use Re-designation - 152<sup>nd</sup> Avenue TSR Site  
Date: March 8, 2019

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TSR Investments, LLC is proposing that the Clark County Comprehensive Plan designation for an approximately 8.1-acre vacant property situated at 9000 NE 152<sup>nd</sup> Avenue be changed from a Commercial to Urban Low Density Residential land use – with the associated zoning map changed from a Community Commercial (CC) to Single Family Residential (R1-6) designation.

While the subject TSR site is located within City of Vancouver’s Urban Growth Area (UGA), the property has not been annexed to the City and, as an unincorporated area, is under the jurisdiction of Clark County. Consistent with input from both County and City staff, TSR has requested that the economic and development consulting firm E. D Hovee & Company, LLC prepare an economic analysis of the subject 152<sup>nd</sup> Avenue property.<sup>1</sup>

The two primary purposes of this economic analysis are to:

- Assess whether the site is viable for long-term commercial development (as requested by the City’s December 3, 2018 review)
- Demonstrate how a change to a residential zone is appropriate and consistent with the County’s Growth Management Plan (as noted from the County’s pre-application conference of November 15, 2018)

The remainder of this economic analysis report is organized to cover the following topics:

At-A-Glance Summary  
Existing Conditions  
Market for Commercial Use  
Market for Single-Family Residential Use  
Appropriateness of Proposed Re-designation



## AT-A-GLANCE SUMMARY

This report has been prepared to address economic market questions raised in Clark County and City review of a proposal to re-designate 8.14 vacant acres owned by TSR Investments LLC on NE 152<sup>nd</sup> Avenue from Community Commercial (CC) to Single Family Residential (R1-6) use. What follows is an overview summary of major observations and findings from this analysis.

**Existing Conditions.** The subject TSR site is situated at the intersection of NE 152<sup>nd</sup> Avenue and NE 93<sup>rd</sup> Street in the Sifton neighborhood of unincorporated Clark County – but within the City of Vancouver’s urban growth area (UGA). Property surrounding the site is designated primarily for residential use; zoned densities drop moving north from the site to the edges of the UGA. Traffic counts on NE 152<sup>nd</sup> Avenue are well below those of other major road corridors.

**Market for Commercial Use.** Three overall findings emerge from this analysis:

- Resident needs for commercial retail and service uses are more than amply accommodated within 2-4/5 miles of the subject TSR property.
- The subject TSR site appears to be neither well situated nor adequately sized to accommodate a market-competitive commercial development.
- Development of secondary sites like the TSR property is also impaired by the continuing shake-out of *bricks and mortar* retail both regionally and nationally.

The best evidence for limited market need is that the TSR site remains vacant – even through the rapid economic expansion experienced in recent years across Clark County.

**Market for Single Family Residential Use.** Based on a detailed review of the demographics of residential demand and current market conditions, primary observations are:

- Even as the national housing market shows signs of slowing, there continues to be as-yet unmet demand for affordable, for-sale workforce housing.
- Demographics of the neighborhood potentially served by the TSR site exemplify the type of affordable single-family residential product still needed in Clark County.
- The TSR proposal and site plan position the subject property to effectively serve the demographic most in need of added single-family, home-ownership opportunity.

**Appropriateness of Proposed Re-Designation.** In summary, this report concludes that:

- The combination of a well-served retail market and a site that is poorly situated means that commercial development is unlikely as a marketable use for the foreseeable future.
- Conversely, the subject site is well situated to serve the under-built workforce market for affordable, single-family home ownership – and fit well within the neighborhood.
- Re-zoning should have no material effect on net loss of commercial activity but will serve to improve the area’s overall prospects for economic growth and vitality.

Existing conditions of significance for this market analysis include locational attributes of the TSR site coupled with vicinity area land use designations and traffic counts. These are factors important for consideration of appropriate, market-ready uses for this undeveloped property.

As depicted by the following map, the estimated 8.14-acre vacant parcel is situated in the southwest quadrant of the intersection of NE 152<sup>nd</sup> Avenue and NE 93<sup>rd</sup> Street in the Sifton neighborhood of unincorporated Clark County.<sup>2</sup>

While unincorporated, property on all sides of the subject site is within Vancouver's UGA. The City's UGA extends to about what would be NE 114<sup>th</sup> Street (on the west side of NE 152<sup>nd</sup> Avenue) and to about 109<sup>th</sup> (east side). Further north, a major stretch of NE 152<sup>nd</sup> lies outside of any UGA until about NE 170<sup>th</sup> Street (the southern edge of Battle Ground's UGA).

## Vicinity Area Land Use Designations

The predominant zoning of vicinity area properties to the south is R1-6 (with a 6,000 average square foot minimum lot size). Other zones within the immediate UGA area are A-Airport zoning for the field just to the south and PF-Public Facilities zoning for York Elementary School within the Evergreen School District (on the east side of NE 152<sup>nd</sup> Avenue).

To the north of the TSR property, predominant zoning is R1-10 (with a 10,000 square foot minimum lot size). Situated further removed are some relatively isolated zones of both greater residential density (R1-7.5, R-12 and R-18 zones) as well as a much lower density R-5 zone (with a 5-acre lot minimum but in an Urban Holding capacity outside the Vancouver UGA).

Starting at about NE 102<sup>nd</sup> Street on the west side of NE 152<sup>nd</sup> Avenue, there is a substantial Business Park (BP) designated area, with four tax parcels totaling nearly 120 acres not yet developed. This site is located approximately ½ mile north of the subject CC-zoned property.

Within this mapped area, the other major undeveloped CC designated sites include two sets of properties totaling 8.26 acres situated in the southeast quadrant of the intersection with Ward Road and NE 162<sup>nd</sup> Avenue. Other CC properties shown at 137<sup>th</sup> and Padden are partially developed including a vacated Albertson's grocery. A smaller undeveloped 2-acre site further north on NE 137<sup>th</sup> Avenue at NE 99<sup>th</sup> Street is indicated as undeveloped.

The primary commercial retail corridor serving this area is Fourth Plain Boulevard, situated 1.2 miles southwest of the subject property via NE 152<sup>nd</sup> Avenue and Ward Road. The 162<sup>nd</sup> Avenue corridor is less than 1 mile distant.

## Traffic Counts

Traffic counts on NE 152<sup>nd</sup> Avenue have increased in recent years but are well below what is desired for commercial retail frontage. Based on most recent RTC-compiled traffic count data, average daily traffic (ADT) on NE 152<sup>nd</sup> Avenue (at 99<sup>th</sup> Street) averages about 7,000 ADT.<sup>3</sup>

By comparison, 4<sup>th</sup> Plain Boulevard at Ward Road averages over 21,000 ADT. Further west, traffic reaches as high as nearly 41,000 ADT on 4<sup>th</sup> Plain just east of SR-500. Counts on the lesser traveled east leg of the Padden Parkway at 137<sup>th</sup> Avenue average over 15,000 ADT.<sup>4</sup> Relatively low traffic counts on 152<sup>nd</sup> are a key reason for the limited appeal that the subject site has had for commercial development – with the property remaining vacant despite CC zoning to date.

## MARKET NEED FOR COMMERCIAL USE

A primary purpose of this economic analysis is to evaluate the market need for commercial use. for commercial use, consistent with the current zoned designation of the site. This involves consideration of the existing land use designation, trade area population and options to meet resident retail service needs including review of the currently available retail inventory.

## Community Commercial Designation

**Clark County's** definition for the Community Commercial (CC) District includes a note that: "These commercial areas are intended to provide for the regular shopping and service needs for several adjacent neighborhoods." (UDC 40.230.010 (2)) Permitted uses also include multi-family/mixed use housing, together with some service activities permitted outright with others on a conditional basis.

The County's updated 2015-35 Comprehensive Plan offers a considerably more expansive description – also providing market criteria – for Community Commercial (CC) uses, as follows:

A commercial center area provides services to several neighborhoods in urban areas of Clark County and is implemented with the Community Commercial zone. New community commercial areas should generally be between five and 20 acres in size, spaced two to four miles from similar uses or zones, serve a population of 10,000 to 20,000, locate at minor or major arterial crossroads and serve a primary trade area between 2 to 4 miles.

The **City of Vancouver** offers a similar definition for its CC zone, stating: "The CC zoning district is designed to provide for retail goods and services purchased regularly by residents of several nearby neighborhoods." (VMC 20.430.020 (B)) Vancouver's code definition goes on to note that the zone also accommodates offices, institutions and housing.

The City's current 2011-2030 Comprehensive Plan discussion of the corresponding CC zone is a bit more narrowly tailored, planned for what are described as:

Medium scale commercial uses and services, typically serving more than one neighborhood. Designated areas are typically between 2 and 10 acres in size, located near collector or arterial street intersections.

In effect, Vancouver's plan envisions smaller site CC uses than is the case for Clark County. Unlike Clark County, the City's plan document provides no explicit reference to population sizing or distance spacing of the primary trade area.

## Trade Area Population

As depicted by the chart to the right, there are more than an estimated 14,000 residents living within one mile of the subject NE 152<sup>nd</sup> Avenue site. Area population essentially doubles to nearly 31,000 residents at a 2-mile distance, increasing to nearly 108,000

## Comparative Populations

Population Characteristic	Market Areas Considered			
	1 mile	2 mile	4 mile	Clark Co
2019 Population	14,200	30,800	107,900	487,600
Average Annual Growth Rate (AAGR):				
2000-10	2.9%	2.2%	2.7%	2.1%
2010-19	1.7%	2.4%	1.8%	1.5%

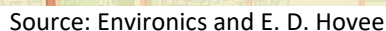
Source: Environics and E. D. Hovee.



While consistent with County spacing guidelines, population at the 2- and 4-mile distances from the NE 152<sup>nd</sup> Avenue site easily exceeds the population minimum requirements indicated by the Comprehensive Plan. The size of the area population to be served is such that substantially larger acreage together with better located and well-traveled sites are needed to competitively serve resident needs than is possible with the approximately 8-acre subject property.

The market reality is that residents of the NE 152<sup>nd</sup> Avenue corridor have substantial shopping opportunities available within an approximately 2-4 mile distance with existing or potential new retail development -- via more heavily traveled corridors to the south and west.

- **Within 1-mile**, resident incomes support an estimated \$250 million per year of retail sales. However, nearly half (47%) of what these residents would normally spend in Clark County occurs at retail stores located outside the 1-mile area.
- **Within a 2-mile area**, the proportion of retail leakage drops from 47% to just 2% as there is a substantially greater share of stores available to serve a more diverse array of the needs of local residents. Retail offerings particularly strong at the 2-mile distance include home furnishings, electronics/appliances, home improvement, health and personal care, apparel, and gas service station establishments.
- **With a 4-mile ring**, the competitive inventory of retail offerings is more than adequate to meet resident needs. Due to the presence of retailers with a county-wide clientele (as at Vancouver Mall), retail availability is better at the 4-mile radius than for Clark County in its entirety. The only minor shortfalls are found with auto sales, grocery (well served at a 5-mile distance) and specialty stores (county- or region-wide).



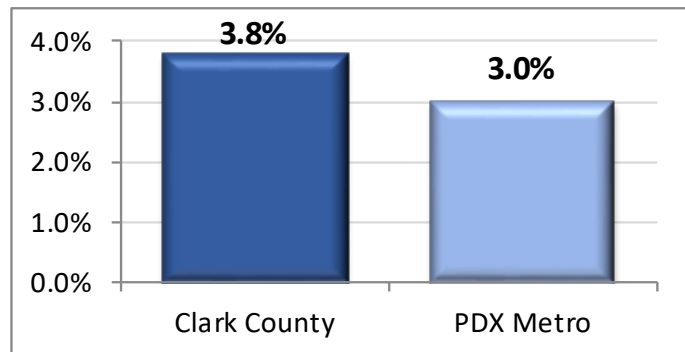
## Retail Inventory

As of year-end 2018, the Portland-Vancouver metro region has an estimated inventory of 110 million square feet of commercial retail space – over half of which (52%) comprises general including stand-alone or street retail. The other 48% consists of space in multi-tenant malls, power, strip/commercial and specialty centers.

With close to 19 million square feet, Clark County accounts for about 17% of the region's retail space. While space occupancy has improved in the last year, Clark County continues to experience a retail vacancy rate above that of the entire metro region.

Metro-wide, the demand (or net absorption) of retail space has been on a bit of a roller-coaster in recent years. After peaking at over 1.5 million square feet of net absorption in 2014, demand for space has dropped to a level ranging averaging about 850,000 +/- square feet per year from 2016-18.

**Retail Vacancy Rates (Q4-2018)**



Source: Kidder Mathews, *Real Estate Market Review*, 4<sup>th</sup> Quarter 2018.

After a year of negative space demand in 2017 (with new vacancies outpacing demand), Clark County experienced a rebound in retail absorption in 2018. However, when also adjusted for loss of some competitive space due to use conversion, net leasing equated to just over a 1% increase in occupied county-wide retail space this past year – a rate of increase that remains below the pace of population growth.

A less robust market for retail space has been affected by a combination of factors operating at the national, county-wide and NE Vancouver area markets:

- **Nationally**, commercial retail space demand is dampened by recent trends including an aging population, store consolidations and closures, and continued growth of e-commerce – all to the detriment of *brick and mortar* stores.
- **Clark County** retail demand continues to be affected by the combination of the Washington state sales tax and greater diversity of shopping opportunities on the Oregon side of the Columbia River – with in-county retail expenditures coming in at nearly 30% below what in-county resident incomes should support.
- **NE Vancouver** retail opportunities are further dampened by location at the edge of the UGA with less population density and lower traffic counts in the immediate 1-mile trade area than is the case with retail centers surrounded on all sides by urban residential development. Weak demand is also attested by lack of significant retail development interest for the subject site and slow development of other retail properties even toward the eastern end of the more traveled 4<sup>th</sup> Plain Boulevard corridor.

## Summary Observations – Commercial Need

To summarize, the following observations can be made as to the limited need for additional commercial development – whether in the trade area or, more specifically, at the subject site:

- **Resident needs for commercial retail and service uses are more than amply accommodated within 2-4/5 miles of the subject TSR property.** The large retail inventory at both major centers (such as Vancouver Mall) and on corridors (including 4<sup>th</sup> Plain Boulevard and NE 162<sup>nd</sup> Avenue) fully serve the Sifton area neighborhood without need for added commercial space – both at this time and for the reasonably foreseeable future based on current UGA boundaries. Adequacy of retail is also consistent with County Comprehensive Plan spacing of Community Commercial at 2-4 mile intervals.
- **The subject TSR site appears to be neither well situated nor adequately sized to accommodate a market-competitive commercial development.** Traffic counts are too low to be attractive to national and local businesses reliant on walk-in customers. At 8 acres, the site is also relatively small to attract investment capital for a planned neighborhood center which typically would be grocery anchored. If UGA boundaries are eventually expanded to encompass the rural area bisected by NE 152<sup>nd</sup> Avenue extending north to Battle Ground, any commercial use that does emerge likely will choose to locate further north, mid-way between the current incorporated boundaries of Vancouver and Battle Ground (for example, on the 152<sup>nd</sup> Avenue property currently designated but not yet developed for business park use).
- **Development of secondary sites like the TSR property is also impaired by the continuing shake-out of bricks and mortar retail both regionally and nationally.** Retail closures and mergers affecting national and regional chains from grocery to department, discount and specialty stores are continuing – in many cases requiring conversion of obsolete retail centers to non-retail uses. Growing market share of internet retailers coupled with the advances of new internet/retail platforms such as are provided by Amazon continue to threaten and require reconfiguration of existing retail with reduced demand for net new space. *Brick and mortar* stores that survive will be those situated at prime locations – with high traffic counts involving increasingly sophisticated developers and property managers. Secondary and tertiary sites such as the subject TSR property are likely to receive scant attention in the meantime.

The best evidence for limited market need is that the 8-acre TSR site remains vacant – even through a period of economic recovery and then renewed economic expansion since the recession of the last decade. However, prospects for community commercial development at this site can be expected to diminish rather than improve for reasons noted above.

If a commercial use does emerge in the near term for this site, it most likely will be for a low intensity development, exemplified by a mini-storage/RV-storage facility as has been previously proposed. This would have very limited on-site employment, would not serve the commercial shopping and service interests of the neighborhood, and would be incompatible with adjoining educational and residential development.

## MARKET FOR SINGLE-FAMILY RESIDENTIAL USE

This economic analysis now proceeds to discussion of the market need for single-family residential development – as the proposed use of the TSR site. Discussion involves more detailed consideration of the trade/vicinity area demographics of significance for housing development, followed by review of current sales patterns for Brush Prairie area housing demand in the context of the greater Clark County housing market. As with the commercial discussion, this review concludes with summary observations as to market need for added housing that could be addressed by development of the subject property.

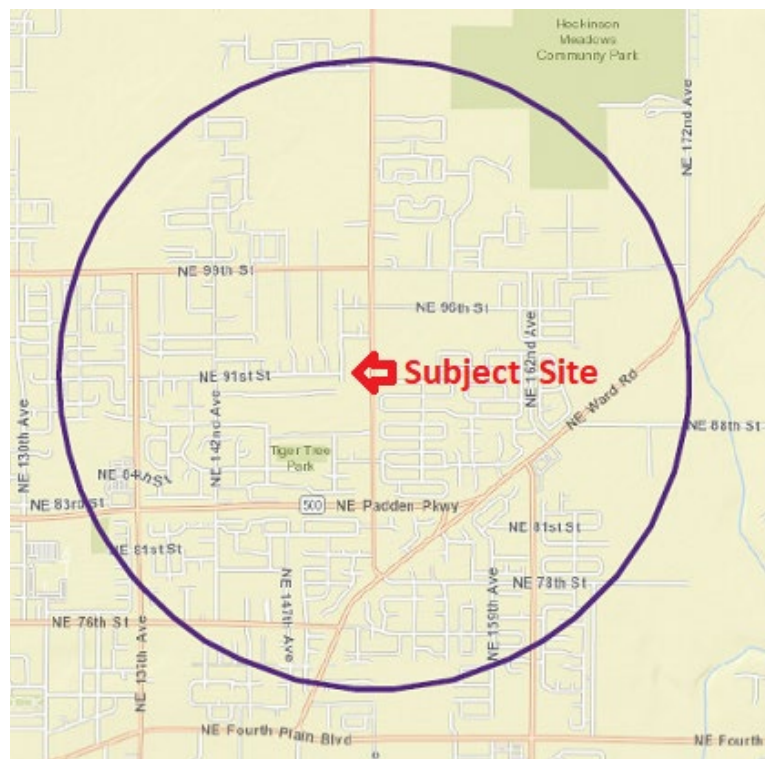
### Demographics of Residential Demand

As previously noted, three alternative trade areas have been identified and considered with this economic analysis – each based on a ring (or radius) of 1-, 2- and 4-mile distances from the subject property. For commercial purposes, a 2-4/5 mile ring proves most suitable as it best characterizes the geography from which most retail and service needs of area residents can be readily obtained.

For residential uses, the opposite approach – of focusing on a 1-mile trade area (or immediate neighborhood) – proves more useful. As depicted by the map to the right, this area extends to the south-east beyond NE Ward Road, to just west of NE 137<sup>th</sup> Avenue, and north to the Hockinson Meadows Community Park.

2019 population of this 1-mile area is estimated at 14,200 residents. Population growth was relatively rapid from 2000-10, averaging nearly 3% per year from – outstripping growth rates at the 2- and 4-mile distances as well as county-wide growth rates. From 2010-19, growth has slowed to a 1.7% annual rate, below that of the 2- and 4-mile distances.

#### 1-Mile Residential Market Area



Source: Environics and E. D. Hovee

The most immediate 1-mile neighborhood distance is associated with a demographic profile that is distinctly different from the rest of Clark County. The larger 2- and 4- mile geographies more closely align with the overall county-wide demographic.

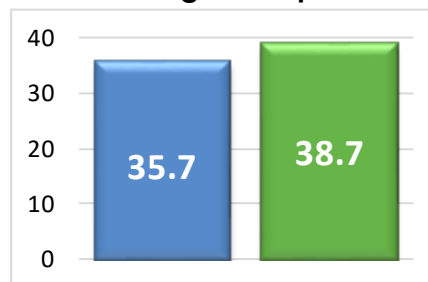


As depicted by the graphs to the right:

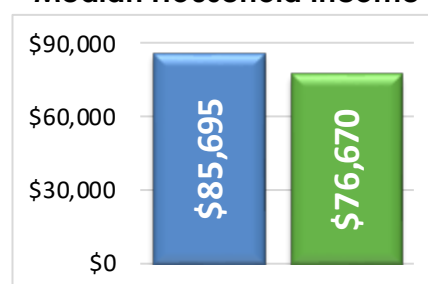
- **Median age** of residents within a 1-mile radius of the subject site is considerably younger than that of the full Clark County population. The immediate area has relatively high proportions of youth age 0-24 and then an above average proportion of younger to middle-age adults age 35-44. Average household size is also high at over 3.1 persons per unit versus less than 2.7 county-wide.
- **Median income** of 1-mile households is about 12% above that of the entire county. About two-thirds (67%) of local households have incomes ranging from \$50-\$150,000 per year as compared with just over half (53%) of Clark County residents. The county has a broader income spectrum – with more lower- and more higher-income households.
- Conversely, **median values of owner-occupied homes** within the 1-mile radius are 16% below those of the entire county. Despite higher incomes, affordability is constrained by larger families with higher proportions of children – also due to a clear preference for single family homes and home ownership. A more detailed discussion is provided on the following page.
- An estimated 93% of residences within 1-mile consist of **single-family, detached homes** – well above the county-wide single-family, detached rate of 67%. Accompanying this single-family preference is an overall 82% rate of homeownership – also above the county-wide average 66% homeownership rate.

## Comparative Demographics (2019)

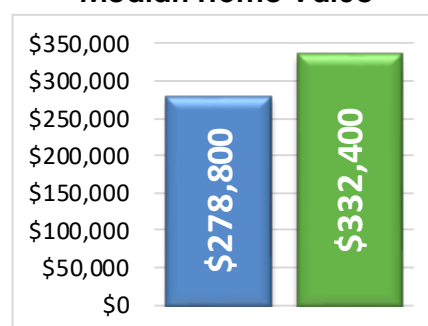
**Median Age of Population**



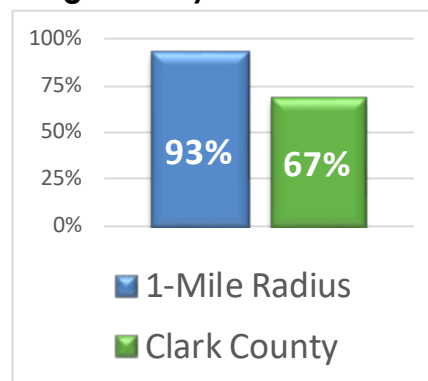
**Median Household Income**



**Median Home Value**



**% Single Family Detached Homes**



Source: U.S. Census and Environics.

## Housing Value Distribution

A more detailed comparison of the distribution of home values for this 1-mile area as compared to all of Clark County is provided by the two pie chart graphics to the right.

As shown by the graphs, nearly 2/3 (65%) of the homes within 1 mile of the subject site are valued at between \$200-\$400,000. This represents a more concentrated middle price point than is indicated by the 51% of owner-occupied homes in the same price range throughout all of Clark County.

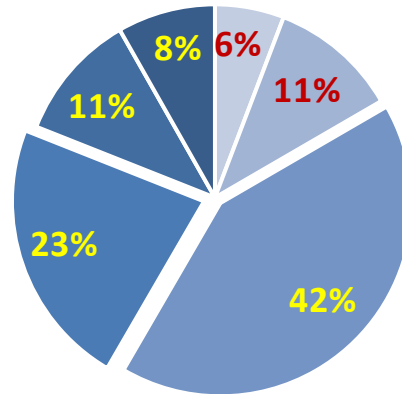
By comparison, only 19% of 1-mile homes are valued at over \$400,000, as compared with 35% of all homes county-wide.

This \$200-\$400,000 price range represents the target market for home construction at the subject site – if development can be delivered to the market within this price range. The \$200-\$300,000 portion of the range is increasingly difficult to achieve except for extremely efficient development projects on relatively small lots.

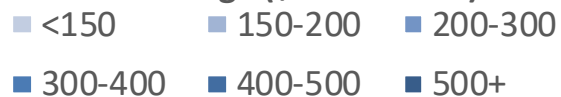
This is essentially a workforce housing market that the TSR Investment project would aim to achieve. It fits with the family and workforce orientation of the existing community, helping to meet a need that has yet to be fully addressed in Clark County.

## Comparative Home Value Distribution (2019)

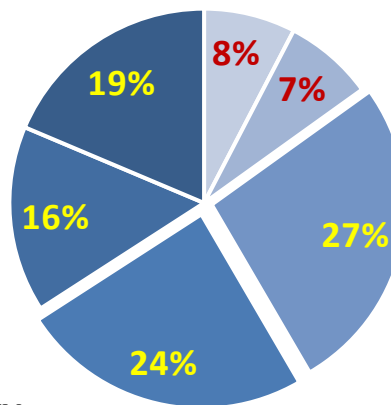
### 1-Mile Radius



### Price Range (\$ Thousands)



### Clark County



Source: Environics and E. D. Hovee.

## Other Features of the 1-Mile Demographic

Other features of the 1-mile demographic of note for this economic analysis include the following:

- A strong family orientation – with less than 20% of non-family households as compared with 30% of households county-wide.
- A proportion of household with children under age 18 that is 35% above the county-wide share.
- A somewhat more diverse population than is the case for all of Clark County, with an above average proportion of Latino/Hispanic residents.
- Higher levels of higher education than is the case county-wide – especially for residents with some college or an Associate’s degree.
- A workforce participation rate of 65% for persons age 16+ -- a rate that is 5% points above the county-wide civilian labor force participation rate of 60%.
- A higher proportion of blue-collar workers than is the case county-wide.
- Strong representation in core occupations of office/administrative support, construction/extraction, healthcare technician/support, maintenance/repair, production, transportation/material moving and personal care – which combined account for 62% of the 1-mile employed workforce as compared to 52% of the resident workforce throughout all of Clark County.

Taken together, the profile of the 1-mile immediate neighborhood is distinctively different from that of Clark County when considered on a county-wide basis. Residents of the immediate neighborhood are younger as well more ethnically diverse, work- and family-oriented than their counterparts county-wide. Neighborhood area residents have more children and are more likely to be single-family owners that is the case county-wide. Well educated and with above median household incomes, these residents are also looking for value in home ownership.

This is a pivotal workforce demographic that has proven challenging for residential development to cost-effectively serve recently due to escalating home prices. However, new residential construction that caters to this existing demographic can be expected to best fit the neighborhood and likely experience the best market response.

## Residential Sales Patterns

Residential sales data for 2018 provides a window into **current sales pricing** for homes in Clark County. As defined by RMLS including the Clark County Association of Realtors as an RMLS shareholder, the Clark County market is divided into 32 submarkets.

The subject TSR site is situated in what is termed as the Brush Prairie/Hockinson submarket. This Brush Prairie/ Hockinson submarket is defined as extending from NE 72<sup>nd</sup> on the west to about NE 242<sup>nd</sup> Avenue on the east, and from NE 199<sup>th</sup> street on the north to a combination of NE 83<sup>rd</sup> Street (west of NE 162<sup>nd</sup> Avenue) and 4<sup>th</sup> Plain Boulevard (east of 162<sup>nd</sup>) on the south.<sup>5</sup>

In 2018, this submarket accounted for nearly 10% of all closed residential sales transactions in Clark County. The share of sales is somewhat above the submarket’s 9% share of population county-wide – an indication of above-average market demand and turnover.

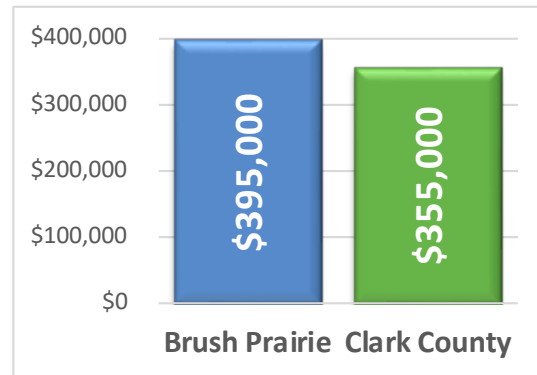
As illustrated by the graph to the right, a median sales price of \$395,000 was recorded for the Brush Prairie subarea in 2018. This is 11% above the median home price of \$355,000 county-wide.

However, the demographic information compiled with this economic analysis indicates that the immediate neighborhood (or 1-mile trade area) around the subject site supports a somewhat lower price point than the rest of this much larger Brush Prairie/Hockinson community. RMLS data indicates that the median sales price of the Five Corners/Sifton area immediately south is \$309,000 – 13% below the Clark County median and 22% below the Brush Prairie median sales price. This is more in line with demographic data for the 1-mile trade area which shows a median value (for all homes whether sold or not) that is 22% below the overall Brush Prairie area and 16% below the Clark County median.

Out of 32 RMLS-identified submarkets in Clark County, the Five Corners/Sifton area is the 6<sup>th</sup> least expensive. Only one submarket (NW Heights) experienced median sales price of less than \$300,000 in 2018; the next five range between \$300-\$309,000.

In effect, appropriate pricing of new residential homes will be of considerable importance for marketability and build-out of the subject TSR site. In 2018, the average time on market for all homes sold in Clark County was 48 days. Average time on market was more lengthy at 61 days for the higher priced homes of the Brush Prairie/Hockinson geography versus only 29 days for the adjoining lower-priced Sifton submarket. Out of 32 RMLS-defined submarkets in Clark County, it is also noted that Sifton experienced the 3<sup>rd</sup> lowest average time on market.

### Median Home Sales Prices (2018)



Source: RMLS, *Market Action*, December 2018.

## Site Development Plan

As illustrated by a preliminary site plan on the following page, the subject property is planned to be divided into about 43 buildable parcels. Parcel sizes are varied, ranging from less than 5,000-8,000 square feet in size (with one parcel at close to 12,500 square feet). Most are in the 5-6,000 square foot size range.

As proposed, the R1-6 zone is the second most dense single-family residential zone for unincorporated Clark County. If adopted, the zoning would match that of the residential area immediately to the south of the subject TSR site.

Zoned densities would be generally higher (with smaller lot sizes) than is possible with much of the other property in the unincorporated Brush Prairie/Hockinson area. Smaller lots will make it possible to develop housing at a cost and resulting price point more in line with current home sales pricing in the immediate neighborhood of the TSR property.<sup>6</sup>

## Preliminary Site Plan for 9000 NE 152<sup>nd</sup> Avenue Site (R1-6 Layout)



Source: AKS Engineering & Forestry, LLC for TSR Investments. Preliminary as of February 13, 2019

## Summary Observations – Residential Need

To summarize, the following observations can be made as to the strong need for additional affordable single-family residential development – nationally as well as county-wide and, most specifically, in conjunction with the subject site:

- **Even as the national housing market has shown signs of slowing, there continues to be as- yet unmet demand for affordable, for-sale workforce housing.** Rapidly appreciating housing prices coupled with higher mortgage interest rates are starting to take a toll on housing sales and development – especially at the mid-upper end of the market. With its year-end report, RMLS notes that 2018 market “ended the year with some cooling” – particularly on the Oregon side of the Columbia River. However, Clark County generally continues to show market strength. The moderate to middle portion of the market which was undersupplied in the early phases of recovery from the Great Recession reflects continued momentum – especially with continued job growth and now with wage gains being experienced. Locally as well as nationally, market time to sale tends to be lowest in areas with housing priced to be affordable for mid-income workforce.
- **Demographics of the neighborhood potentially served by the TSR site exemplify the type of affordable single-family residential product still needed in Clark County.** The 1-mile area surrounding the York Elementary school is younger, more ethnically diverse, work- and family-oriented than is the case generally throughout Clark County. With larger households and more children, this is a market grouping that still prefers and commands single-family ownership opportunity. If this demographic cannot be affordably served, Clark County may well feel the effects in terms of reduced appeal for employers requiring mid-level administrative, blue collar and service workforce.
- **The TSR proposal and site plan position the subject property to effectively serve the demographic most in need of added single-family, home-ownership opportunity.** The site is planned for higher density single family development than is possible in much of the rest of the Brush Prairie/Hockinson area. This proposed zone and site plan will better enable the developer to meet a price point affordable to mid-market workforce. The site is also attractive for residential development due to its adjacency to an elementary school and for proximity to a relative abundance of vicinity area commercial retail and services businesses near I-205, 4<sup>th</sup> Plain Boulevard and NE 162<sup>nd</sup> Avenue.

The best evidence of market need is the willingness of the property owner and developer to proceed through the process of a Comprehensive Plan amendment and accompanying zone change for this location near the edge of Vancouver’s UGA – followed by investment in a residential product that will serve a proven, growing and in-demand local market demographic.

## APPROPRIATENESS OF PROPOSED RE-DESIGNATION

As part of a Final Report issued by Clark County following a November 15, 2018 pre-application conference, County staff raised questions about the continued applicability of a community

commercial designation, due to “concern about the lack of commercial activity in the vicinity.” County staff also indicated a need to demonstrate how change to a residential zone would be appropriate – including how the change would be compatible with the neighborhood and surrounding area.

Due to the property’s inclusion in the Vancouver UGA, the City of Vancouver provided comments to Clark County via separate letter dated December 3, 2018. In this communication, the city recommended preparation of an “economic analysis demonstrating the property is not viable for long-term commercial development.” The City’s letter also suggested that if the property is designated for residential use, some portion of the site should be considered for a multi-family or denser single-family designation.

This economic analysis addresses these questions from three perspectives for the subject site:

- Current and future market viability of community commercial use
- Current and future market viability of residential use
- Economic and community benefits of proposed land use re-designation

Drawing from the foregoing analysis, this report addresses each of these topics in summary fashion as follows.

## **Market Viability of Community Commercial Use**

Staff comments from both County and City express concern that the lack of other commercially zoned properties in the immediate vicinity, e.g. within one-half mile as noted by the City. Our review concurs with this observation.

As indicated by the map on page 3 of this report, the closest commercially designated sites are the Padden Marketplace (at Padden Parkway and NE 137<sup>th</sup> Avenue) and Walgreen/Papa Murphy’s (at NE Ward Road and 162<sup>nd</sup> Avenue). Both sites are situated just over one mile (driving distance) from the subject 152<sup>nd</sup> property. While partially developed, both of these commercially designated areas are not built out but have vacant land or building availability.

As previously noted, there also is a 120-acre BP-zoned – and as yet undeveloped – property situated just ½ mile north of the subject TSR property on 152<sup>nd</sup> Avenue. Some retail, dining and entertainment uses are allowed on an outright permitted basis – subject to a limitation to not exceed 10% of total gross building area. Other more intensive commercial uses are not allowed or would be considered on a conditional use basis.

Even if the subject property were the only site, the designation of a particular property for commercial use does not necessarily mean that it will be market viable. The following factors clearly indicate that the subject NE 152<sup>nd</sup> Avenue site is unlikely to be marketable for significant commercial use – whether short-term or for the readily foreseeable future:

- **First and perhaps most significantly, most residents of Clark County shop for commercial goods and services at distances that are well over ½ -1 mile distant from their home.** As this analysis demonstrates, residents living in the Sifton neighborhood have greater access to a full range of commercial businesses than is typical of the *average* Clark County resident – at between two to 4-5 miles from their home. In effect, the local area is extremely well served and possibly oversaturated with retail to serve this NE Vancouver need at present. A 2-4 mile distance also fits with County policy.
- **Second, the absence of unmet demand is clearly indicated by the fact that the NE 152<sup>nd</sup> Avenue site has yet to develop – or even experience significant retail development interest.** The only apparent interest demonstrated to date is for a mini-storage and RV-storage facility which would offer little in the way of retail vitality, employment or day-to-day goods and services for neighborhood area residents. While a community retail development could pose conflicts when dropped into an area already developed as fully residential, the mini-storage approach would likely prove to be far more incompatible with adjoining single family and elementary school uses.
- **Third, if added neighborhood demand materializes with future population growth, it can be met at other more suitable locations within ½-1 mile of the subject property.** The Padden/137<sup>th</sup> and Ward/162<sup>nd</sup> sites have remaining space offering the appeal of higher traffic counts and with more urban residential development extending in all directions than the subject property which is more at the edge of the UGA.

If and when urban residential development begins to fill in the 152<sup>nd</sup> corridor between the Vancouver and Battle Ground UGAs, the BP property located just ½ mile north likely will emerge as more appealing for commercial use than the subject site for two reasons – location more central to existing *plus* future *new* housing, and capacity for providing a larger 20+/- acre more suitable and market-ready for a full service neighborhood or community commercial center. This could occur by re-zoning a portion of the 120-acre BP site for a master planned commercial retail and/or mixed-use development.

## Market Viability of Residential Use

Contrasted with maintenance of commercial zoning, there are three primary reasons noted in support of rezoning the subject 152<sup>nd</sup> Avenue site for residential development:

- **First and foremost, the site is well suited to capture the most underserved home-owner market currently in Clark County – first-time and moderate-income buyers.** As documented in this economic analysis, the majority (51%) of homeowners in Clark County are living in homes valued at \$200-\$400,000 – with another 15% at homes valued below \$200,000. This is a market that has been relatively difficult to build for in the Brush Prairie/Hockinson submarket – exemplified by a median price point of \$395,000 for new and used home sales in 2018 – essentially out of the range of 2/3 of the owner market. Due to smaller residential lot sizes (at R1-6 densities of 6,000 square feet per lot), it should be possible for TSR to serve this important slice of a strongly family- and workforce-oriented market for which demand continues to outpace supply.



- **Second, the subject 152<sup>nd</sup> Avenue property is particularly well-suited to serve this under-built workforce market.** The demographics of the 51% majority of Clark County owners who can afford to own in the \$200-\$400,000 price range fits the existing demographic of the 1-mile market surrounding the subject TSR property. A new development will fit well with and complement the existing character of Sifton neighborhood – especially the portion within a 1-mile radius of the York Elementary School. This close demographic fit should facilitate more rapid build-out and sales absorption than might otherwise be the case.

At R1-6 densities, the development as proposed also will serve as a transition point from similar R1-6 densities south of the subject site to R1-10 and other even lower density residential areas immediately north. Apartment uses would be out of character with predominantly single-family neighborhoods of the greater Sifton/Five Corners area. The proposed R1-6 zoning is consistent with pricing for mid-level priced single-family, owner-occupied housing – and at densities above what is currently experienced as one travels further to the edge of Vancouver’s UGA and beyond.

- **Third, the scale and market appeal of the TSR-planned development should fit well into the fabric of the existing neighborhood.** R1-6 development offers less traffic impact than a commercial development. The TSR project should serve to reinforce existing family-oriented neighborhood uses and character – also better assuring stability of neighborhood appeal and housing pricing for existing area residents.

## Economic & Community Benefits of Land Use Re-designation

The last section of this economic analysis addresses broader economic and community benefits of the proposed land use re-designation – from the perspective of adopted comprehensive plans for Clark County and the City of Vancouver. Of significance for this review is the relationship to the economic development elements of the County and City plan documents.

**Clark County Economic Development Policy.** The overall goal of the Chapter 9 economic development element to the Clark County Comprehensive plan is that:

*Clark County will grow as a high-wage economy that creates jobs at a rate in excess of population growth and an increasing percentage of the population will both **live and work** in Clark County. There will be an emphasis on emerging clusters that have a significant knowledge-based component. (emphasis in **bold face**)*

Of importance for this economic analysis are policies aimed at “viable growth” that will “improve the lifestyle of Clark County residents” and of assuring “an adequate supply of land suitable for compatible commercial and industrial development.” This includes policy guidance to “locate convenience-oriented retail and service developments adjacent to residential neighborhoods,” meaning a 2-4 mile distance between community commercial centers.

**City of Vancouver Economic Development Policy.** While the City of Vancouver does not have direct land use jurisdiction over the subject property, the City does have a long-term

interest as the site is part of the City's as-yet unincorporated Urban Growth Area (UGA). Economic development policies of the City are addressed "to increase the number of jobs for local residents and reduce the need for residents to commute to Oregon for work, shopping, and entertainment."

A City policy of specific importance for this proposed land use action is EC-5, as follows:

***EC-5 No net loss of employment capacity***

*Restrict zone changes or legislative land use approvals that would lessen long-term capacity for high-wage employment unless accompanied by other changes within the same review cycle that would compensate for the lost capacity or unless the proposed change would promote the long-term economic health of the city.*

**Benefits of Proposed Land Use Re-designation.** From both County and City perspectives, there are two overall questions to address for consistency with adopted Comprehensive Plan policies for economic development – effects on competitive commercial land inventories and on overall economic development of the Vancouver/Clark County area:

- **With re-designation as proposed to future residential use, there should be no material effect on the competitively viable inventory of commercial land.** As this analysis demonstrates, the Sifton area is more than adequately served with commercial retail goods and services. The subject NE 152<sup>nd</sup> property represents a 2<sup>nd</sup> or 3<sup>rd</sup> tier location for commercial use and in the event that need arises in the future, other sites within as little as ½-1 mile will prove more viable for commercial use. In effect, if the subject site is not viable for commercial development, conversion to a marketable use essentially means no net loss of commercial activity for the reasonably foreseeable future. Any future demand for added commercial is likely to land elsewhere.
- **Rezoning for the more marketable use of residential development can serve to improve the area's prospects for overall economic growth and vitality.** A review of land use literature coupled with land use analysis by E. D. Hovee indicates that economic development is increasingly linked to providing appropriately scaled, located, and priced workforce housing. Of special note is that the east Vancouver area has experienced more rapid employment than residential growth – partly as the result of over-zoning for employment uses versus added residential development. Without an adequate inventory and diversity of housing, it will be more difficult to attract labor force (especially in a tight labor market). Employers are increasingly unwilling to locate or expand in areas with inadequate and mis-priced housing. Consequently, providing more workforce housing targeted to the under-served, moderately priced single-family home ownership market will serve to enhance opportunities for continued, sustained higher wage employment opportunity for the immediate neighborhood and greater Clark County community.<sup>7</sup>

E. D. Hovee appreciates to provide this economic impact analysis on behalf of TSR Investments and is prepared to address questions regarding any aspect of this report.

## END NOTES

- <sup>1</sup> Information for this economic analysis has been obtained from sources deemed to be reliable. However, the accuracy of information from third party sources is not guaranteed and data is subject to change without notice. Findings and conclusions of this memorandum are those of the author and should not be construed as representing the opinion of any other party without their express consent, whether in whole or part.
- <sup>2</sup> The Clark County Assessor estimates the site to be 7.56 acres; TRS estimates 8.14 acres. All traffic counts are from most recent counts of the SW Washington Regional Transportation Council (RTC) as provided by the web site: <https://www.rtc.wa.gov/data/traffic/locations.asp>, as of February 2018.
- <sup>3</sup> Traffic counts for NE 152nd Avenue at 99<sup>th</sup> Street represent an average for the north and south legs of the intersection.
- <sup>4</sup> Traffic counts on the more traveled west leg of the Padden at 137<sup>th</sup> Avenue are higher at over 18,300 ADT.
- <sup>5</sup> The 1-mile trade area immediately surrounding the subject TSR site has a 2019 population estimated at 14,200 residents. The larger RMLS-defined Brush Prairie/Hockinson geography of which the 1-mile area is a part has a 2019 population of approximately 43,300. Median home value (whether recently on the market or not) is indicated as \$278,800 for the 1-mile radius area and at \$358,700 for the more encompassing Brush Prairie/Hockinson area. Data is per Environics/Claritas.
- <sup>6</sup> Per Table 3-4 of the *Vancouver Comprehensive Plan 2011-2030*, the median assessed value of a home built since 2000 was \$92,750 greater in an R1-10 than R1-6 zone and more than double the R1-6 value in the City's R-2 zone with 20,000 square foot minimum lot size. The R1-6 value was only \$2,000 more than the comparable R1-5 zoned value. The difference in market value as documented for 2011 between assessed values for R1-10 and R1-5 is also referred to in the City of Vancouver comments of December 3, 2018 regarding the TSR and another project application with the added City note that "the (value) difference is probably greater today."
- <sup>7</sup> A detailed discussion of the relationship between housing and economic development is provided by E. D. Hovee in a memorandum dated May 25, 2017 – provided as an Attachment D Economic Development Analysis to a Vancouver Planning Commission staff report of October 10, 2017 regarding the then-proposed change in comprehensive plan and zoning map designations by Fore Development Company for a 7.6 acre site located at 16516 SE Mill Plain Boulevard. Also included with a City Council memorandum dated October 24, 2017.

### **E.D. Hovee & Company, LLC**

This market evaluation has been prepared on behalf of the TSR Investments, LLC by the economic and development consulting firm E. D. Hovee & Company, LLC. Since 1984, E. D. Hovee has provided economic forecasting, market and feasibility studies for a range of residential, commercial and mixed-use development projects – primarily focused in the Portland-Vancouver metro region. Clients assisted have included:

- Public agencies including Clark County, the Cities of Vancouver, Ridgefield, Battle Ground and Vancouver, area school districts and port districts
- Non-profit organizations including the Columbia River Economic Development Council, Identity Clark County and Fort Vancouver National Trust
- Private development firms including the Al Angelo Company, Fore Development, Gramor Resources, Killian-Pacific, Property Management Group, and Real Vest

# NE 152nd Avenue Zone Change

Transportation Impact Study  
Clark County, Washington

**Date:**

May 16, 2019

**Prepared for:**

Gary Rademacher  
TSR Investments, LLC.

**Prepared by:**

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**LANCASTER**  
ENGINEERING



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## ***Executive Summary***

1. The proposed NE 152<sup>nd</sup> Avenue project will include the change in zoning of a single property (assessor parcel #154246000), located south of NE 93<sup>rd</sup> Street, east of NE 150<sup>th</sup> Avenue, and west of NE 152<sup>nd</sup> Avenue in unincorporated Clark County, Washington. Specifically, the property is proposed for a rezone from *Community Commercial* (CC) to *Urban Low Density Residential* (R1-6).
2. The trip generation calculations show that the net change in the trip generation potential of the site is projected to decrease by 71 morning peak hour trips, 165 evening peak hour trips, and 1,838 average weekday trips after the proposed rezone to R1-6.
3. Per a preliminary signal warrant analysis, warrants are projected to be met at the intersection of NE 99<sup>th</sup> Street at NE 152<sup>nd</sup> Avenue by the 2039 planning year, regardless of whether the proposed zone change is implemented.
4. The intersection of NE 99<sup>th</sup> Street at NE 152<sup>nd</sup> Avenue is projected to operate at LOS F under the 2039 planning horizon during both the morning and evening peak hours, regardless of whether the proposed zone change is implemented. However, with full development under the proposed R1-6 zoning, it is projected that overall intersection delays will decrease during both peak hours than if fully developed under the CC zoning.
5. The intersection of NE Padden Parkway at NE 152<sup>nd</sup> Avenue is currently operating acceptably per Clark County standards and is projected to continue operating acceptably by the 2039 planning horizon, regardless of whether the proposed zone change is implemented.
6. The roadway segment of NE 152<sup>nd</sup> Avenue between NE 99<sup>th</sup> Street and NE Padden Parkway is projected to operate with a v/c ratio in excess of 0.90 by the 2039 planning horizon with full development under the proposed zoning. Upon reviewing the County's Six-Year Transportation Improvement Program, this segment of NE 152<sup>nd</sup> Avenue is planned for improvements, which if accompanied by a change in the County's roadway designation to C-2cb, is expected to increase the vehicular capacity of the roadway. Additionally, it should be noted that with development under the proposed R1-6 zoning, volumes along NE 152<sup>nd</sup> Avenue are projected to decrease relative to full development under the existing CC zoning. All other studied roadway segments are projected to operate acceptably through the 2039 planning horizon with the proposed zone change implemented.
7. The proposed change in zoning for the subject property is not anticipated to cause any significant impacts to the transportation system upon implementation since it will not result in an increase in the peak hour or daily trip generation potential of the site. Accordingly, no significant traffic delays or congestion is expected to result due to the zone change.



## ***Project Description***

### ***Introduction***

The proposed NE 152<sup>nd</sup> Avenue project will include the change in zoning of a single property (assessor parcel #154246000), located south of NE 93<sup>rd</sup> Street, east of NE 150<sup>th</sup> Avenue, and west of NE 152<sup>nd</sup> Avenue in unincorporated Clark County, Washington. Specifically, the property is proposed for a rezone from *Community Commercial* (CC) to *Urban Low Density Residential* (R1-6). This report addresses the potential impacts of the proposed zone change on the nearby street system. Based on a review of the pre-application conference notes, dated November 15<sup>th</sup>, 2018, as well as input from Clark County staff, the report conducts the following analyses for present day and future conditions:

- Compare the trip generation potential of the site between existing and proposed conditions;
- Determine the modal split of potential site trips generated; and
- Evaluate site trip distribution.

Additionally, Clark County's Unified Development Code sections 40.350.020.G.1.a-d will be addressed in accordance with code section 40.560.010.G.5, whereby analyses will be conducted for the roadway segment of NE 152<sup>nd</sup> Avenue and for following two intersections:

1. NE 99<sup>th</sup> Street at NE 152<sup>nd</sup> Avenue; and
2. NE Padden Parkway at NE 152<sup>nd</sup> Avenue.

The purpose of this study is to determine whether the transportation system within the vicinity of the site is capable of supporting potential development of the site under R1-6 zoning and to determine any mitigation that may be necessary to do so. Detailed information on traffic counts and trip generation calculations is included in the appendix to this report.

### ***Location Description***

The project site is located south of NE 93<sup>rd</sup> Street, east of NE 150<sup>th</sup> Avenue, and west of NE 152<sup>nd</sup> Avenue in unincorporated Clark County, Washington. The subject site is located within a developing residential area of the County, with single-family houses to the north, southeast, and west; undeveloped land to the south; and York Elementary School to the northeast. The site consists of a single property (assessor parcel #154246000) which encompasses an approximate total of 7.56 acres and is currently undeveloped.

### ***Vicinity Streets***

The proposed development is expected to impact five roadways near the site. Table 1 provides a description of each of the vicinity roadways.



**Table 1: Vicinity Roadway Descriptions**

Roadway	Jurisdiction	Functional Classification	Cross-Section	Speed	On-street Parking	Bicycle Lanes	Curbs	Sidewalks
NE 99th Street	Clark County	Minor Arterial	2 to 3 Lanes	40 mph Posted	Not Permitted	Partial Both Sides	Partial Both Sides	Partial Both Sides
NE 93rd Street	Clark County	Local Street	2 Lanes	25 mph Posted	Permitted North Side	None	North Side	North Side
NE Padden Parkway	WSDOT	State Route	3 to 5 Lanes	40/50 mph Posted	Not Permitted	Partial Both Sides	Both Sides	Partial Both Sides
NE 150th Avenue	Clark County	Local Street	2 Lanes	25 mph Statutory	Partially Permitted	None	Partial Both Sides	Partial Both Sides
NE 152nd Avenue	Clark County	Collector	2 Lanes	35 mph Posted	Partially Permitted	Partial Both Sides	Partial Both Sides	Partial Both Sides

Notes: Functional classification based on Clark County 2016 Arterial Atlas.

Statutory speed based on Washington State Code Section RCW 46.61.400.

### Study Intersections

A majority of site trips generated by the proposed development are expected to impact two nearby intersections of significance. A summarized description of these intersections is presented in Table 2.

**Table 2: Study Intersection Descriptions**

Number	Name	Geometry	Traffic Control	Phasing/Stopped Approaches
1	NE 99th Street at NE 152nd	Four-Legged	Stop-Controlled	All-Way Stop-Controlled
2	NE Padden Parkway at NE 152nd Avenue	Four-Legged	Traffic Signal	Permitted/Protected N/S Left-turns, FYA E/W Left-turns

Note: Flashing-Yellow-Arrow phasing is denoted at FYA.

A vicinity map displaying the project site, vicinity streets, and the study intersections with their associated lane configurations is shown in Figure 1 on page 5.



### *Transit*

The project site is located near a single transit line that has stops along NE 152<sup>nd</sup> Avenue, the nearest being adjacent to the site at the intersection of NE 91<sup>st</sup> Street at NE 152<sup>nd</sup> Avenue. *Route #72 – Orchards*, provides service between the Orchards Neighborhood and Vancouver Mall Transit Center, with notable stops near Kaiser Clinic, Heritage High School, Mabry Center, and Covington Middle School. Weekday service is scheduled from approximately 5:00 AM and 9:45 PM and has headways of approximately 30 to 60 minutes. Saturday service is scheduled from approximately 8:00 AM to 7:45 PM and has headways of approximately 60 minutes. Sunday and Holiday service is scheduled from approximately 9:00 AM to 5:45 PM and has headways of approximately 60 minutes.

# LEGEND

○ STUDY INTERSECTION

⊥ STOP SIGN

⬆️⬆️⬆️ TRAFFIC SIGNAL

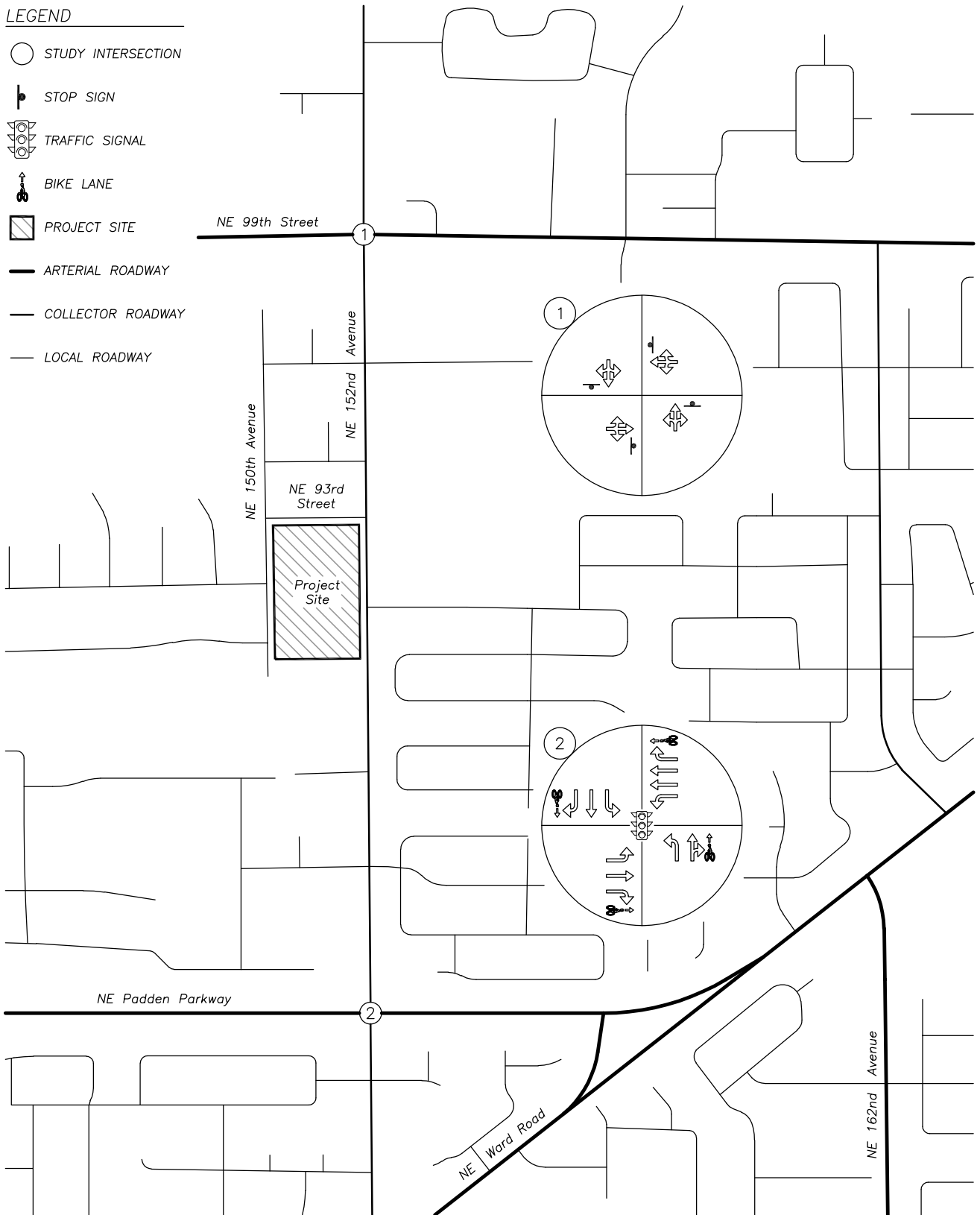
🚲 BIKE LANE

▨ PROJECT SITE

— ARTERIAL ROADWAY

— COLLECTOR ROADWAY

— LOCAL ROADWAY



VICINITY MAP



FIGURE 1

PAGE 5



## Site Trips

### Trip Generation

The subject site is currently zoned as *Community Commercial* (CC) and is proposed for a change in zoning to *Urban Low Residential* (R1-6). To determine the potential impacts of the proposed zone change, reasonable “worst-case” development scenarios for the existing and proposed zones were determined utilizing data for the most traffic-intensive uses permitted within each zone.

#### Existing CC Zone

To determine a reasonable “worst-case” development scenario under the existing CC zone, Clark County’s Unified Development Code 40.230.010 *Commercial Districts* (NC, CC, GC) was referenced and compared to a variety of land uses provided within the *Trip Generation Manual*<sup>1</sup>. Based on an assessment of permitted uses under the CC zone that could reasonably be developed within the 7.56-acre (329,300 square foot) lot, data from the following two land uses were referenced and compared to one another based on the square-footage of gross building floor area:

- *Office Park* (750); and
- *Shopping Center* (820).

Upon reviewing Clark County Codes 40.320 *Landscaping and Screening*, 40.230.010 *Commercial Districts* (NC, CC, GC), and 40.200 *Land Use Districts – General Provisions*, there are no specific design criteria regarding the minimum or maximum floor area ratio (FAR) or lot coverages for uses within a CC zone. Therefore, it is assumed that a reasonable maximum total building footprint for either an *Office Park* or *Shopping Center* would cover approximately 30 percent of the developable area. The remaining developable area is considered as space necessary to accommodate parking, street right-of-way improvements, public space, landscaping, etc. Based on this assumption, a reasonable “worst-case” development scenario under the existing zoning may include the construction of approximately 98,800 square feet of either *Office Park* or *Shopping Center*.

Of the two analyzed land uses, land use code 820 consists of retail uses, which generally attract pass-by and diverted trips. Pass-by trips are trips that leave the adjacent roadway to patronize a land use and then continue in their original direction of travel. Similar to pass-by trips, diverted trips are trips that divert from nearby roadways not adjacent to the site to patronize a land use before continuing to their original destination. Pass-by trips do not add additional vehicles to the surrounding transportation system; however, they do add additional turning movements at site access intersections. Diverted trips may add turning movements at both site access and other nearby intersections.

Pass-by and diverted trips rates were determined using data provided within the *Trip Generation Handbook*<sup>2</sup>. Data from land use code 820 was used to determine an evening peak hour pass-by rate. It is assumed that the

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<sup>1</sup> Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 10<sup>th</sup> Edition, 2017.

<sup>2</sup> Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 3<sup>rd</sup> Edition, 2014.



morning peak hour and weekday rates would approximately match the evening peak hour rate. For the purposes of this analysis, diverted trips were treated as primary trips.

Table 3 presents a comparison of trip generation for each land use which was analyzed under the existing CC zone.

**Table 3: Existing CC Zone Trip Generation Comparison**

	ITE Code	Size & Rate	Morning Peak Hour			Evening Peak Hour			Weekday Total
			Enter	Exit	Total	Enter	Exit	Total	
Office Park	750	98,800 sq.ft.	126	16	142	7	99	106	1,094
Shopping Center	820	98,800 sq.ft.	58	35	93	180	196	376	3,730
<i>Pass-by Trips</i>	<i>820</i>	<i>34%</i>	<i>16</i>	<i>16</i>	<i>32</i>	<i>64</i>	<i>64</i>	<i>128</i>	<i>1,268</i>
Primary Trips			42	19	61	116	132	248	2,462

Based on the trip generation analysis, as detailed in Table 3, the *Office Park* is projected to generate the highest number of trips during the morning peak hour while the *Shopping Center* generates the highest number of trips during the evening peak hour and over an average weekday. Since either use could reasonably be developed within the site, the reasonable “worst-case” development scenario was analyzed utilizing data from each of the potential land uses.

### *Proposed R1-6 Zone*

To determine a reasonable “worst-case” development scenario under the proposed R1-6 zoning, Clark County’s Unified Development Code *40.220.010 Single-Family Residential Districts (R1-20, R1-10, R1-7.5, R1-6 and R1-5)* was referenced and compared to a variety of land uses provided within the *Trip Generation Manual*. Based on an assessment of permitted uses under the R1-6 zone, data from land use codes 210, *Single-Family Detached Housing*, and 565, *Day Care Center*, was used to estimate the proposed trip generation potential of the site based on the number of dwelling units and the square-footage of gross building floor area, respectively.

To determine a dwelling unit count within the site, a maximum density rate of 5.8 dwelling units per acre within a R1-6 zone was referenced from *Table 40.220.010-4 Density Transfers*. Based on a total area of 7.56 acres, the site may be developed with up to 43 dwelling units. To estimate a reasonable size for a day care facility, it is assumed that a single-family house may be converted and utilized for day care services. Accordingly, a reasonably sized day care that could be developed would be approximately 3,000 square feet. Since one house could be converted to a day care facility, the net dwelling unit count would be reduced to 42 houses.

### *Analysis Results*

The trip generation calculations show that under the existing CC zone, the subject site could reasonably generate up to 142 morning peak hour trips, 248 net new evening peak hour trips, and 2,462 net new average



weekday trips. Under the proposed R1-6 zone, the site could reasonably generate up to 64 morning peak hour trips, 75 evening peak hour trips, and 538 average weekday trips. Accordingly, the net change in the trip generation potential of the site after the proposed rezone is projected to decrease by 78 morning peak hour trips, 173 evening peak hour trips, and 1,924 average weekday trips.

The trip generation estimates are summarized in Table 4 below. Detailed trip generation calculations are included in the technical appendix to this report.

**Table 4: Trip Generation Summary**

	ITE Code	Size	Morning Peak Hour			Evening Peak Hour			Weekday Total
			Enter	Exit	Total	Enter	Exit	Total	
Existing CC Zone									
Office Park	750	98,800 sq.ft.	126	16	142	-	-	-	-
Shopping Center	820	98,800 sq.ft.	-	-	-	116	132	248	2,462
Maximum Potential of Trips Generated			126	16	142	116	132	248	2,462
Proposed R1-6 Zone									
Single-Family Housing	210	42 units	8	23	31	26	16	42	396
Day Care Center	565	3,000 sq.ft.	17	16	33	16	17	33	142
Total Trips			25	39	64	42	33	75	538
Net Change in Site Trip Generation Potential			-101	23	-78	-74	-99	-173	-1,924

Since the proposed zone change will result in a net decrease in the trip generation potential of the site, the zone change may be considered a down-zone with regard to traffic intensity. Accordingly, the proposed zone change will have no significant impact on the operation of area streets and intersections since it does not result in an increase in the peak hour or daily trip generation potential of the site.

### ***Trip Distribution***

The trip distribution of the proposed development was derived using the Southwest Washington Regional Transportation Council (RTC) transportation system model. The project site is located adjacent to Transportation Analysis Zone (TAZ) #357 for which a select zone analysis was run to determine the distribution of site trips entering and exiting the zone.



Using information from the RTC model, the following trip distribution is projected for existing year 2019 conditions and future year 2039 conditions:

#### Year 2019 Existing Conditions

- Approximately 64 percent of site trips will travel to/from the south along NE 152<sup>nd</sup> Avenue;
- Approximately 18 percent of site trips will travel to/from the west along NE Padden Parkway;
- Approximately 7 percent of site trips will travel to/from the north along NE 152<sup>nd</sup> Avenue;
- Approximately 5 percent of site trips will travel to/from the east along NE Padden Parkway;
- Approximately 3 percent of site trips will travel to/from the west along NE 99<sup>th</sup> Street;
- Approximately 1 percent of site trips will travel to/from the east along NE 99<sup>th</sup> Street; and
- Approximately 2 percent of site trips will travel to/from locales within the immediate site vicinity.

#### Year 2039 Future Conditions

- Approximately 56 percent of site trips will travel to/from the south along NE 152<sup>nd</sup> Avenue;
- Approximately 15 percent of site trips will travel to/from the west along NE Padden Parkway;
- Approximately 11 percent of site trips will travel to/from the north along NE 152<sup>nd</sup> Avenue;
- Approximately 8 percent of site trips will travel to/from the east along NE Padden Parkway;
- Approximately 7 percent of site trips will travel to/from the west along NE 99<sup>th</sup> Street;
- Approximately 1 percent of site trips will travel to/from the east along NE 99<sup>th</sup> Street; and
- Approximately 2 percent of site trips will travel to/from locales within the immediate site vicinity.

The trip distribution and assignment for the site trips generated by the proposed development during the morning and evening peak hours are shown in Figure 2 on page 11 and Figure 3 on page 12, respectively.



## ***Traffic Volumes***

### ***Existing Conditions***

Traffic counts were conducted at the study intersections on Thursday, May 9<sup>th</sup>, 2019, from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM. Data was used from each intersection's respective morning and evening peak hours.

### ***Background Conditions***

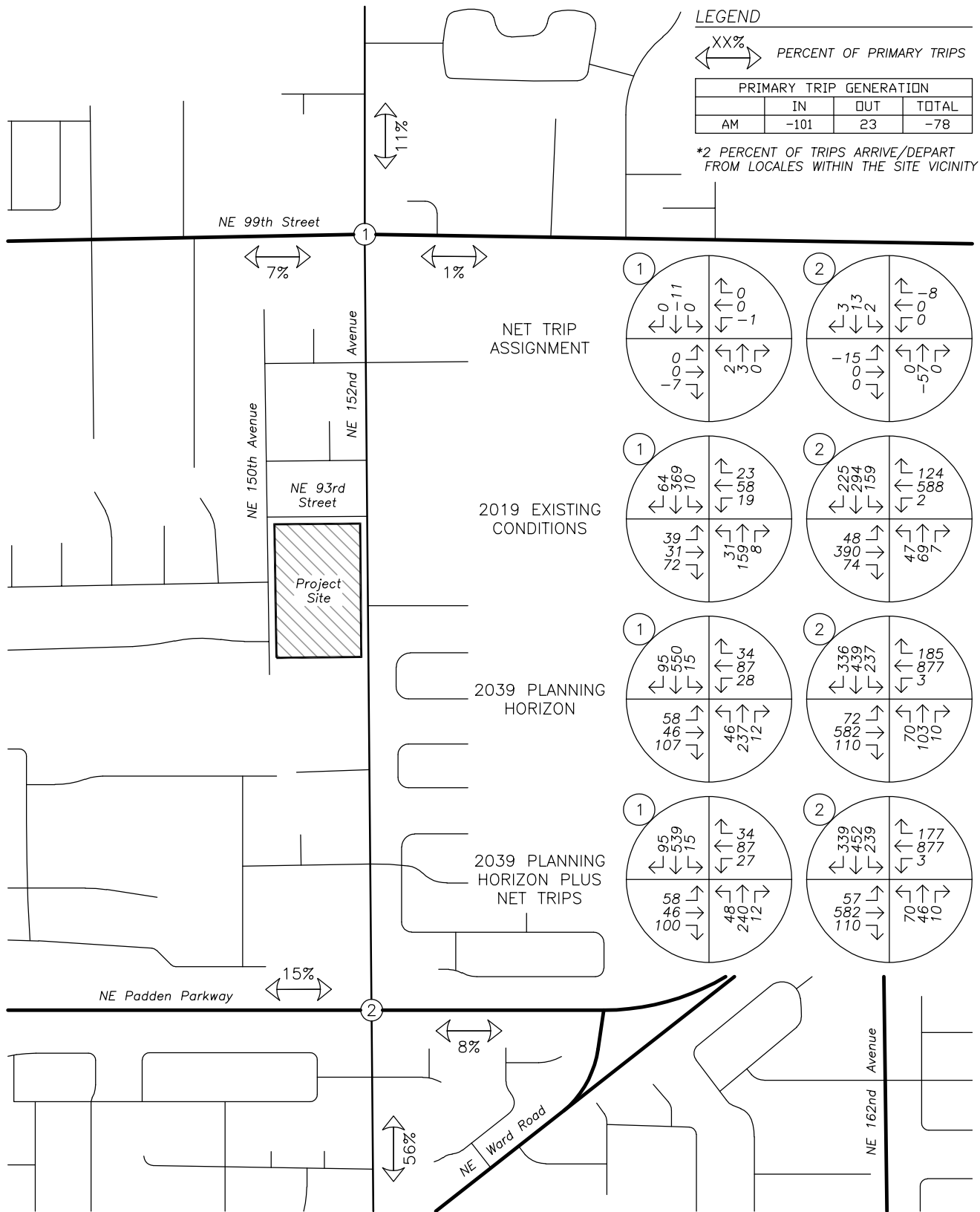
To provide analysis of the impact of the proposed development on the nearby transportation facilities, an estimate of future traffic volumes is required. In order to approximate the future year 2039 traffic volumes along NE 152<sup>nd</sup> Avenue and at the study intersections, an average linear growth rate of 2.458 percent per year was calculated within the site vicinity utilizing year 2010 and year 2035 roadway volume data provided by the Southwest Washington RTC. The growth rate was applied to the existing year 2019 traffic volumes over a 20-year period to project year 2039 traffic volumes.

### ***Buildout Conditions***

The net change in potential peak hour trips calculated to be generated by the proposed zone change, as described earlier within the *Site Trips* section, were added to the projected year 2039 planning horizon traffic volumes to obtain the expected year 2039 planning horizon plus zone change volumes.

Figure 2 on page 11 and Figure 3 on page 12 show the existing and projected 2039 planning horizon traffic volumes, with and without the proposed zone change, at the study intersections during the morning and evening peak hours, respectively.



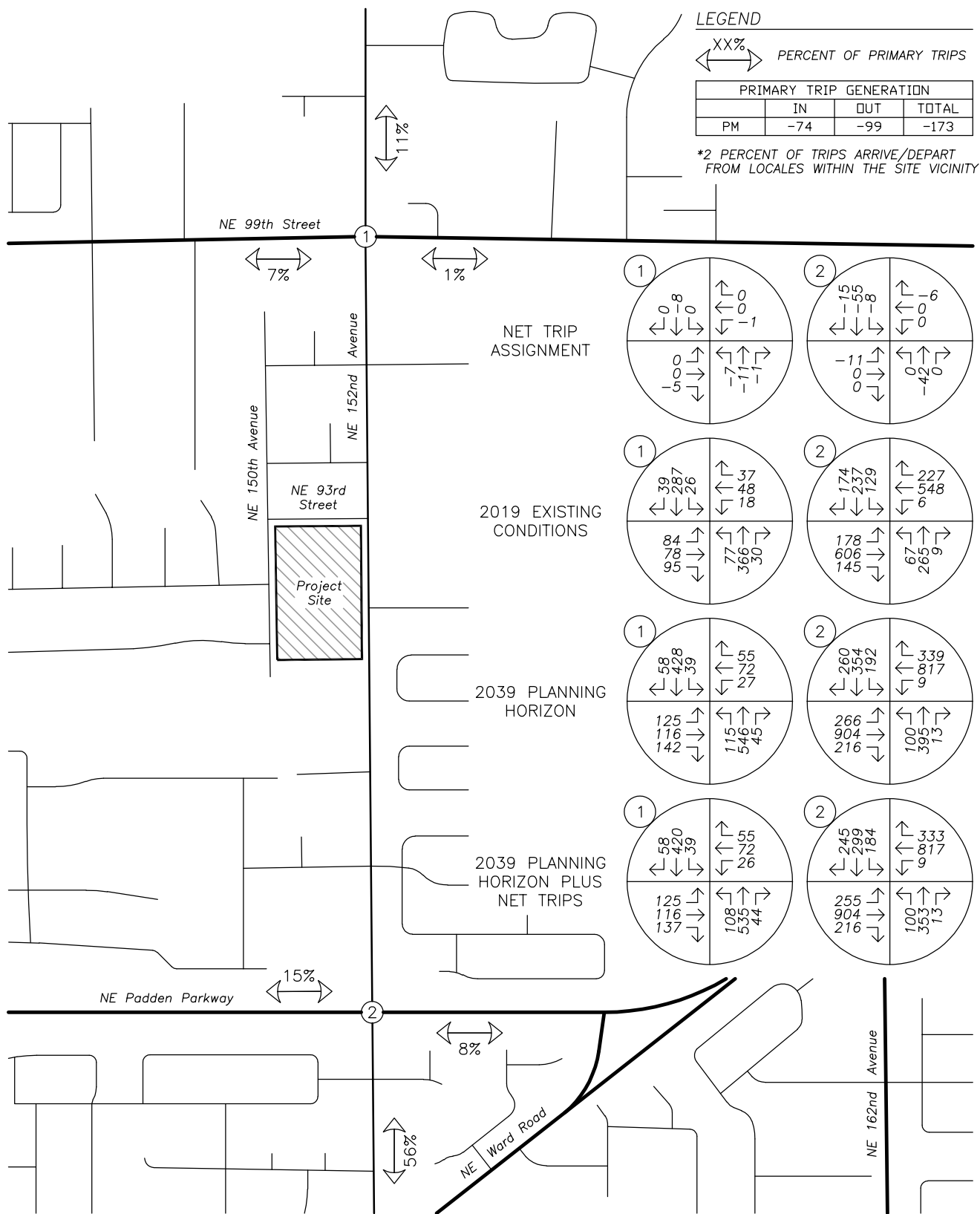


TRAFFIC VOLUMES & SITE TRIP ASSIGNMENT  
2019 Existing & 2039 Planning Horizon Conditions  
AM Peak Hour



FIGURE  
2

PAGE  
11



**TRAFFIC VOLUMES & SITE TRIP ASSIGNMENT**  
 2019 Existing & 2039 Planning Horizon Conditions  
 PM Peak Hour



**FIGURE 3**

**PAGE 12**



## ***Safety Analysis***

### ***Crash Data Analysis***

Using data obtained from the Washington Department of Transportation's (WSDOT) Crash Data and Reporting Branch, a review of the most recent available five years of crash history (January 2014 to December 2018) at the study intersections was performed. The crash data was evaluated based on the number of crashes, the type of collisions, the severity of the collisions, and the resulting crash rate for the intersection. Crash rates provide the ability to compare safety risks at different intersections by accounting for both the number of crashes that have occurred during the study period and the number of vehicles that typically travel through the intersection. Crash rates were calculated using the common assumption that traffic counted during the evening peak period represents approximately 10 percent of the annual average daily traffic (AADT) at the intersection. Crash rates in excess of 1.0 crashes per million entering vehicles (CMEV) may be indicative of design deficiencies and therefore require a need for further investigation and possible mitigation.

With regard to crash severity, WSDOT classifies crashes in the following categories:

- *No Apparent Injury* (NA);
- *Possible Injury* (P);
- *Suspected Minor Injury* (SM);
- *Suspected Serious Injury* (SS); and
- Fatality or Fatal Injury.

Table 5 provides a summary of crash types while Table 6 summarizes crash severities and rates for each of the study intersections. Crash data is included in the technical appendix to this report.



Table 5: Crash Type Summary

	Intersection	Crash Type						Total Crashes
		Rear End	Turn	Angle	Side Swipe	Ped/Bike	Fixed Object	
1	NE 99th Street at NE 152nd Avenue	1	3	5	0	0	0	9
2	NE Padden Parkway at NE 152nd Avenue	2	18	3	1	0	1	25

Table 6: Crash Severity and Rate Summary

	Intersection	Crash Severity						Total Crashes	AADT	Crash Rate
		NA	P	SM	SS	Fatal	Unknown			
1	NE 99th Street at NE 152nd Avenue	8	1	0	0	0	0	9	11,850	0.42
2	NE Padden Parkway at NE 152nd Avenue	8	12	5	0	0	0	25	25,910	0.53

Based on the most recent five years of crash data, no significant trends or crash patterns were identified at any of the study intersections that are indicative of safety concerns.

### *Preliminary Signal Warrant Analysis*

Preliminary traffic signal warrants were examined for the unsignalized intersection of NE 99<sup>th</sup> Street at NE 152<sup>nd</sup> Avenue to determine whether the installation of a new traffic signal will be warranted at the intersection. Based on the preliminary analysis, traffic signal warrants are projected to be met at the intersection by the 2039 planning year, regardless of whether the proposed zone change is implemented.



## Operational Analysis

### Intersection Capacity Analysis

A capacity and delay analysis were conducted for each of the study intersections per the signalized and unsignalized intersection analysis methodologies in the *Highway Capacity Manual*<sup>3</sup> (HCM). Intersections are generally evaluated based on the average control delay experienced by vehicles and are assigned a grade according to their operation. The level of service (LOS) of an intersection can range from LOS A, which indicates very little or no delay experienced by vehicles, to LOS F, which indicates a high degree of congestion and delay. The volume-to-capacity (v/c) ratio is a measure that compares the traffic volumes (demand) against the available capacity of an intersection.

According to Clark County's Unified Development Code, Title 40.350 – *Transportation and Circulation*, Clark County's performance standards require unsignalized intersections to operate at LOS E or better unless traffic signal warrants are met. If traffic signal warrants are met, the intersection is required to operate at LOS D or better. Individual movements at signalized intersections of regional significance are to operate with average delays of less than two cycle lengths or 240 seconds, whichever is less.

The v/c, delay, and LOS results of the capacity analysis are shown in Table 7 for the morning and evening peak hours. Detailed calculations as well as tables showing the relationship between delay and LOS are included in the appendix to this report.

**Table 7: Intersection Capacity Analysis Summary**

	Morning Peak Hour			Evening Peak Hour		
	LOS	Delay (s)	v/c	LOS	Delay (s)	v/c
<b>1. NE 99th Street at NE 152nd Avenue</b>						
2019 Existing Conditions	B	15	-	C	21	-
2039 Planning Horizon	<b>F</b>	<b>78</b>	-	<b>F</b>	<b>143</b>	-
2039 Planning Horizon plus Zone Change	<b>F</b>	<b>72</b>	-	<b>F</b>	<b>132</b>	-
<b>2. NE Padden Parkway at NE 152nd Avenue</b>						
2019 Existing Conditions	B	17	-	B	19	-
2039 Planning Horizon	C	28	-	D	46	-
2039 Planning Horizon plus Zone Change	C	29	-	D	40	-

**BOLDED** results indicates operation exceeds acceptable jurisdictional standards.

<sup>3</sup> Transportation Research Board, *Highway Capacity Manual*, 6<sup>th</sup> Edition, 2016.



Based on the results of the operational analysis, the intersection of NE 99<sup>th</sup> Street at NE 152<sup>nd</sup> Avenue is projected to operate at LOS F under the 2039 planning horizon during both the morning and evening peak hours, regardless of whether the proposed zone change is implemented. However, with full development under the proposed zone change, it is projected that overall intersection delays will decrease during both peak hours than if fully developed under the existing zoning.

The intersection of NE Padden Parkway at NE 152<sup>nd</sup> Avenue is currently operating acceptably per Clark County standards and is projected to continue operating acceptably by the 2039 planning horizon, regardless of whether the proposed zone change is implemented.

Based on the intersection capacity analysis, no operational mitigation is necessary or recommended in association with the proposed change in zoning.

### *Roadway Capacity Analysis*

In accordance with Clark County Code Section 40.350.020(G) – *Level of Service Standards*, a capacity analysis was conducted for the roadway segment of NE 152<sup>nd</sup> Avenue near the site. The code section requires all collector and arterial roadway segments located within the Vancouver Urban Growth Area, but outside Vancouver city limits, as well as state highways of regional significance to have a maximum v/c ratio no greater than 0.90, measured independently for each direction of travel. Roadway volumes were based on the 2039 planning horizon plus zone change volumes during the morning and evening peak hours. Roadway capacities were determined per Table 40.350.020-1 of the Clark County code based on the County roadway designation and classification.

The results of the roadway capacity analysis for the projected 2039 planning horizon traffic conditions with full development under the proposed zoning are shown in Table 8. The maximum calculated v/c ratio along each roadway segment is reported for both the morning and evening peak hours.

**Table 8: Roadway Capacity Analysis Summary**

	Segment		Classification	Capacity (veh/hr)	Volume/Capacity	
	From	To			AM	PM
NE 152nd Avenue	North	NE 99th Street	C-2	800	0.81	0.89
	NE 99th Street	NE Padden Parkway	C-2	800	<b>1.29</b>	<b>1.18</b>
	NE Padden Parkway	South	C-2	800	0.71	0.66

**BOLDED** text indicates a roadway capacity in excess of 0.90.

Based on the detailed analysis, the roadway segment of NE 152<sup>nd</sup> Avenue between NE 99<sup>th</sup> Street and NE Padden Parkway is projected to operate with a v/c ratio in excess of 0.90 by the 2039 planning horizon with full development under the proposed zoning. Upon reviewing the County's Six-Year Transportation Improvement Program (TIP), the segment of NE 152<sup>nd</sup> Avenue between NE 99<sup>th</sup> Street and NE Padden Parkway is planned for improvements inclusive of adding continuous sidewalks and bicycle lanes (Project #5). If accompanied by a change in the County's roadway designation from C-2 to C-2cb, the single direction capacity of the roadway is expected to increase. Additionally, it should be noted that with development under the proposed zoning, volumes along NE 152<sup>nd</sup> Avenue are projected to decrease relative to full development under the existing zoning. All other studied roadway segments are projected to operate acceptably through the 2039 planning horizon with the proposed zone change implemented.

### ***Modal Split***

The surrounding site vicinity provides a variety of multi-modal opportunities for travel to/from the site. Under existing conditions, sidewalks are provided along the north side of NE 93<sup>rd</sup> Street; along both sides of NE 150<sup>th</sup> Avenue and NE 152<sup>nd</sup> Avenue north of NE 93<sup>rd</sup> Street; along the west side of NE 150<sup>th</sup> Avenue south of NE 93<sup>rd</sup> Street; and intermittently along both sides of NE 152<sup>nd</sup> Avenue south of NE 93<sup>rd</sup> Street. Bicycle lanes are intermittently provided along NE 152<sup>nd</sup> Avenue, while low traffic volumes and travel speeds along local streets, such as NE 150<sup>th</sup> Avenue and NE 93<sup>rd</sup> Street, allow bicyclist the ability to safely and comfortably share the roadway with motor vehicle traffic. In addition, a bus stop serving Route #72 – *Orchards* is located adjacent to the site, near the intersection of NE 91<sup>st</sup> Street at NE 152<sup>nd</sup> Avenue.

Upon assessing the types of uses that could be developed under an R1-6 zone and CC zone and the fact that the land uses permitted within the proposed R1-6 zone are consistent with the residential nature of the surrounding site vicinity, it is expected that the multi-modal splits between the two zones and the overall multi-modal splits of the surrounding area will not vary significantly between existing and future conditions.



## **Conclusions**

The trip generation calculations show that the net change in the trip generation potential of the site after the proposed rezone is projected to decrease by 71 morning peak hour trips, 165 evening peak hour trips, and 1,838 average weekday trips.

Per a preliminary signal warrant analysis, warrants are projected to be met at the intersection of NE 99<sup>th</sup> Street at NE 152<sup>nd</sup> Avenue by the 2039 planning year, regardless of whether the proposed zone change is implemented.

The intersection of NE 99<sup>th</sup> Street at NE 152<sup>nd</sup> Avenue is projected to operate at LOS F under the 2039 planning horizon during both the morning and evening peak hours, regardless of whether the proposed zone change is implemented. However, with full development under the proposed R1-6 zoning, it is projected that overall intersection delays will decrease during both peak hours than if fully developed under the CC zoning.

The intersection of NE Padden Parkway at NE 152<sup>nd</sup> Avenue is currently operating acceptably per Clark County standards and is projected to continue operating acceptably by the 2039 planning horizon, regardless of whether the proposed zone change is implemented.

The roadway segment of NE 152<sup>nd</sup> Avenue between NE 99<sup>th</sup> Street and NE Padden Parkway is projected to operate with a v/c ratio in excess of 0.90 by the 2039 planning horizon with full development under the proposed zoning. Upon reviewing the County's Six-Year Transportation Improvement Program, this segment of NE 152<sup>nd</sup> Avenue is planned for improvements, which if accompanied by a change in the County's roadway designation to C-2cb, is expected to increase the vehicular capacity of the roadway. Additionally, it should be noted that with development under the proposed R1-6 zoning, volumes along NE 152<sup>nd</sup> Avenue are projected to decrease relative to full development under the existing CC zoning. All other studied roadway segments are projected to operate acceptably through the 2039 planning horizon with the proposed zone change implemented.

The proposed change in zoning for the subject property is not anticipated to cause any significant impacts to the transportation system upon implementation since it will not result in an increase in the peak hour or daily trip generation potential of the site. Accordingly, no significant traffic delays or congestion is expected to result due to the zone change.



1e

## *Appendix*



## TRIP GENERATION CALCULATIONS

### Existing CC Zone

*Land Use:* Office Park  
*Land Use Code:* 750  
*Setting/Location* General Urban/Suburban  
*Variable:* 1,000 Sq. Ft. of GFA  
*Variable Value:* 98.8

#### AM PEAK HOUR

*Trip Rate:* 1.44

	Enter	Exit	Total
Directional Distribution	89%	11%	
Trip Ends	<b>126</b>	<b>16</b>	<b>142</b>

#### PM PEAK HOUR

*Trip Rate:* 1.07

	Enter	Exit	Total
Directional Distribution	7%	93%	
Trip Ends	<b>7</b>	<b>99</b>	<b>106</b>

#### WEEKDAY

*Trip Rate:* 11.07

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	<b>547</b>	<b>547</b>	<b>1,094</b>

#### SATURDAY

*Trip Rate:* 1.64

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	<b>81</b>	<b>81</b>	<b>162</b>

Source: TRIP GENERATION, Tenth Edition



## TRIP GENERATION CALCULATIONS

### Existing CC Zone

*Land Use:* Shopping Center  
*Land Use Code:* 820  
*Setting/Location* General Urban/Suburban  
*Variable:* 1,000 Sq. Ft. GFA  
*Variable Value:* 98.8

#### AM PEAK HOUR

*Trip Rate:* 0.94

	Enter	Exit	Total
Directional Distribution	62%	38%	
Trip Ends	<b>58</b>	<b>35</b>	<b>93</b>

#### PM PEAK HOUR

*Trip Rate:* 3.81

	Enter	Exit	Total
Directional Distribution	48%	52%	
Trip Ends	<b>180</b>	<b>196</b>	<b>376</b>

#### WEEKDAY

*Trip Rate:* 37.75

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	<b>1,865</b>	<b>1,865</b>	<b>3,730</b>

#### SATURDAY

*Trip Rate:* 46.12

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	<b>2,278</b>	<b>2,278</b>	<b>4,556</b>

Source: TRIP GENERATION, Tenth Edition



## TRIP GENERATION CALCULATIONS

### Proposed R1-6 Zone

*Land Use:* Single-Family Detached Housing  
*Land Use Code:* 210  
*Setting/Location* General Urban/Suburban  
*Variable:* Dwelling Units  
*Variable Value:* 42

#### AM PEAK HOUR

*Trip Rate:* 0.74

	Enter	Exit	Total
Directional Distribution	25%	75%	
Trip Ends	8	23	31

#### PM PEAK HOUR

*Trip Rate:* 0.99

	Enter	Exit	Total
Directional Distribution	63%	37%	
Trip Ends	26	16	42

#### WEEKDAY

*Trip Rate:* 9.44

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	198	198	396

#### SATURDAY

*Trip Rate:* 9.54

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	200	200	400

Source: Trip Generation Manual, Tenth Edition



## TRIP GENERATION CALCULATIONS

### Proposed R1-6 Zone

*Land Use:* Day Care Center  
*Land Use Code:* 565  
*Setting/Location:* General Urban/Suburban  
*Variable:* 1,000 Sq Ft Gross Floor Area  
*Variable Value:* 3

#### AM PEAK HOUR

*Trip Rate:* 11.00

	Enter	Exit	Total
Directional Distribution	53%	47%	
Trip Ends	17	16	33

#### PM PEAK HOUR

*Trip Rate:* 11.12

	Enter	Exit	Total
Directional Distribution	47%	53%	
Trip Ends	16	17	33

#### WEEKDAY

*Trip Rate:* 47.62

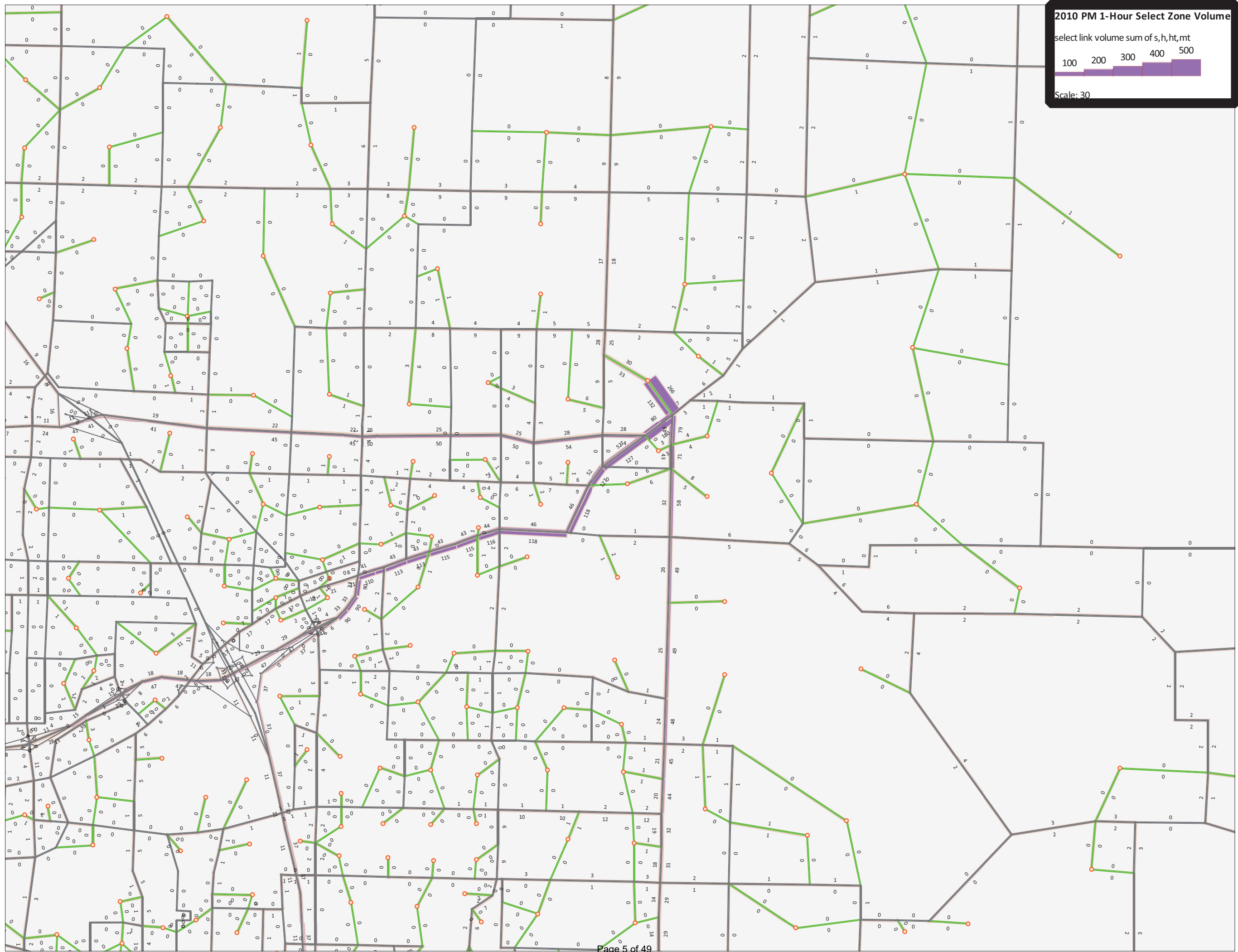
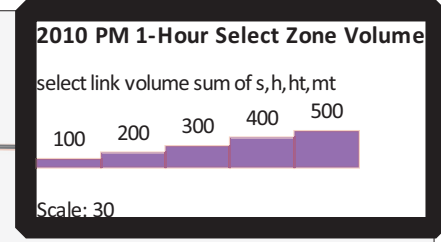
	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	71	71	142

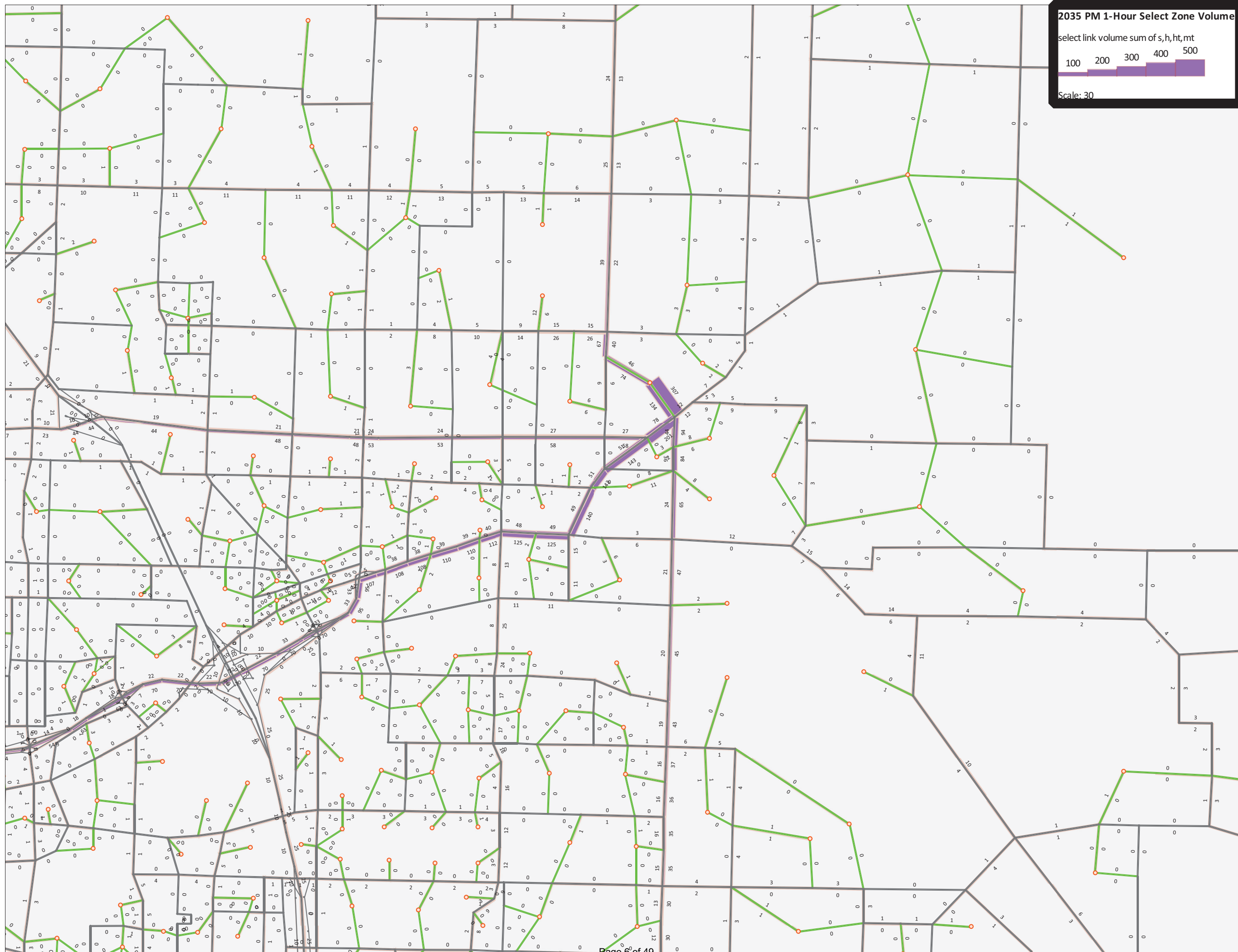
#### SATURDAY

*Trip Rate:* 6.22

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	9	9	18

Source: TRIP GENERATION, Tenth Edition





**2035 PM 1-Hour Select Zone Volume**

select link volume sum of s,h,ht,mt

100 200 300 400 500

Scale: 30



## Total Vehicle Summary

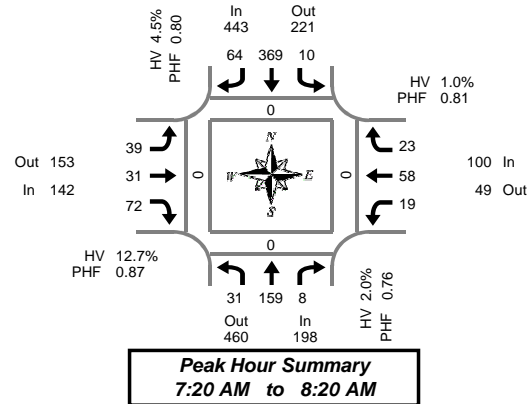


Clay Carney  
(503) 833-2740

## NE 152nd Ave & NE 99th St

Thursday, May 09, 2019

7:00 AM to 9:00 AM



### 5-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	3	10	0	0	3	30	4	0	3	2	5	0	1	3	0	0	64	0	0	0	0
7:05 AM	1	6	0	0	2	33	2	0	2	4	8	0	5	7	0	0	70	0	0	0	1
7:10 AM	2	12	1	0	2	28	1	0	1	0	4	0	2	7	1	0	61	0	0	0	0
7:15 AM	4	9	0	0	0	34	4	0	0	2	9	0	4	6	3	0	75	0	0	0	0
7:20 AM	1	16	0	0	0	30	2	0	1	1	9	0	3	4	3	0	70	0	0	0	0
7:25 AM	1	12	0	0	1	34	10	0	5	5	5	0	2	2	1	0	78	0	0	0	0
7:30 AM	5	12	0	0	0	46	2	0	5	1	6	0	0	7	2	0	86	0	0	0	0
7:35 AM	2	9	1	0	0	34	11	0	2	3	9	0	3	5	2	0	81	0	0	0	0
7:40 AM	2	21	0	0	0	23	4	0	6	2	4	0	2	5	2	0	71	0	0	0	0
7:45 AM	4	15	0	0	1	27	2	0	5	1	5	0	2	6	4	0	72	0	0	0	0
7:50 AM	5	18	0	0	0	23	8	0	2	2	6	0	4	4	1	0	73	0	0	0	0
7:55 AM	2	15	0	0	2	28	8	0	2	7	7	0	1	5	1	0	78	0	0	0	0
8:00 AM	1	13	0	0	0	29	3	0	2	1	5	0	0	2	3	0	59	0	0	0	0
8:05 AM	3	12	2	0	1	35	3	0	1	1	5	0	0	3	1	0	67	0	0	0	0
8:10 AM	2	6	4	0	1	35	4	0	5	2	4	0	1	6	2	0	72	0	0	0	0
8:15 AM	3	10	1	0	4	25	7	0	3	5	7	0	1	9	1	0	76	0	0	0	0
8:20 AM	2	10	0	0	4	12	3	0	3	5	11	0	3	7	0	0	60	0	0	0	0
8:25 AM	3	14	3	0	2	30	4	0	3	4	5	0	2	5	0	0	75	0	0	0	0
8:30 AM	2	9	0	0	2	18	4	0	3	2	6	0	0	4	1	0	51	0	0	0	0
8:35 AM	6	9	0	0	2	23	4	0	2	5	6	0	1	3	4	0	65	0	0	0	0
8:40 AM	2	8	1	0	2	27	6	0	3	5	8	0	2	5	1	0	70	0	0	0	0
8:45 AM	0	12	1	0	0	27	3	0	3	5	7	0	2	4	2	0	66	0	0	0	0
8:50 AM	1	9	1	0	2	22	3	0	1	4	5	0	4	11	3	0	66	0	0	0	0
8:55 AM	7	6	1	0	0	24	4	0	5	4	4	0	1	4	2	0	62	0	0	0	0
Total Survey	64	273	16	0	31	677	106	0	68	73	150	0	46	124	40	0	1,668	0	0	0	1

### 15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	6	28	1	0	7	91	7	0	6	6	17	0	8	17	1	0	195	0	0	0	1
7:15 AM	6	37	0	0	1	98	16	0	6	8	23	0	9	12	7	0	223	0	0	0	0
7:30 AM	9	42	1	0	0	103	17	0	13	6	19	0	5	17	6	0	238	0	0	0	0
7:45 AM	11	48	0	0	3	78	18	0	9	10	18	0	7	15	6	0	223	0	0	0	0
8:00 AM	6	31	6	0	2	99	10	0	8	4	14	0	1	11	6	0	198	0	0	0	0
8:15 AM	8	34	4	0	10	67	14	0	9	14	23	0	6	21	1	0	211	0	0	0	0
8:30 AM	10	26	1	0	6	68	14	0	8	12	20	0	3	12	6	0	186	0	0	0	0
8:45 AM	8	27	3	0	2	73	10	0	9	13	16	0	7	19	7	0	194	0	0	0	0
Total Survey	64	273	16	0	31	677	106	0	68	73	150	0	46	124	40	0	1,668	0	0	0	1

### Peak Hour Summary 7:20 AM to 8:20 AM

By Approach	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	198	460	658	0	443	221	664	0	142	153	295	0	100	49	149	0	883	0	0	0	0
%HV	2.0%				4.5%				12.7%				1.0%				4.9%				
PHF	0.76				0.80				0.87				0.81				0.90				

By Movement	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Total				
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total					
Volume	31	159	8	198	10	369	64	443	39	31	72	142	19	58	23	100	883				
%HV	0.0%	2.5%	0.0%	2.0%	10.0%	4.1%	6.3%	4.5%	17.9%	9.7%	11.1%	12.7%	0.0%	1.7%	0.0%	1.0%	4.9%				
PHF	0.70	0.74	0.29	0.76	0.42	0.81	0.70	0.80	0.75	0.78	0.90	0.87	0.59	0.81	0.72	0.81	0.90				

### Rolling Hour Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	32	155	2	0	11	370	58	0	34	30	77	0	29	61	20	0	879	0	0	0	1
7:15 AM	32	158	7	0	6	378	61	0	36	28	74	0	22	55	25	0	882	0	0	0	0
7:30 AM	34	155	11	0	15	347	59	0	39	34	74	0	19	64	19	0	870	0	0	0	0
7:45 AM	35	139	11	0	21	312	56	0	34	40	75	0	17	59	19	0	818	0	0	0	0
8:00 AM	32	118	14	0	20	307	48	0	34	43	73	0	17	63	20	0	789	0	0	0	0



## Heavy Vehicle Summary

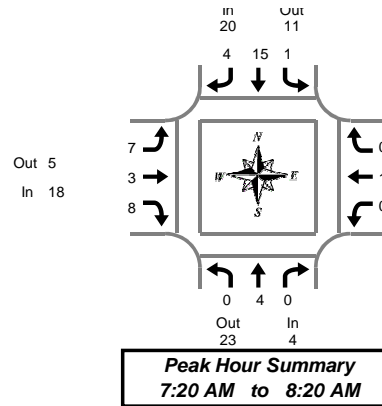


Clay Carney  
(503) 833-2740

### NE 152nd Ave & NE 99th St

Thursday, May 09, 2019

7:00 AM to 9:00 AM



#### Heavy Vehicle 5-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2
7:05 AM	0	0	0	0	1	2	1	4	0	1	0	1	0	0	0	0	5
7:10 AM	0	1	0	1	1	0	0	1	1	0	1	2	0	0	0	0	4
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:20 AM	0	0	0	0	0	2	0	2	0	0	1	1	0	1	0	1	4
7:25 AM	0	1	0	1	0	0	1	1	1	0	2	3	0	0	0	0	5
7:30 AM	0	1	0	1	0	1	0	1	1	1	2	4	0	0	0	0	6
7:35 AM	0	0	0	0	0	1	0	1	1	1	0	2	0	0	0	0	3
7:40 AM	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	3	0	3	1	0	1	2	0	0	0	0	5
7:50 AM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	2
7:55 AM	0	0	0	0	0	4	0	4	0	1	0	1	0	0	0	0	5
8:00 AM	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
8:05 AM	0	1	0	1	1	1	0	2	1	0	0	1	0	0	0	0	4
8:10 AM	0	0	0	0	0	1	1	2	1	0	1	2	0	0	0	0	4
8:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
8:20 AM	0	0	0	0	1	0	1	2	1	0	1	2	0	0	0	0	4
8:25 AM	0	1	0	1	1	0	1	2	0	0	1	1	0	0	0	0	4
8:30 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
8:35 AM	0	2	0	2	0	3	0	3	0	0	0	0	0	0	0	0	5
8:40 AM	1	1	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
8:45 AM	0	1	0	1	0	1	0	1	1	1	1	3	1	0	1	2	7
8:50 AM	0	0	1	1	0	1	0	1	0	1	1	2	0	0	0	0	4
8:55 AM	0	0	0	0	0	1	0	1	1	0	0	1	0	1	0	1	3
Total Survey	1	10	1	12	6	24	8	38	11	7	13	31	1	3	1	5	86

#### Heavy Vehicle 15-Minute Interval Summary 7:00 AM to 9:00 AM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	1	0	1	3	3	1	7	1	1	1	3	0	0	0	0	11
7:15 AM	0	1	0	1	0	2	1	3	1	0	3	4	0	2	0	2	10
7:30 AM	0	1	0	1	0	3	1	4	2	2	2	6	0	0	0	0	11
7:45 AM	0	1	0	1	0	7	0	7	1	1	2	4	0	0	0	0	12
8:00 AM	0	1	0	1	1	3	1	5	3	0	1	4	0	0	0	0	10
8:15 AM	0	1	0	1	2	0	3	5	1	0	2	3	0	0	0	0	9
8:30 AM	1	3	0	4	0	3	1	4	0	1	0	1	0	0	0	0	9
8:45 AM	0	1	1	2	0	3	0	3	2	2	2	6	1	1	1	3	14
Total Survey	1	10	1	12	6	24	8	38	11	7	13	31	1	3	1	5	86

#### Heavy Vehicle Peak Hour Summary 7:20 AM to 8:20 AM

By Approach	Northbound NE 152nd Ave			Southbound NE 152nd Ave			Eastbound NE 99th St			Westbound NE 99th St			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	4	23	27	20	11	31	18	5	23	1	4	5	43
PHF	0.50			0.71			0.50			0.25			0.72

By Movement	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	4	0	4	1	15	4	20	7	3	8	18	0	2	0	2	43
PHF	0.00	0.50	0.00	0.50	0.25	0.54	0.50	0.71	0.58	0.38	0.40	0.50	0.00	0.25	0.00	0.25	0.72

#### Heavy Vehicle Rolling Hour Summary 7:00 AM to 9:00 AM

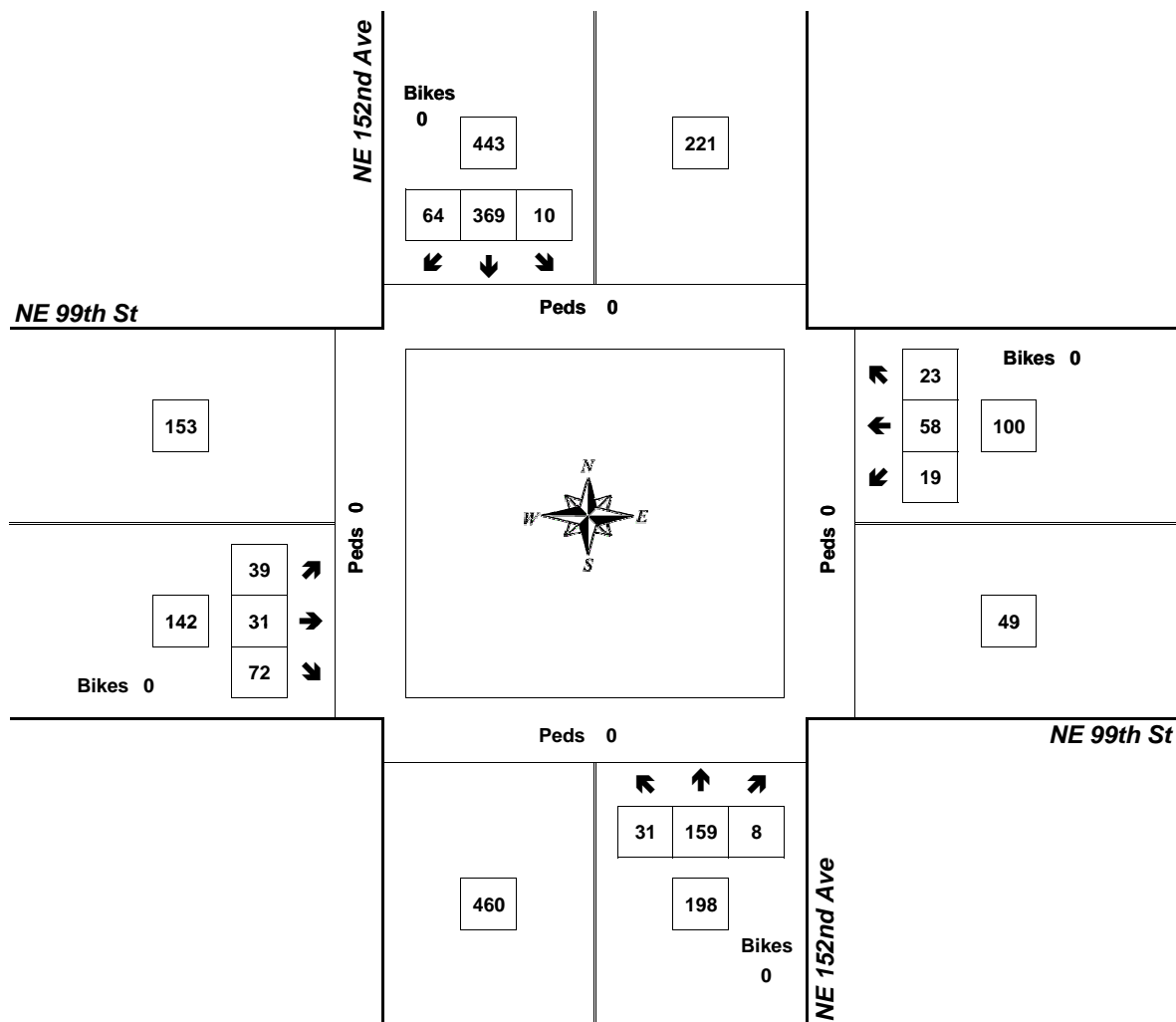
Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	4	0	4	3	15	3	21	5	4	8	17	0	2	0	2	44
7:15 AM	0	4	0	4	1	15	3	19	7	3	8	18	0	2	0	2	43
7:30 AM	0	4	0	4	3	13	5	21	7	3	7	17	0	0	0	0	42
7:45 AM	1	6	0	7	3	13	5	21	5	2	5	12	0	0	0	0	40
8:00 AM	1	6	1	8	3	9	5	17	6	3	5	14	1	1	1	3	42

**All Traffic Data**  
Services Inc.

Clay Carney  
(503) 833-2740

**7:20 AM to 8:20 AM**

**Thursday, May 09, 2019**



Approach	PHF	HV%	Volume
EB	0.87	12.7%	142
WB	0.81	1.0%	100
NB	0.76	2.0%	198
SB	0.80	4.5%	443
Intersection	0.90	4.9%	883

Count Period: 7:00 AM to 9:00 AM

## Total Vehicle Summary



Clay Carney  
(503) 833-2740

## NE 152nd Ave & NE 99th St

Thursday, May 09, 2019

4:00 PM to 6:00 PM

### 5-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	8	21	3	0	2	16	4	0	13	10	10	0	2	3	0	0	92	0	0	0	0
4:05 PM	7	41	4	0	2	15	2	0	8	4	7	0	2	4	5	0	101	0	0	0	0
4:10 PM	4	29	1	0	1	16	7	0	2	6	4	0	1	6	4	0	81	0	0	0	0
4:15 PM	8	23	2	0	2	22	3	0	6	9	2	0	0	6	2	0	85	0	0	0	0
4:20 PM	9	17	0	0	5	19	5	0	6	5	7	0	1	5	2	0	81	0	0	0	0
4:25 PM	3	20	4	0	3	18	8	0	3	10	13	0	1	0	1	0	84	0	0	0	0
4:30 PM	4	26	3	0	2	21	4	0	9	8	6	0	0	6	3	0	92	0	0	0	0
4:35 PM	8	35	0	0	0	19	3	0	2	8	15	0	1	3	7	0	101	0	0	0	0
4:40 PM	4	36	2	0	4	28	5	0	6	7	7	0	2	3	3	0	107	0	0	0	0
4:45 PM	2	34	4	0	3	18	0	0	8	6	9	0	5	4	3	0	96	0	0	0	0
4:50 PM	6	37	3	0	4	13	2	0	3	3	9	0	4	2	3	0	89	0	0	0	0
4:55 PM	3	28	3	0	0	30	1	0	13	8	7	0	2	1	4	0	100	0	0	0	0
5:00 PM	10	27	5	0	0	15	2	0	3	6	5	0	2	3	2	0	80	0	0	0	0
5:05 PM	11	21	3	0	1	36	4	0	10	8	11	0	0	7	3	0	115	0	0	0	0
5:10 PM	12	29	1	0	0	27	3	0	10	3	7	0	0	4	2	0	98	0	0	0	0
5:15 PM	5	22	3	0	5	23	3	0	8	11	5	0	1	2	1	0	89	1	0	0	0
5:20 PM	7	37	2	0	5	24	5	0	5	6	7	0	0	6	3	0	107	0	0	0	0
5:25 PM	5	34	1	0	2	33	7	0	7	4	7	0	1	7	3	0	111	0	0	0	0
5:30 PM	5	36	0	0	1	18	4	0	13	3	4	0	1	2	1	0	88	0	0	0	0
5:35 PM	7	32	0	0	0	22	1	0	5	3	6	0	1	2	2	0	81	0	0	0	0
5:40 PM	5	37	1	0	2	22	9	0	8	7	3	0	2	4	3	0	103	0	0	0	0
5:45 PM	7	32	2	0	2	18	4	0	6	6	8	0	2	2	3	0	92	0	0	0	0
5:50 PM	7	31	2	0	0	27	6	0	6	11	4	0	1	3	4	0	102	0	0	0	0
5:55 PM	6	30	2	0	5	13	5	0	6	10	4	0	1	5	6	0	93	0	0	0	0
Total Survey	153	715	51	0	51	513	97	0	166	162	167	0	33	90	70	0	2,268	1	0	0	0

### 15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	19	91	8	0	5	47	13	0	23	20	21	0	5	13	9	0	274	0	0	0	0
4:15 PM	20	60	6	0	10	59	16	0	15	24	22	0	2	11	5	0	250	0	0	0	0
4:30 PM	16	97	5	0	6	68	12	0	17	23	28	0	3	12	13	0	300	0	0	0	0
4:45 PM	11	99	10	0	7	61	3	0	24	17	25	0	11	7	10	0	285	0	0	0	0
5:00 PM	33	77	9	0	1	78	9	0	23	17	23	0	2	14	7	0	293	0	0	0	0
5:15 PM	17	93	6	0	12	80	15	0	20	21	19	0	2	15	7	0	307	1	0	0	0
5:30 PM	17	105	1	0	3	62	14	0	26	13	13	0	4	8	6	0	272	0	0	0	0
5:45 PM	20	93	6	0	7	58	15	0	18	27	16	0	4	10	13	0	287	0	0	0	0
Total Survey	153	715	51	0	51	513	97	0	166	162	167	0	33	90	70	0	2,268	1	0	0	0

### Peak Hour Summary

4:30 PM to 5:30 PM

By Approach	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	473	400	873	0	352	487	839	0	257	164	421	0	103	134	237	0	1,185	1	0	0	0
%HV	1.7%				0.6%				3.1%				2.9%				1.8%				
PHF	0.92				0.82				0.88				0.83				0.96				

By Movement	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	77	366	30	473	26	287	39	352	84	78	95	257	18	48	37	103	1,185
%HV	0.0%	1.9%	3.3%	1.7%	0.0%	0.7%	0.0%	0.6%	4.8%	0.0%	4.2%	3.1%	11.1%	0.0%	2.7%	2.9%	1.8%
PHF	0.58	0.86	0.68	0.92	0.54	0.83	0.65	0.82	0.75	0.85	0.77	0.88	0.41	0.80	0.71	0.83	0.96

### Rolling Hour Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	66	347	29	0	28	235	44	0	79	84	96	0	21	43	37	0	1,109	0	0	0	0
4:15 PM	80	333	30	0	24	266	40	0	79	81	98	0	18	44	35	0	1,128	0	0	0	0
4:30 PM	77	366	30	0	26	287	39	0	84	78	95	0	18	48	37	0	1,185	1	0	0	0
4:45 PM	78	374	26	0	23	281	41	0	93	68	80	0	19	44	30	0	1,157	1	0	0	0
5:00 PM	87	368	22	0	23	278	53	0	87	78	71	0	12	47	33	0	1,159	1	0	0	0

## Heavy Vehicle Summary



Clay Carney  
(503) 833-2740

### NE 152nd Ave & NE 99th St

Thursday, May 09, 2019

4:00 PM to 6:00 PM

#### Heavy Vehicle 5-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4:05 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
4:10 PM	0	2	0	2	0	0	1	1	0	1	0	1	0	0	0	0	4
4:15 PM	1	0	0	1	0	1	2	3	1	0	1	2	0	0	0	0	6
4:20 PM	1	0	0	1	0	1	0	1	0	0	1	1	0	0	0	0	3
4:25 PM	0	1	0	1	1	0	0	1	1	0	1	2	0	0	0	0	4
4:30 PM	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
4:35 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
4:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
4:50 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
4:55 PM	0	0	0	0	0	0	0	0	2	0	1	3	0	0	0	0	3
5:00 PM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:05 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	2
5:10 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	2	0	2	0	0	0	0	0	0	1	1	0	0	0	0	3
5:25 PM	0	1	0	1	0	0	0	0	1	0	0	1	1	0	0	1	3
5:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:35 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
5:40 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
5:50 PM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	2	14	1	17	1	5	3	9	8	1	8	17	2	0	2	4	47

#### Heavy Vehicle 15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	4	0	4	0	0	1	1	0	1	0	1	0	0	1	1	7
4:15 PM	2	1	0	3	1	2	2	5	2	0	3	5	0	0	0	0	13
4:30 PM	0	3	0	3	0	1	0	1	1	0	0	1	0	0	0	0	5
4:45 PM	0	0	0	0	0	0	0	0	2	0	2	4	1	0	0	1	5
5:00 PM	0	1	1	2	0	1	0	1	0	0	1	1	0	0	1	1	5
5:15 PM	0	3	0	3	0	0	0	0	1	0	1	2	1	0	0	1	6
5:30 PM	0	2	0	2	0	0	0	0	1	0	0	1	0	0	0	0	3
5:45 PM	0	0	0	0	0	1	0	1	1	0	1	2	0	0	0	0	3
Total Survey	2	14	1	17	1	5	3	9	8	1	8	17	2	0	2	4	47

#### Heavy Vehicle Peak Hour Summary

4:30 PM to 5:30 PM

By Approach	Northbound NE 152nd Ave			Southbound NE 152nd Ave			Eastbound NE 99th St			Westbound NE 99th St			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	8	8	16	2	12	14	8	0	8	3	1	4	21
PHF	0.67			0.50			0.50			0.75			0.75

By Movement	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	7	1	8	0	2	0	2	4	0	4	8	2	0	1	3	21
PHF	0.00	0.58	0.25	0.67	0.00	0.50	0.00	0.50	0.50	0.00	0.50	0.50	0.50	0.00	0.25	0.75	0.75

#### Heavy Vehicle Rolling Hour Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE 99th St				Westbound NE 99th St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	2	8	0	10	1	3	3	7	5	1	5	11	1	0	1	2	30
4:15 PM	2	5	1	8	1	4	2	7	5	0	6	11	1	0	1	2	28
4:30 PM	0	7	1	8	0	2	0	2	4	0	4	8	2	0	1	3	21
4:45 PM	0	6	1	7	0	1	0	1	4	0	4	8	2	0	1	3	19
5:00 PM	0	6	1	7	0	2	0	2	3	0	3	6	1	0	1	2	17

## Peak Hour Summary

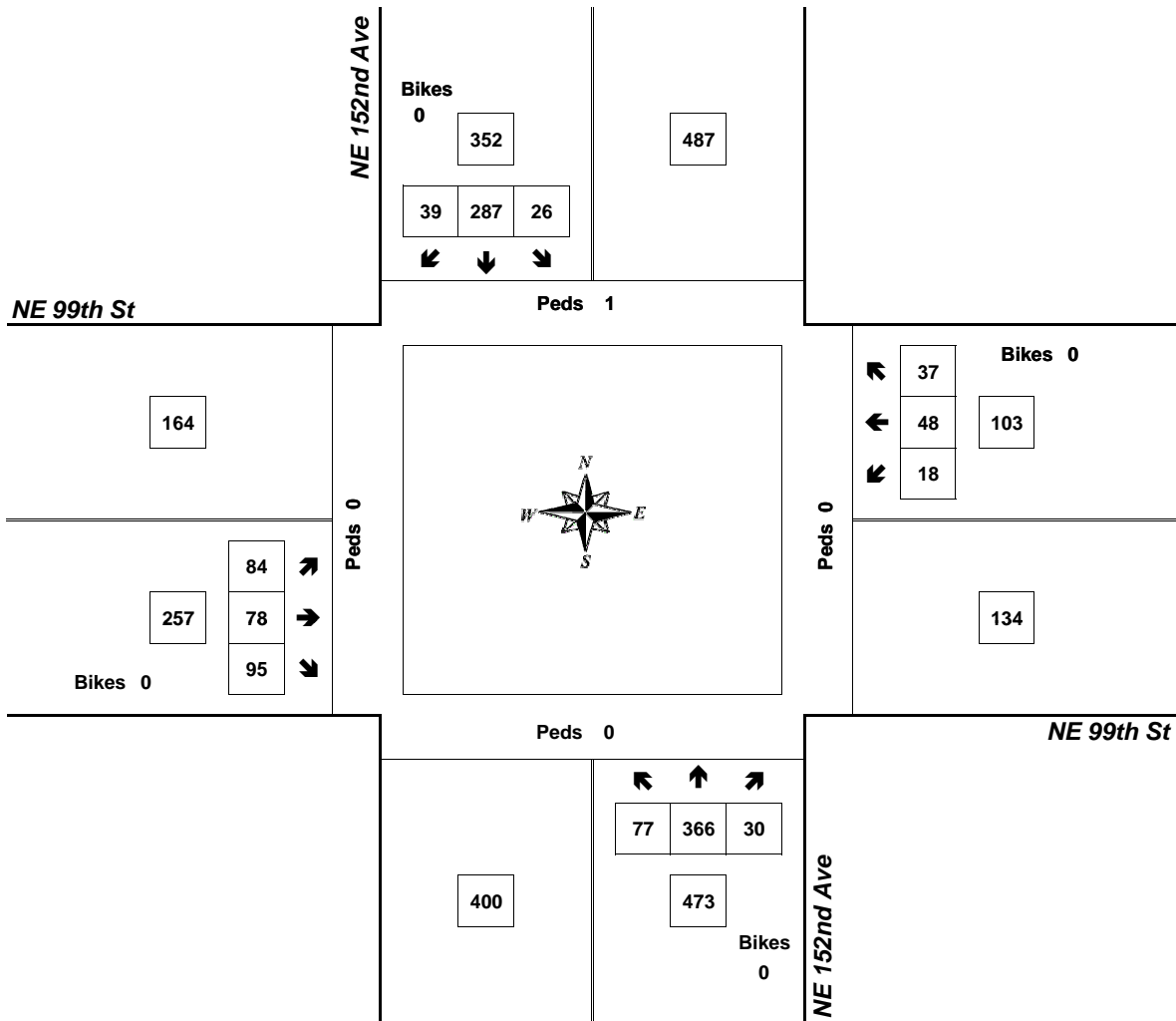


Clay Carney  
(503) 833-2740

### NE 152nd Ave & NE 99th St

4:30 PM to 5:30 PM

Thursday, May 09, 2019



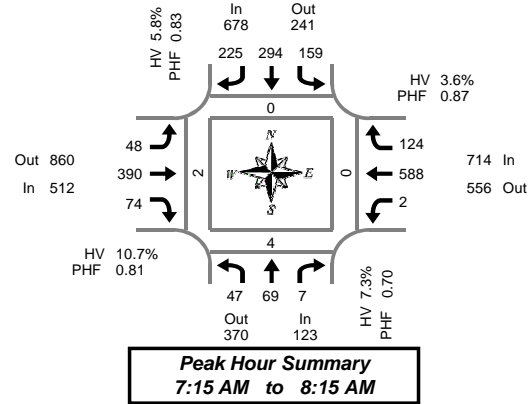
Approach	PHF	HV%	Volume
EB	0.88	3.1%	257
WB	0.83	2.9%	103
NB	0.92	1.7%	473
SB	0.82	0.6%	352
<b>Intersection</b>	0.96	1.8%	1,185

Count Period: 4:00 PM to 6:00 PM

## Total Vehicle Summary



Clay Carney  
(503) 833-2740



## NE 152nd Ave & NE Padden Pkwy

Thursday, May 09, 2019

7:00 AM to 9:00 AM

### 5-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	2	5	0	0	9	17	25	0	4	22	4	0	1	44	7	0	140	0	0	0	0
7:05 AM	4	8	1	0	11	30	20	1	3	29	2	0	1	33	5	0	147	0	1	0	0
7:10 AM	7	8	0	0	20	20	8	0	1	21	5	0	0	48	5	0	143	0	0	0	0
7:15 AM	7	2	0	0	17	30	21	0	3	23	0	0	0	43	13	0	159	0	0	0	0
7:20 AM	3	4	1	0	13	20	20	0	3	18	8	0	0	45	12	0	147	0	2	0	0
7:25 AM	3	1	0	0	17	27	24	0	4	34	10	1	0	54	9	0	183	0	0	0	0
7:30 AM	5	2	0	0	15	22	25	0	5	51	3	0	0	47	12	0	187	0	0	0	0
7:35 AM	7	7	1	0	18	36	21	0	7	37	7	0	0	51	4	0	196	0	0	0	0
7:40 AM	5	9	0	0	9	28	12	0	4	37	8	0	0	52	18	0	182	0	0	0	0
7:45 AM	3	9	1	0	9	24	14	0	5	32	8	0	0	69	8	0	182	0	0	0	1
7:50 AM	2	15	0	0	12	22	18	0	2	32	8	0	0	46	12	0	169	0	1	0	0
7:55 AM	2	7	0	0	8	19	23	0	5	30	5	0	0	44	10	0	153	0	0	0	0
8:00 AM	5	3	0	0	15	21	9	0	3	29	4	0	1	41	9	0	140	0	0	0	0
8:05 AM	5	9	3	0	14	24	15	0	4	29	9	0	0	48	12	0	172	0	1	0	0
8:10 AM	0	1	1	0	12	21	23	0	3	38	4	0	1	48	5	0	157	0	0	0	1
8:15 AM	1	6	2	0	12	21	16	0	6	35	9	0	1	43	5	0	157	0	0	0	0
8:20 AM	8	8	0	0	9	22	13	0	7	15	5	0	1	36	7	0	131	0	0	0	0
8:25 AM	2	6	0	0	18	17	11	0	11	37	3	0	0	27	9	0	141	0	1	0	0
8:30 AM	8	7	0	0	4	13	15	0	10	35	5	0	0	41	3	0	141	0	0	0	0
8:35 AM	5	7	1	0	8	23	24	0	4	11	2	0	0	26	8	0	119	0	0	0	0
8:40 AM	2	6	0	0	7	10	9	0	15	33	11	0	0	58	7	0	158	0	0	0	1
8:45 AM	6	4	0	0	9	30	17	0	13	29	6	0	0	46	7	0	167	0	0	0	0
8:50 AM	3	8	0	0	9	16	15	0	9	25	4	0	0	27	5	0	121	0	1	0	0
8:55 AM	1	6	2	0	5	18	18	0	2	25	4	0	3	25	13	0	122	0	0	0	0
Total Survey	96	148	13	0	280	531	416	1	133	707	134	1	9	1,042	205	0	3,714	0	7	0	3

### 15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	13	21	1	0	40	67	53	1	8	72	11	0	2	125	17	0	430	0	1	0	0
7:15 AM	13	7	1	0	47	77	65	0	10	75	18	1	0	142	34	0	489	0	2	0	0
7:30 AM	17	18	1	0	42	86	58	0	16	125	18	0	0	150	34	0	565	0	0	0	0
7:45 AM	7	31	1	0	29	65	55	0	12	94	21	0	0	159	30	0	504	0	1	0	1
8:00 AM	10	13	4	0	41	66	47	0	10	96	17	0	2	137	26	0	469	0	1	0	1
8:15 AM	11	20	2	0	39	60	40	0	24	87	17	0	2	106	21	0	429	0	1	0	0
8:30 AM	15	20	1	0	19	46	48	0	29	79	18	0	0	125	18	0	418	0	0	0	1
8:45 AM	10	18	2	0	23	64	50	0	24	79	14	0	3	98	25	0	410	0	1	0	0
Total Survey	96	148	13	0	280	531	416	1	133	707	134	1	9	1,042	205	0	3,714	0	7	0	3

### Peak Hour Summary

7:15 AM to 8:15 AM

By Approach	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	123	370	493	0	678	241	919	0	512	860	1,372	1	714	556	1,270	0	2,027	0	4	0	2
%HV	7.3%				5.8%				10.7%				3.6%				6.4%				
PHF	0.70				0.83				0.81				0.87				0.90				

By Movement	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	47	69	7	123	159	294	225	678	48	390	74	512	2	588	124	714	2,027
%HV	2.1%	8.7%	28.6%	7.3%	7.5%	5.4%	4.9%	5.8%	12.5%	11.0%	8.1%	10.7%	50.0%	3.4%	4.0%	3.6%	6.4%
PHF	0.69	0.52	0.44	0.70	0.80	0.84	0.80	0.83	0.75	0.78	0.77	0.81	0.25	0.85	0.82	0.87	0.90

### Rolling Hour Summary

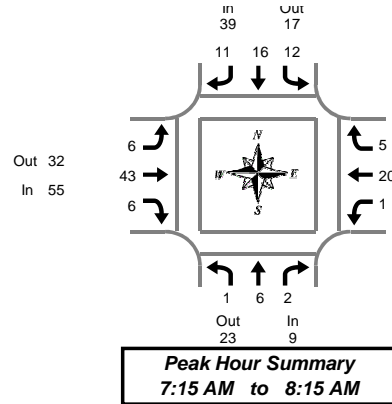
7:00 AM to 9:00 AM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	50	77	4	0	158	295	231	1	46	366	68	1	2	576	115	0	1,988	0	4	0	1
7:15 AM	47	69	7	0	159	294	225	0	48	390	74	1	2	588	124	0	2,027	0	4	0	2
7:30 AM	45	82	8	0	151	277	200	0	62	402	73	0	4	552	111	0	1,967	0	3	0	2
7:45 AM	43	84	8	0	128	237	190	0	75	356	73	0	4	527	95	0	1,820	0	3	0	3
8:00 AM	46	71	9	0	122	236	185	0	87	341	66	0	7	466	90	0	1,726	0	3	0	2

## Heavy Vehicle Summary



Clay Carney  
(503) 833-2740



## NE 152nd Ave & NE Padden Pkwy

Thursday, May 09, 2019

7:00 AM to 9:00 AM

### Heavy Vehicle 5-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	1	1	0	4	0	4	0	2	0	2	7
7:05 AM	0	0	0	0	0	1	0	1	1	3	0	4	0	2	1	3	8
7:10 AM	0	0	0	0	1	1	0	2	0	1	0	1	0	3	0	3	6
7:15 AM	0	0	0	0	1	0	0	1	1	4	0	5	0	1	1	2	8
7:20 AM	0	1	0	1	1	1	1	3	0	3	0	3	0	1	1	2	9
7:25 AM	0	0	0	0	0	3	0	3	2	6	0	8	0	2	0	2	13
7:30 AM	0	0	0	0	4	1	0	5	0	7	0	7	0	1	1	2	14
7:35 AM	0	0	0	0	1	0	1	2	2	3	0	5	0	1	0	1	8
7:40 AM	0	0	0	0	0	2	0	2	0	1	1	2	0	4	0	4	8
7:45 AM	0	1	0	1	1	2	0	3	0	2	0	2	0	1	0	1	7
7:50 AM	0	1	0	1	0	3	1	4	0	2	1	3	0	1	1	2	10
7:55 AM	1	2	0	3	0	1	3	4	0	2	0	2	0	3	0	3	12
8:00 AM	0	0	0	0	2	2	0	4	0	5	0	5	0	3	0	3	12
8:05 AM	0	1	2	3	0	0	0	0	1	2	3	6	0	2	1	3	12
8:10 AM	0	0	0	0	2	1	5	8	0	6	1	7	1	0	0	1	16
8:15 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	2	0	2	4
8:20 AM	1	0	0	1	0	0	0	0	0	1	0	1	0	2	0	2	4
8:25 AM	0	1	0	1	0	1	0	1	0	3	0	3	0	2	1	3	8
8:30 AM	0	1	0	1	0	0	0	0	0	4	0	4	0	7	1	8	13
8:35 AM	0	1	0	1	0	0	1	1	0	1	0	1	0	0	2	2	5
8:40 AM	0	0	0	0	2	0	0	2	2	2	1	5	0	4	2	6	13
8:45 AM	0	0	0	0	0	1	1	2	2	6	1	9	0	1	1	2	13
8:50 AM	0	1	0	1	1	2	1	4	1	4	0	5	0	1	0	1	11
8:55 AM	0	1	1	2	0	0	3	3	0	5	1	6	0	1	1	2	13
Total Survey	2	11	3	16	16	22	18	56	12	78	10	100	1	47	14	62	234

### Heavy Vehicle 15-Minute Interval Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	1	2	1	4	1	8	0	9	0	7	1	8	21
7:15 AM	0	1	0	1	2	4	1	7	3	13	0	16	0	4	2	6	30
7:30 AM	0	0	0	0	5	3	1	9	2	11	1	14	0	6	1	7	30
7:45 AM	1	4	0	5	1	6	4	11	0	6	1	7	0	5	1	6	29
8:00 AM	0	1	2	3	4	3	5	12	1	13	4	18	1	5	1	7	40
8:15 AM	1	1	0	2	0	1	0	1	0	5	1	6	0	6	1	7	16
8:30 AM	0	2	0	2	2	0	1	3	2	7	1	10	0	11	5	16	31
8:45 AM	0	2	1	3	1	3	5	9	3	15	2	20	0	3	2	5	37
Total Survey	2	11	3	16	16	22	18	56	12	78	10	100	1	47	14	62	234

### Heavy Vehicle Peak Hour Summary

7:15 AM to 8:15 AM

By Approach	Northbound NE 152nd Ave			Southbound NE 152nd Ave			Eastbound NE Padden Pkwy			Westbound NE Padden Pkwy			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	9	23	32	39	17	56	55	32	87	26	57	83	129
PHF	0.38			0.81			0.69			0.72			0.81

By Movement	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	1	6	2	9	12	16	11	39	6	43	6	55	1	20	5	26	129
PHF	0.25	0.38	0.25	0.38	0.60	0.57	0.55	0.81	0.38	0.67	0.38	0.69	0.25	0.63	0.63	0.72	0.81

### Heavy Vehicle Rolling Hour Summary

7:00 AM to 9:00 AM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	1	5	0	6	9	15	7	31	6	38	2	46	0	22	5	27	110
7:15 AM	1	6	2	9	12	16	11	39	6	43	6	55	1	20	5	26	129
7:30 AM	2	6	2	10	10	13	10	33	3	35	7	45	1	22	4	27	115
7:45 AM	2	8	2	12	7	10	10	27	3	31	7	41	1	27	8	36	116
8:00 AM	1	6	3	10	7	7	11	25	6	40	8	54	1	25	9	35	124

## Peak Hour Summary

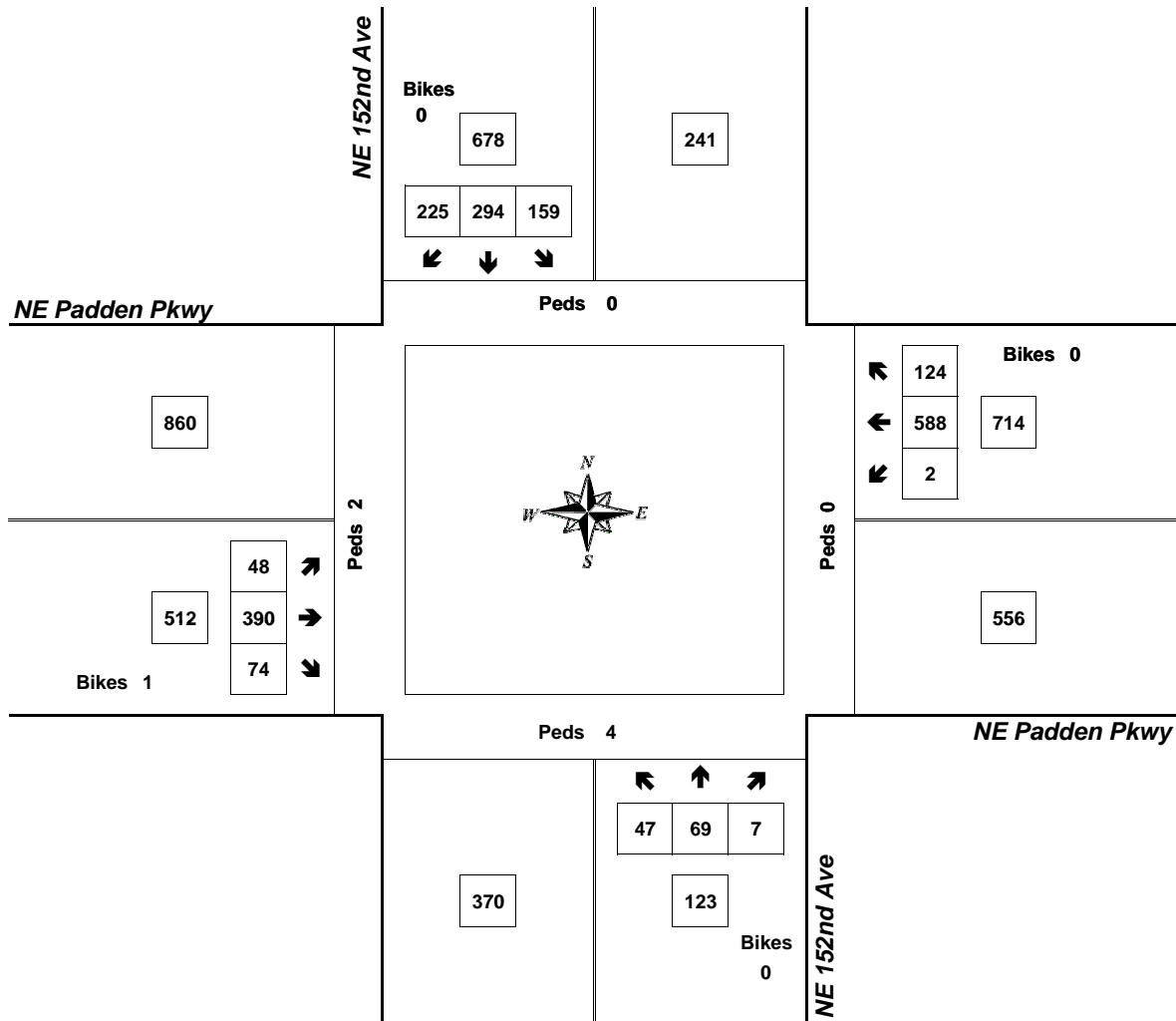


Clay Carney  
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### NE 152nd Ave & NE Padden Pkwy

7:15 AM to 8:15 AM

Thursday, May 09, 2019



Approach	PHF	HV%	Volume
EB	0.81	10.7%	512
WB	0.87	3.6%	714
NB	0.70	7.3%	123
SB	0.83	5.8%	678
Intersection	0.90	6.4%	2,027

Count Period: 7:00 AM to 9:00 AM



## Total Vehicle Summary



Clay Carney  
(503) 833-2740

## NE 152nd Ave & NE Padden Pkwy

Thursday, May 09, 2019

4:00 PM to 6:00 PM

### 5-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	4	18	0	0	9	31	11	0	12	32	9	0	1	45	17	0	189	0	0	0	0
4:05 PM	5	24	1	0	11	25	15	0	22	55	26	0	2	33	14	0	233	0	0	0	0
4:10 PM	7	20	2	0	6	24	19	0	20	33	12	0	0	46	9	0	198	0	0	0	0
4:15 PM	4	19	1	0	11	10	19	0	11	32	7	0	1	48	10	0	173	0	1	0	0
4:20 PM	3	12	3	0	12	14	5	0	11	47	14	0	1	54	9	0	185	0	0	0	0
4:25 PM	6	18	1	0	12	14	9	1	22	36	15	0	1	47	15	0	196	0	1	0	0
4:30 PM	9	23	2	0	9	18	15	0	15	28	5	0	1	40	17	0	182	0	0	0	1
4:35 PM	2	11	0	0	5	13	10	0	19	57	17	0	2	67	22	0	225	1	0	0	0
4:40 PM	9	28	0	0	12	19	20	0	17	57	11	0	0	50	16	0	239	1	0	0	1
4:45 PM	8	23	0	0	12	20	11	0	21	55	9	0	1	35	18	0	213	0	0	0	2
4:50 PM	7	24	1	0	7	20	14	0	18	54	10	0	1	43	26	0	225	0	0	0	0
4:55 PM	1	25	2	0	12	19	15	0	12	31	4	0	0	37	17	1	175	0	1	0	0
5:00 PM	5	22	1	0	8	23	6	0	14	53	13	0	0	45	19	0	209	0	0	0	0
5:05 PM	5	21	0	0	13	18	14	0	12	53	12	0	0	44	14	0	206	0	0	0	0
5:10 PM	3	18	0	0	15	24	19	0	8	62	8	0	0	40	20	0	217	0	0	0	3
5:15 PM	10	21	0	0	14	22	17	0	13	34	11	0	0	26	17	0	185	0	0	0	0
5:20 PM	3	18	3	0	7	20	14	0	19	51	14	0	0	52	18	0	219	0	2	0	0
5:25 PM	4	17	0	0	10	25	17	0	10	44	21	0	1	62	24	0	235	0	0	0	0
5:30 PM	10	37	2	0	14	14	17	0	15	55	15	0	1	47	16	0	243	0	0	0	0
5:35 PM	8	21	1	0	5	18	12	0	9	37	7	0	1	42	21	0	182	0	0	0	0
5:40 PM	2	18	1	0	8	12	6	0	26	48	11	0	0	44	16	1	192	0	0	0	0
5:45 PM	4	32	2	0	6	20	12	0	12	63	11	0	3	41	22	0	228	0	0	0	0
5:50 PM	10	23	1	0	8	17	13	0	21	57	6	0	0	33	18	0	207	0	0	0	1
5:55 PM	3	17	5	0	6	16	7	0	23	27	11	0	1	29	19	0	164	0	0	0	0
Total Survey	132	510	29	0	232	456	317	1	382	1,101	279	0	18	1,050	414	2	4,920	2	5	0	8

### 15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	16	62	3	0	26	80	45	0	54	120	47	0	3	124	40	0	620	0	0	0	0
4:15 PM	13	49	5	0	35	38	33	1	44	115	36	0	3	149	34	0	554	0	2	0	0
4:30 PM	20	62	2	0	26	50	45	0	51	142	33	0	3	157	55	0	646	2	0	0	2
4:45 PM	16	72	3	0	31	59	40	0	51	140	23	0	2	115	61	1	613	0	1	0	2
5:00 PM	13	61	1	0	36	65	39	0	34	168	33	0	0	129	53	0	632	0	0	0	3
5:15 PM	17	56	3	0	31	67	48	0	42	129	46	0	1	140	59	0	639	0	2	0	0
5:30 PM	20	76	4	0	27	44	35	0	50	140	33	0	2	133	53	1	617	0	0	0	0
5:45 PM	17	72	8	0	20	53	32	0	56	147	28	0	4	103	59	0	599	0	0	0	1
Total Survey	132	510	29	0	232	456	317	1	382	1,101	279	0	18	1,050	414	2	4,920	2	5	0	8

### Peak Hour Summary

4:35 PM to 5:35 PM

By Approach	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	341	388	729	0	540	670	1,210	0	929	789	1,718	0	781	744	1,525	1	2,591	2	3	0	6
%HV	1.8%				1.9%				1.2%				2.6%				1.8%				
PHF	0.85				0.87				0.88				0.88				0.93				

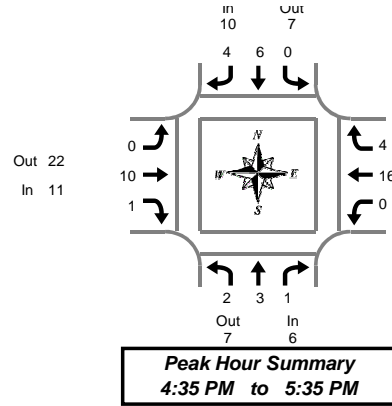
By Movement	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	67	265	9	341	129	237	174	540	178	606	145	929	6	548	227	781	2,591
%HV	3.0%	1.1%	11.1%	1.8%	0.0%	2.5%	2.3%	1.9%	0.0%	1.7%	0.7%	1.2%	0.0%	2.9%	1.8%	2.6%	1.8%
PHF	0.70	0.88	0.45	0.85	0.77	0.88	0.87	0.87	0.78	0.90	0.73	0.88	0.50	0.85	0.92	0.88	0.93

### Rolling Hour Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	65	245	13	0	118	227	163	1	200	517	139	0	11	545	190	1	2,433	2	3	0	4
4:15 PM	62	244	11	0	128	212	157	1	180	565	125	0	8	550	203	1	2,445	2	3	0	7
4:30 PM	66	251	9	0	124	241	172	0	178	579	135	0	6	541	228	1	2,530	2	3	0	7
4:45 PM	66	265	11	0	125	235	162	0	177	577	135	0	5	517	226	2	2,501	0	3	0	5
5:00 PM	67	265	16	0	114	229	154	0	182	584	140	0	7	505	224	1	2,487	0	2	0	4

## Heavy Vehicle Summary



## NE 152nd Ave & NE Padden Pkwy

Thursday, May 09, 2019

4:00 PM to 6:00 PM

### Heavy Vehicle 5-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	1	0	0	1	0	4	0	4	0	0	2	2	0	0	1	1	8
4:05 PM	0	1	0	1	2	1	0	3	0	1	0	1	0	1	1	2	7
4:10 PM	0	1	0	1	0	0	1	1	0	2	1	3	0	4	0	4	9
4:15 PM	1	2	1	4	0	0	2	2	0	1	0	1	0	2	1	3	10
4:20 PM	0	0	0	0	1	2	1	4	0	0	1	1	0	2	0	2	7
4:25 PM	0	1	0	1	0	2	0	2	2	1	0	3	0	2	1	3	9
4:30 PM	0	0	0	0	0	0	0	0	3	1	1	5	0	5	0	5	10
4:35 PM	0	0	0	0	0	1	0	1	0	3	0	3	0	5	0	5	9
4:40 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	1	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
4:50 PM	0	1	1	2	0	1	1	2	0	1	0	1	0	2	0	2	7
4:55 PM	0	1	0	1	0	1	1	2	0	1	0	1	0	0	0	0	4
5:00 PM	1	0	0	1	0	1	0	1	0	1	0	1	0	2	0	2	5
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
5:10 PM	0	1	0	1	0	1	1	2	0	1	0	1	0	1	0	1	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
5:20 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
5:25 PM	0	0	0	0	0	1	1	2	0	0	1	1	0	1	1	2	5
5:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:40 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:50 PM	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
5:55 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Total Survey	4	8	2	14	3	16	9	28	6	16	7	29	0	35	8	43	114

### Heavy Vehicle 15-Minute Interval Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	1	2	0	3	2	5	1	8	0	3	3	6	0	5	2	7	24
4:15 PM	1	3	1	5	1	4	3	8	2	2	1	5	0	6	2	8	26
4:30 PM	0	0	0	0	0	1	0	1	3	6	1	10	0	11	0	11	22
4:45 PM	0	2	1	3	0	2	2	4	0	2	0	2	0	3	1	4	13
5:00 PM	1	1	0	2	0	2	1	3	0	2	0	2	0	5	0	5	12
5:15 PM	0	0	0	0	0	1	1	2	0	1	1	2	0	1	3	4	8
5:30 PM	1	0	0	1	0	0	1	1	0	0	0	0	0	3	0	3	5
5:45 PM	0	0	0	0	0	1	0	1	1	0	1	2	0	1	0	1	4
Total Survey	4	8	2	14	3	16	9	28	6	16	7	29	0	35	8	43	114

### Heavy Vehicle Peak Hour Summary

4:35 PM to 5:35 PM

By Approach	Northbound NE 152nd Ave			Southbound NE 152nd Ave			Eastbound NE Padden Pkwy			Westbound NE Padden Pkwy			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	6	7	13	10	7	17	11	22	33	20	11	31	47
PHF	0.38			0.50			0.55			0.63			0.73

By Movement	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	2	3	1	6	0	6	4	10	0	10	1	11	0	16	4	20	47
PHF	0.50	0.38	0.25	0.38	0.00	0.50	0.50	0.50	0.00	0.50	0.25	0.55	0.00	0.57	0.33	0.63	0.73

### Heavy Vehicle Rolling Hour Summary

4:00 PM to 6:00 PM

Interval Start Time	Northbound NE 152nd Ave				Southbound NE 152nd Ave				Eastbound NE Padden Pkwy				Westbound NE Padden Pkwy				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	2	7	2	11	3	12	6	21	5	13	5	23	0	25	5	30	85
4:15 PM	2	6	2	10	1	9	6	16	5	12	2	19	0	25	3	28	73
4:30 PM	1	3	1	5	0	6	4	10	3	11	2	16	0	20	4	24	55
4:45 PM	2	3	1	6	0	5	5	10	0	5	1	6	0	12	4	16	38
5:00 PM	2	1	0	3	0	4	3	7	1	3	2	6	0	10	3	13	29

## Peak Hour Summary

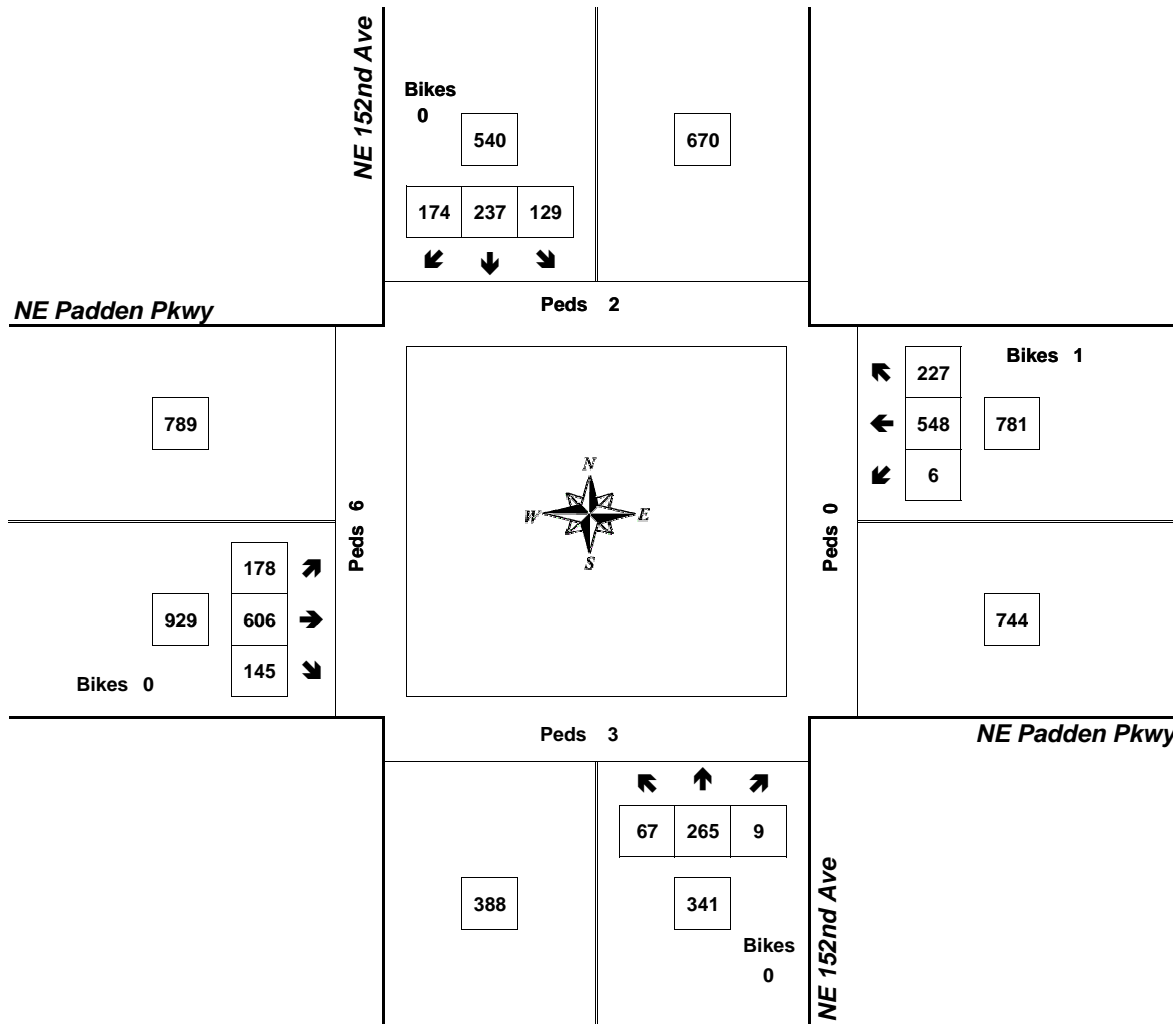


Clay Carney  
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### NE 152nd Ave & NE Padden Pkwy

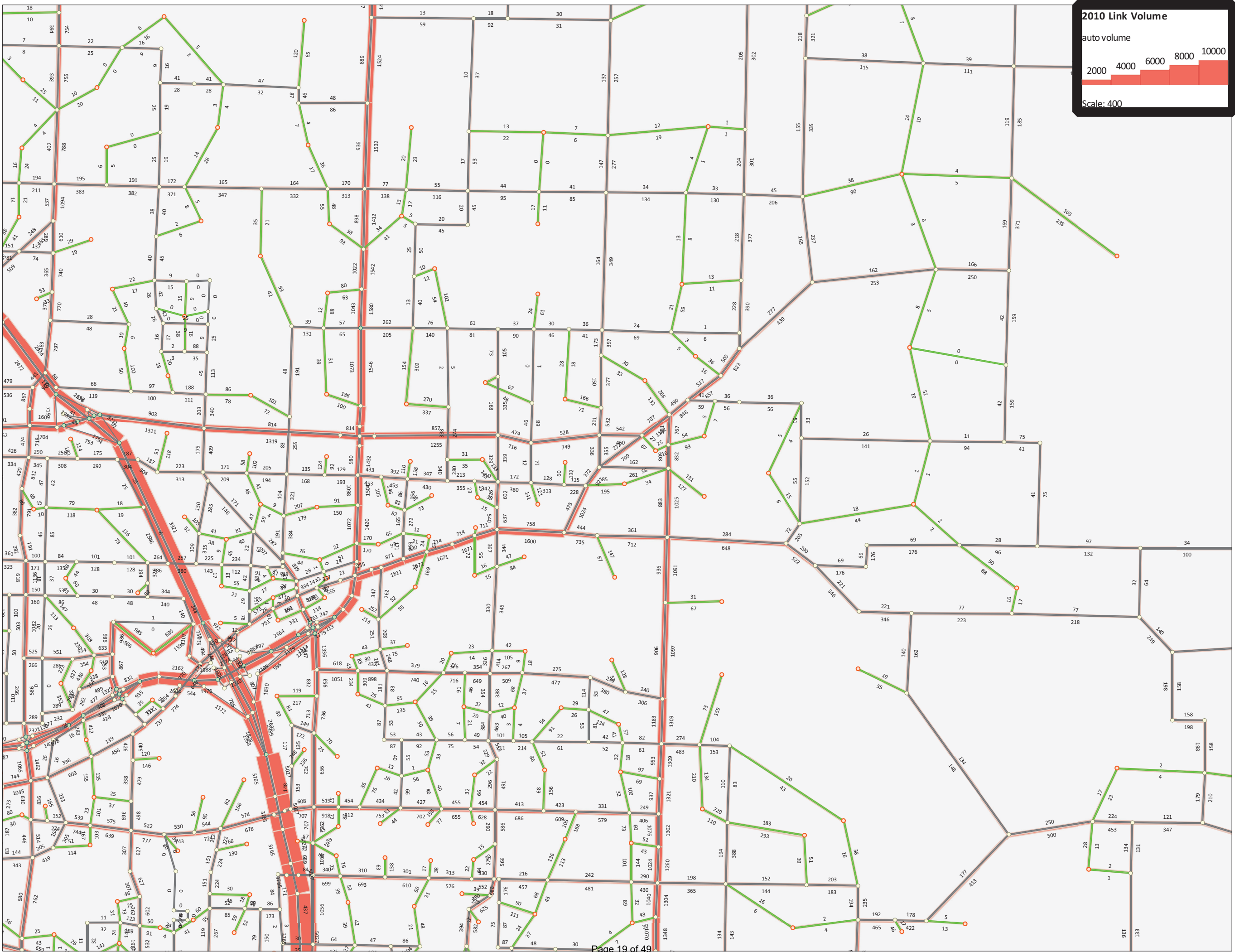
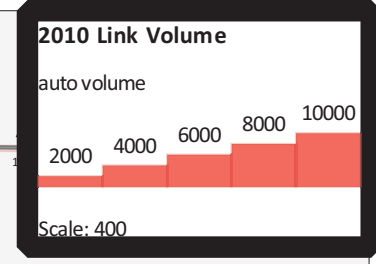
4:35 PM to 5:35 PM

Thursday, May 09, 2019

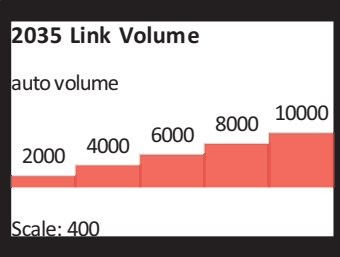
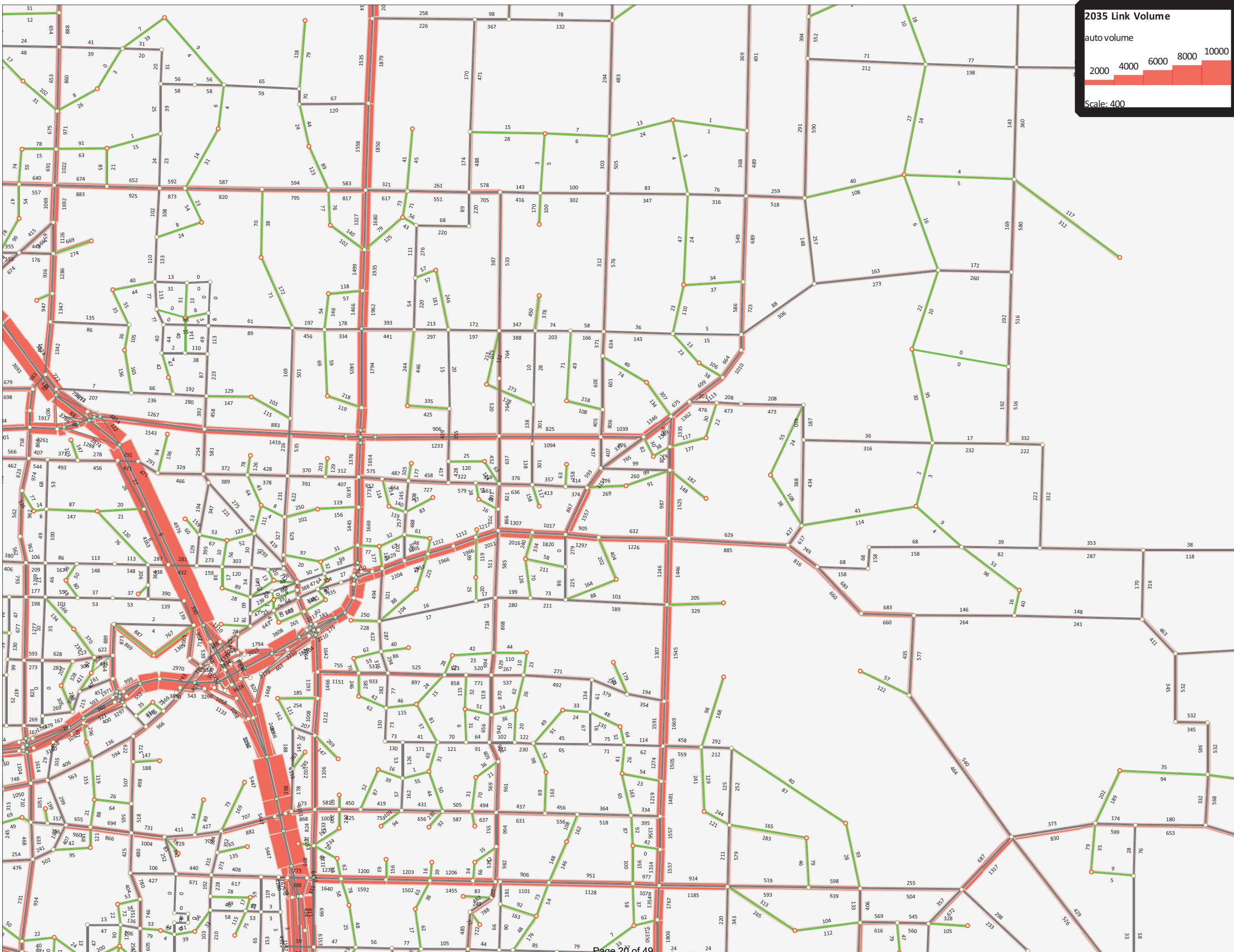


Approach	PHF	HV%	Volume
EB	0.88	1.2%	929
WB	0.88	2.6%	781
NB	0.85	1.8%	341
SB	0.87	1.9%	540
Intersection	0.93	1.8%	2,591

Count Period: 4:00 PM to 6:00 PM







OFFICER REPORTED CRASHES THAT OCCURRED AT MULTIPLE INTERSECTIONS IN CLARK COUNTY

COUNTY ROADS

Intesection 1: 99th St ( Co Rd # 23940, mp 0.980 - 1.020 ) @ 152nd Ave ( Co Rd # 24190, mp 0.980 - 1.020 )

01/01/2014 - 12/31/2018 See 2nd tab below for road info

Under 23 U.S. Code § 409 and 23 U.S. Code § 148, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

JURISDICTION	COUNTY	CITY	PRIMARY TRAFFICWAY	MILEPOST	A/B	BLOCK NUMBER	INTERSECTING TRAFFICWAY	CO ONLY INTERSECTING COUNTY ROAD MILEPOST	DIST FROM REF POINT	MI or FT	COMP DIR FROM REF POINT	REFERENCE POINT NAME	SR ONLY HISTORY / SUSPENSE IND	REPORT NUMBER	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# FAT	# VEH	# PEDS	# BIKES	VEHICLE 1 TYPE	VEHICLE 2 TYPE
County Road	Clark		23940	1.000			24190	1.000					No	3169625	10/23/2015	19:06	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
County Road	Clark		23940	1.000			24190	1.000					No	E412094	03/30/2015	13:37	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
County Road	Clark		23940	1.000			24190	1.000					No	E476910	10/27/2015	19:05	No Apparent Injury	0	0	2	0	0	Passenger Car	Passenger Car
County Road	Clark		23940	1.000			24190	1.000					No	E697313	07/06/2017	18:43	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
County Road	Clark		24190	1.000			23940	1.000					No	E456458	08/29/2015	17:59	No Apparent Injury	0	0	3	0	0	Passenger Car	Passenger Car
County Road	Clark		24190	1.000			23940	1.000					No	E665534	04/23/2017	18:34	No Apparent Injury	0	0	2	0	0	Passenger Car	Passenger Car
County Road	Clark		24190	1.000			23940	1.000					No	E692925	07/17/2017	14:00	No Apparent Injury	0	0	3	0	0	Passenger Car	Passenger Car
County Road	Clark		24190	1.000			23940	1.000					No	E817559	07/13/2018	18:52	Possible Injury	2	0	2	0	0	Passenger Car	Passenger Car
County Road	Clark		24190	1.000			23940	1.000					No	E848545	10/11/2018	05:32	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb

OFFICER REPORTED CRASHES THAT OCCURRED AT MULTIPLE INTERSECTIONS IN CLARK COUNTY

**COUNTY ROADS**

Intesection 1: 99th St ( Co Rd # 23940, mp 0.980 - 1.020 ) @ 152nd Ave ( Co Rd # 24190, mp 0.980 - 1.020 )

**01/01/2014 - 12/31/2018** See 2nd tab below for road info

*Under 23 U.S. Code § 409 and 23 U.S. Code § 148, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.*

JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION	LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 3 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 2)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 3 (UNIT 2)
At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Entering at angle	Going Straight Ahead	Going Straight Ahead	West	East	North	South	Inattention	Did Not Grant RW to Vehicle		None		
At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Making Left Turn	Going Straight Ahead	South	West	West	East	Did Not Grant RW to Vehicle			None		
At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	Entering at angle	Going Straight Ahead	Starting in Traffic Lane	West	East	South	North	Other			None		
At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Making Left Turn	North	South	West	North	Inattention			None		
At Intersection and Related	Clear or Partly Cloudy	Wet	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	South	North	East	West	Disregard Stop Sign - Flashing Red			None		
At Intersection and Related	Overcast	Wet	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Inattention	Follow Too Closely		None		
At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	East	West	West	North	None			None		
At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Starting in Traffic Lane	West	East	North	South	Under Influence of Alcohol	Disregard Stop Sign - Flashing Red	Exceeding Stated Speed Limit	None		
At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-No Street Lights	Entering at angle	Starting in Traffic Lane	Starting in Traffic Lane	North	South	West	East	Unknown Driver Distraction			Unknown Driver Distraction		

OFFICER REPORTED CRASHES THAT OCCURRED AT MULTIPLE INTERSECTIONS IN CLARK COUNTY

COUNTY ROADS

Intesection 1: 99th St ( Co Rd # 23940, mp 0.980 - 1.020 ) @ 152nd Ave ( Co Rd # 24190, mp 0.980 - 1.020 )

01/01/2014 - 12/31/2018 See 2nd tab below for road info

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PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 2 (UNIT 2)	PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 3 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)	WA STATE PLANE SOUTH X 2010 - FORWARD	WA STATE PLANE SOUTH Y 2010 - FORWARD
			Lane of Primary Trafficway	1125155.9	138052.81
			Lane of Primary Trafficway	1125166.662	138053.29
			Lane of Primary Trafficway	1125155.9	138052.81
			Lane of Primary Trafficway	1125155.91	138052.81
			Lane of Primary Trafficway	1125155.9	138052.81
			Lane of Primary Trafficway	1125155.91	138052.81
			Lane of Primary Trafficway	1125155.91	138052.81
			Lane of Primary Trafficway	1125155.91	138052.81
			Lane of Primary Trafficway	1125155.91	138052.81



OFFICER REPORTED CRASHES THAT OCCURRED AT MULTIPLE INTERSECTIONS IN CLARK COUNTY

**STATE ROUTES**

Intersection 2: SR 500 ( aka Padden Pkwy, mp 8.63B - 8.76B) @ 152nd Ave ( Co Rd # 24190, mp 1.730 - 1.770 )

**01/01/2014 - 12/31/2018** See 2nd tab below for road info

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JURISDICTION	COUNTY	CITY	PRIMARY TRAFFICWAY	MILEPOST	A/B	BLOCK NUMBER	INTERSECTING TRAFFICWAY	CO ONLY INTERSECTING COUNTY ROAD MILEPOST	DIST FROM REF POINT	MI or FT	COMP DIR FROM REF POINT	REFERENCE POINT NAME	SR ONLY HISTORY / SUSPENSE IND	REPORT NUMBER	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# FAT	# VEH	# PEDS	# BIKES	VEHICLE 1 TYPE	VEHICLE 2 TYPE
State Route	Clark		500	8.73	B								No	E374555	11/13/2014	18:01	Possible Injury	1	0	2	0	0	Passenger Car	Passenger Car
State Route	Clark		500	8.73	B								No	E382379	12/08/2014	16:09	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Clark		500	8.73	B								No	E428751	05/20/2015	22:00	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
State Route	Clark		500	8.73	B								No	E480875	11/08/2015	09:45	Possible Injury	3	0	3	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Clark		500	8.73	B								No	E492779	12/05/2015	12:05	Possible Injury	2	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Clark		500	8.73	B								No	E513028	02/06/2016	11:08	No Apparent Injury	0	0	1	0	0	Passenger Car	
State Route	Clark		500	8.73	B								No	E518459	02/17/2016	15:48	Possible Injury	1	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Clark		500	8.73	B								No	E546264	05/16/2016	12:22	Possible Injury	1	0	2	0	0	Not Stated	Passenger Car
State Route	Clark		500	8.73	B								No	E560211	06/27/2016	18:49	No Apparent Injury	0	0	2	0	0	Passenger Car	Passenger Car
State Route	Clark		500	8.73	B								No	E578847	08/27/2016	18:48	Suspected Minor Injury	1	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Motorcycle
State Route	Clark		500	8.73	B								No	E594146	10/09/2016	19:05	Suspected Minor Injury	1	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
State Route	Clark		500	8.73	B								No	E624568	12/18/2016	18:39	Suspected Minor Injury	1	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car

OFFICER REPORTED CRASHES THAT OCCURRED AT MULTIPLE INTERSECTIONS IN CLARK COUNTY

**STATE ROUTES**

Intersection 2: SR 500 ( aka Padden Pkwy, mp 8.63B - 8.76B) @ 152nd Ave ( Co Rd # 24190, mp 1.730 - 1.770 )

**01/01/2014 - 12/31/2018** See 2nd tab below for road info

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JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION	LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 3 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 2)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 3 (UNIT 2)
At Intersection and Related	Sleet or Hail or Freezing Rain	Wet	Dark-Street Lights On	From opposite direction one left turn - one straight	Making Left Turn	Going Straight Ahead	North	East	South	North	Improper Turn	Inattention		None		
At Intersection and Related	Overcast	Dry	Daylight	From same direction - both going straight - one stopped - sideswipe	Changing Lanes	Stopped for Traffic	West	East	West	Vehicle Stopped	Inattention	Did Not Grant RW to Vehicle		None		
At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From opposite direction one left turn - one straight	Slowing	Making Left Turn	East	West	West	North	Under Influence of Alcohol	Disregard Stop and Go Light		Driver Not Distracted		
At Intersection and Related	Overcast	Wet	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	North	South	East	West	Disregard Stop and Go Light			None		
At Intersection and Related	Raining	Wet	Daylight	From opposite direction one left turn - one straight	Going Straight Ahead	Making Left Turn	East	West	West	North	Disregard Stop and Go Light	Inattention		None		
At Intersection and Related	Overcast	Dry	Daylight	Tree or Stump (stationary)	Making Right Turn		West	South			Driver Distractions Outside Vehicle					
At Intersection and Related	Raining	Wet	Daylight	From opposite direction one left turn - one straight	Making Left Turn	Going Straight Ahead	South	West	North	South	Did Not Grant RW to Vehicle			None		
At Intersection and Related	Overcast	Dry	Daylight	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	South	North	Vehicle Stopped	Vehicle Stopped	Follow Too Closely			None		
At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction one left turn - one straight	Going Straight Ahead	Making Left Turn	East	West	West	North	None			Improper Turn		
At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	From opposite direction one left turn - one straight	Making Left Turn	Going Straight Ahead	West	North	East	West	Other	Inattention		None		
At Intersection and Related	Raining	Wet	Dark-Street Lights On	From opposite direction one left turn - one straight	Making Left Turn	Going Straight Ahead	North	East	South	North	Did Not Grant RW to Vehicle			None		
At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From opposite direction one left turn - one straight	Making Left Turn	Going Straight Ahead	South	West	North	South	Improper Turn	Did Not Grant RW to Vehicle		None		

OFFICER REPORTED CRASHES THAT OCCURRED AT MULTIPLE INTERSECTIONS IN CLARK COUNTY

**STATE ROUTES**

Intersection 2: SR 500 ( aka Padden Pkwy, mp 8.63B - 8.76B) @ 152nd Ave ( Co Rd # 24190, mp 1.730 - 1.770 )

**01/01/2014 - 12/31/2018** See 2nd tab below for road info

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PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 2 (UNIT 2)	PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 3 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)	WA STATE PLANE SOUTH X 2010 - FORWARD	WA STATE PLANE SOUTH Y 2010 - FORWARD
			Left Turn Lane Decreasing Milepost	1125089.87	134047.34
			Left Turn Lane Increasing Milepost	1125087.87	134047.4
			Lane 1 Decreasing Milepost	1125095.09	134047.16
			Lane 1 Decreasing Milepost	1125098.43	134044.26
			Lane 2 Decreasing Milepost	1125090.73	134047.31
			Past Right Shoulder Increasing Milepost	1125089	134045.5
			Left Turn Lane Increasing Milepost	1125091.34	134047.6
			Intersecting Road Increasing Milepost	1125090.02	134046.57
			Lane 2 Decreasing Milepost	1125095.09	134047.16
			Lane 1 Decreasing Milepost	1125084.82	134044.04
			Lane 2 Decreasing Milepost	1125078.62	134045.91
			Lane 1 Decreasing Milepost	1125088.55	134046.19

OFFICER REPORTED CRASHES THAT OCCURRED AT MULTIPLE INTERSECTIONS IN CLARK COUNTY

**STATE ROUTES**

Intersection 2: SR 500 ( aka Padden Pkwy, mp 8.63B - 8.76B) @ 152nd Ave ( Co Rd # 24190, mp 1.730 - 1.770 )

**01/01/2014 - 12/31/2018** See 2nd tab below for road info

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State Route	Clark		500	8.73	B								No	E640310	02/08/2017	12:47	Suspected Minor Injury	3	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
State Route	Clark		500	8.73	B								No	E718694	09/22/2017	23:45	Possible Injury	1	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
State Route	Clark		500	8.73	B								No	E742312	11/30/2017	17:52	Suspected Minor Injury	2	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Clark		500	8.73	B								No	E743503	11/29/2017	17:21	Possible Injury	1	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
State Route	Clark		500	8.73	B								No	E753660	12/29/2017	16:55	Possible Injury	1	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Clark		500	8.73	B								No	E770822	02/18/2018	22:08	Possible Injury	1	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Clark		500	8.73	B								No	E784361	03/25/2018	21:16	Possible Injury	1	0	2	0	0	Passenger Car	Passenger Car
State Route	Clark		500	8.73	B								No	E807828	06/08/2018	18:48	Possible Injury	1	0	2	0	0	Passenger Car	Passenger Car
State Route	Clark		500	8.73	B								No	E810889	06/15/2018	21:42	No Apparent Injury	0	0	2	0	0	Passenger Car	Passenger Car
State Route	Clark		500	8.73	B								No	E811243	06/16/2018	10:55	No Apparent Injury	0	0	2	0	0	Passenger Car	Pickup,Panel Truck or Vanette under 10,000 lb
State Route	Clark		500	8.73	B								No	E821884	07/12/2018	00:11	No Apparent Injury	0	0	2	0	0	Pickup,Panel Truck or Vanette under 10,000 lb	Passenger Car
State Route	Clark		500	8.73	B								No	E855830	10/26/2018	09:28	No Apparent Injury	0	0	2	0	0	Passenger Car	Passenger Car

OFFICER REPORTED CRASHES THAT OCCURRED AT MULTIPLE INTERSECTIONS IN CLARK COUNTY

**STATE ROUTES**

Intersection 2: SR 500 ( aka Padden Pkwy, mp 8.63B - 8.76B) @ 152nd Ave ( Co Rd # 24190, mp 1.730 - 1.770 )

**01/01/2014 - 12/31/2018** See 2nd tab below for road info

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JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION	LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 3 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 2)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 3 (UNIT 2)
At Intersection and Related	Raining	Wet	Daylight	From opposite direction one left turn - one straight	Making Left Turn	Going Straight Ahead	West	North	East	West	Did Not Grant RW to Vehicle			None		
At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From opposite direction one left turn - one straight	Making Left Turn	Going Straight Ahead	West	North	East	West	Under Influence of Alcohol			None		
At Intersection and Related	Raining	Wet	Dark-Street Lights On	From opposite direction one left turn - one straight	Making Left Turn	Going Straight Ahead	North	East	South	North	Unknown Driver Distraction			Unknown Driver Distraction		
At Intersection and Related	Overcast	Wet	Dark-Street Lights On	From opposite direction one left turn - one straight	Making Left Turn	Going Straight Ahead	West	North	East	West	Did Not Grant RW to Vehicle			None		
At Intersection and Related	Raining	Wet	Dark-Street Lights On	From opposite direction one left turn - one straight	Making Left Turn	Going Straight Ahead	West	North	East	West	Improper Turn	Inattention		None		
At Intersection and Related	Overcast	Snow/Slush	Dark-Street Lights On	From opposite direction one left turn - one straight	Going Straight Ahead	Making Left Turn	South	North	North	East	None			Did Not Grant RW to Vehicle		
At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From opposite direction one left turn - one straight	Making Left Turn	Going Straight Ahead	West	North	East	West	Other	Inattention		None		
At Intersection and Related	Raining	Wet	Daylight	From opposite direction one left turn - one straight	Making Left Turn	Going Straight Ahead	West	North	East	West	Did Not Grant RW to Vehicle			None		
At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From same direction - both going straight - one stopped - rear-end	Going Straight Ahead	Stopped at Signal or Stop Sign	West	East	Vehicle Stopped	Vehicle Stopped	Exceeding Reas. Safe Speed			None		
At Intersection and Related	Clear or Partly Cloudy	Dry	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead			East	West	Disregard Stop and Go Light			None		
At Intersection and Related	Clear or Partly Cloudy	Dry	Dark-Street Lights On	From opposite direction one left turn - one straight	Making Left Turn	Going Straight Ahead	West	North	East	West	Did Not Grant RW to Vehicle			Under Influence of Alcohol		
At Intersection and Related	Clear or Partly Cloudy	Wet	Daylight	Entering at angle	Going Straight Ahead	Going Straight Ahead	North	South	East	West	None			None		

OFFICER REPORTED CRASHES THAT OCCURRED AT MULTIPLE INTERSECTIONS IN CLARK COUNTY

STATE ROUTES

Intersection 2: SR 500 ( aka Padden Pkwy, mp 8.63B - 8.76B) @ 152nd Ave ( Co Rd # 24190, mp 1.730 - 1.770 )

01/01/2014 - 12/31/2018 See 2nd tab below for road info

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PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 2 (UNIT 2)	PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 3 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)	WA STATE PLANE SOUTH X 2010 - FORWARD	WA STATE PLANE SOUTH Y 2010 - FORWARD
			Lane 1 Decreasing Milepost	1125095.09	134047.16
			Lane 2 Decreasing Milepost	1125095.09	134047.16
			Lane 1 Decreasing Milepost	1125092.19	134046.04
			Lane 2 Decreasing Milepost	1125088.96	134047.26
			Lane 2 Decreasing Milepost	1125089.95	134044.68
			Lane 2 Increasing Milepost	1125095.05	134046.11
			Lane 2 Decreasing Milepost	1125092.02	134045.78
			Lane 1 Decreasing Milepost	1125091.88	134045.96
			Lane 2 Increasing Milepost	1125090.35	134045.57
			Lane 2 Decreasing Milepost	1125095.09	134047.16
			Lane 2 Decreasing Milepost	1125095.09	134047.16
			Lane 2 Decreasing Milepost	1125095.66	134047.14

OFFICER REPORTED CRASHES THAT OCCURRED AT MULTIPLE INTERSECTIONS IN CLARK COUNTY

STATE ROUTES

Intersection 2: SR 500 ( aka Padden Pkwy, mp 8.63B - 8.76B) @ 152nd Ave ( Co Rd # 24190, mp 1.730 - 1.770 )

01/01/2014 - 12/31/2018 See 2nd tab below for road info

Under 23 U.S. Code § 409 and 23 U.S. Code § 148, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

JURISDICTION	COUNTY	CITY	PRIMARY TRAFFICWAY	MILEPOST	A/B	BLOCK NUMBER	INTERSECTING TRAFFICWAY	CO ONLY INTERSECTING COUNTY ROAD MILEPOST	DIST FROM REF POINT	MI or FT	COMP DIR FROM REF POINT	REFERENCE POINT NAME	SR ONLY HISTORY / SUSPENSE IND	REPORT NUMBER	DATE	TIME	MOST SEVERE INJURY TYPE	# INJ	# FAT	# VEH	# PEDS	# BIKES	VEHICLE 1 TYPE	VEHICLE 2 TYPE
State Route	Clark		500	8.73	B								No	E873639	12/07/2018	21:26	Possible Injury	1	0	2	0	0	Passenger Car	Passenger Car

OFFICER REPORTED CRASHES THAT OCCURRED AT MULTIPLE INTERSECTIONS IN CLARK COUNTY

STATE ROUTES

Intersection 2: SR 500 ( aka Padden Pkwy, mp 8.63B - 8.76B) @ 152nd Ave ( Co Rd # 24190, mp 1.730 - 1.770 )

01/01/2014 - 12/31/2018 See 2nd tab below for road info

Under 23 U.S. Code § 409 and 23 U.S. Code § 148, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

JUNCTION RELATIONSHIP	WEATHER	ROADWAY SURFACE CONDITION	LIGHTING CONDITION	FIRST COLLISION TYPE / OBJECT STRUCK	VEHICLE 1 ACTION	VEHICLE 2 ACTION	VEHICLE 1 COMPASS DIRECTION FROM	VEHICLE 1 COMPASS DIRECTION TO	VEHICLE 2 COMPASS DIRECTION FROM	VEHICLE 2 COMPASS DIRECTION TO	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 3 (UNIT 1)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 2 (UNIT 2)	MV DRIVER CONTRIBUTING CIRCUMSTANCE 3 (UNIT 2)
At Intersection and Related	Overcast	Wet	Dark-No Street Lights	From opposite direction one left turn - one straight	Making Left Turn	Going Straight Ahead	West	North	East	West	Did Not Grant RW to Vehicle			None		



OFFICER REPORTED CRASHES THAT OCCURRED AT MULTIPLE INTERSECTIONS IN CLARK COUNTY

STATE ROUTES

Intersection 2: SR 500 ( aka Padden Pkwy, mp 8.63B - 8.76B) @ 152nd Ave ( Co Rd # 24190, mp 1.730 - 1.770 )

01/01/2014 - 12/31/2018 See 2nd tab below for road info

Under 23 U.S. Code § 409 and 23 U.S. Code § 148, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 1 (UNIT 2)	PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 2 (UNIT 2)	PEDESTRIAN CONTRIBUTING CIRCUMSTANCE 3 (UNIT 2)	FIRST IMPACT LOCATION (City, County & Misc Trafficways - 2010 forward)	WA STATE PLANE SOUTH X 2010 - FORWARD	WA STATE PLANE SOUTH Y 2010 - FORWARD
			Lane 3 Decreasing Milepost	1125089.21	134027.25

## Traffic Signal Warrant Analysis

Project: NE 152nd Avenue Zone Change  
 Date: 5/16/2019  
 Scenario: 2039 Planning Horizon (Existing CC Zone)

Major Street:	NE 152nd Avenue	Minor Street:	NE 99th Street
Number of Lanes:	1	Number of Lanes:	2
PM Peak Hour Volumes:	1231	PM Peak Hour Volumes:	348

### Warrant Used:

    X     100 percent of standard warrants used  
           70 percent of standard warrants used due to 85th percentile speed in excess  
           of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:		ADT on Major St. (total of both approaches)		ADT on Minor St. (higher-volume approach)	
		100%	70%	100%	70%
<u>Major St.</u>	<u>Minor St.</u>	<u>Warrants</u>	<u>Warrants</u>	<u>Warrants</u>	<u>Warrants</u>
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500

<u>WARRANT 1, CONDITION B</u>					
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
<i>Warrant 1</i>			
<i>Condition A: Minimum Vehicular Volume</i>			
Major Street	12,310	8,850	
Minor Street*	3,480	3,550	<b>No</b>
<i>Condition B: Interruption of Continuous Traffic</i>			
Major Street	12,310	13,300	
Minor Street*	3,480	1,750	<b>No</b>
<i>Combination Warrant</i>			
Major Street	12,310	10,640	
Minor Street*	3,480	2,840	<b>Yes</b>

Note: Minor street right-turning traffic volumes reduced by 25%.

## Traffic Signal Warrant Analysis

Project: NE 152nd Avenue Zone Change  
 Date: 5/16/2019  
 Scenario: 2039 Planning Horizon (Proposed R1-6 Zone))

Major Street:	NE 152nd Avenue	Minor Street:	NE 99th Street
Number of Lanes:	1	Number of Lanes:	2
PM Peak Hour Volumes:	1204	PM Peak Hour Volumes:	344

### Warrant Used:

    X     100 percent of standard warrants used  
           70 percent of standard warrants used due to 85th percentile speed in excess  
           of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:		ADT on Major St. (total of both approaches)		ADT on Minor St. (higher-volume approach)	
		100%	70%	100%	70%
<u>Major St.</u>	<u>Minor St.</u>	<u>Warrants</u>	<u>Warrants</u>	<u>Warrants</u>	<u>Warrants</u>
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500

<u>WARRANT 1, CONDITION B</u>					
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
<i>Warrant 1</i>			
<i>Condition A: Minimum Vehicular Volume</i>			
Major Street	12,040	8,850	
Minor Street*	3,440	3,550	<b>No</b>
<i>Condition B: Interruption of Continuous Traffic</i>			
Major Street	12,040	13,300	
Minor Street*	3,440	1,750	<b>No</b>
<i>Combination Warrant</i>			
Major Street	12,040	10,640	
Minor Street*	3,440	2,840	<b>Yes</b>

Note: Minor street right-turning traffic volumes reduced by 25%.



## LEVEL OF SERVICE

Level of service is used to describe the quality of traffic flow. Levels of service A to C are considered good, and rural roads are usually designed for level of service C. Urban streets and signalized intersections are typically designed for level of service D. Level of service E is considered to be the limit of acceptable delay. For unsignalized intersections, level of service E is generally considered acceptable. Here is a more complete description of levels of service:

*Level of service A:* Very low delay at intersections, with all traffic signal cycles clearing and no vehicles waiting through more than one signal cycle. On highways, low volume and high speeds, with speeds not restricted by other vehicles.

*Level of service B:* Operating speeds beginning to be affected by other traffic; short traffic delays at intersections. Higher average intersection delay than for level of service A resulting from more vehicles stopping.

*Level of service C:* Operating speeds and maneuverability closely controlled by other traffic; higher delays at intersections than for level of service B due to a significant number of vehicles stopping. Not all signal cycles clear the waiting vehicles. This is the recommended design standard for rural highways.

*Level of service D:* Tolerable operating speeds; long traffic delays occur at intersections. The influence of congestion is noticeable. At traffic signals many vehicles stop, and the proportion of vehicles not stopping declines. The number of signal cycle failures, for which vehicles must wait through more than one signal cycle, are noticeable. This is typically the design level for urban signalized intersections.

*Level of service E:* Restricted speeds, very long traffic delays at traffic signals, and traffic volumes near capacity. Flow is unstable so that any interruption, no matter how minor, will cause queues to form and service to deteriorate to level of service F. Traffic signal cycle failures are frequent occurrences. For unsignalized intersections, level of service E or better is generally considered acceptable.

*Level of service F:* Extreme delays, resulting in long queues which may interfere with other traffic movements. There may be stoppages of long duration, and speeds may drop to zero. There may be frequent signal cycle failures. Level of service F will typically result when vehicle arrival rates are greater than capacity. It is considered unacceptable by most drivers.

*LEVEL OF SERVICE CRITERIA  
FOR SIGNALIZED INTERSECTIONS*

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (Seconds)
A	<10
B	10-20
C	20-35
D	35-55
E	55-80
F	>80






*LEVEL OF SERVICE CRITERIA  
FOR UNSIGNALIZED INTERSECTIONS*

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (Seconds)
A	<10
B	10-15
C	15-25
D	25-35
E	35-50
F	>50

HCM 6th AWSC  
1: NE 152nd Avenue & NE 99th Street

05/14/2019

Intersection	
Intersection Delay, s/veh	14.9
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	31	72	19	58	23	31	159	8	10	369	64
Future Vol, veh/h	39	31	72	19	58	23	31	159	8	10	369	64
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	13	13	13	1	1	1	2	2	2	5	5	5
Mvmt Flow	43	34	80	21	64	26	34	177	9	11	410	71
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

























Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	10.4	10.6	11.3	18.9
HCM LOS	B	B	B	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	16%	56%	0%	19%	2%
Vol Thru, %	80%	44%	0%	58%	83%
Vol Right, %	4%	0%	100%	23%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	198	70	72	100	443
LT Vol	31	39	0	19	10
Through Vol	159	31	0	58	369
RT Vol	8	0	72	23	64
Lane Flow Rate	220	78	80	111	492
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.336	0.153	0.135	0.189	0.695
Departure Headway (Hd)	5.503	7.079	6.081	6.134	5.084
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	651	506	588	583	709
Service Time	3.549	4.832	3.834	4.192	3.119
HCM Lane V/C Ratio	0.338	0.154	0.136	0.19	0.694
HCM Control Delay	11.3	11.1	9.8	10.6	18.9
HCM Lane LOS	B	B	A	B	C
HCM 95th-tile Q	1.5	0.5	0.5	0.7	5.6

## HCM 6th Signalized Intersection Summary

### 2: NE 152nd Avenue & NE Padden Parkway

05/14/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	390	74	2	588	124	47	69	7	159	294	225
Future Volume (veh/h)	48	390	74	2	588	124	47	69	7	159	294	225
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.99	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	1737	1737	1737	1841	1841	1841	1796	1796	1796	1811	1811	1811
Adj Flow Rate, veh/h	53	433	82	2	653	138	52	77	8	177	327	250
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	11	11	11	4	4	4	7	7	7	6	6	6
Cap, veh/h	308	593	489	251	1023	453	300	314	33	527	462	391
Arrive On Green	0.05	0.34	0.34	0.00	0.29	0.29	0.05	0.20	0.20	0.11	0.26	0.26
Sat Flow, veh/h	1654	1737	1433	1753	3497	1549	1711	1599	166	1725	1811	1531
Grp Volume(v), veh/h	53	433	82	2	653	138	52	0	85	177	327	250
Grp Sat Flow(s),veh/h/ln	1654	1737	1433	1753	1749	1549	1711	0	1765	1725	1811	1531
Q Serve(g_s), s	1.1	11.3	2.1	0.0	8.4	3.6	1.2	0.0	2.1	4.0	8.4	7.5
Cycle Q Clear(g_c), s	1.1	11.3	2.1	0.0	8.4	3.6	1.2	0.0	2.1	4.0	8.4	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	308	593	489	251	1023	453	300	0	346	527	462	391
V/C Ratio(X)	0.17	0.73	0.17	0.01	0.64	0.30	0.17	0.00	0.25	0.34	0.71	0.64
Avail Cap(c_a), veh/h	387	1178	972	417	2365	1048	383	0	789	642	950	803
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	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	14.9	11.8	13.5	15.8	14.1	15.3	0.0	17.5	13.5	17.4	17.1
Incr Delay (d2), s/veh	0.3	1.8	0.2	0.0	0.7	0.4	0.3	0.0	0.4	0.4	2.0	1.7
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	0.3	3.5	0.5	0.0	2.6	1.0	0.4	0.0	0.8	1.4	3.3	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.4	16.6	12.0	13.6	16.5	14.5	15.6	0.0	17.8	13.8	19.4	18.8
LnGrp LOS	B	B	B	B	B	B	B	A	B	B	B	B
Approach Vol, veh/h	568			793			137			754		
Approach Delay, s/veh	15.6			16.2			17.0			17.9		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.2	14.6	4.6	22.1	7.1	17.6	7.2	19.5				
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	9.1	23.0	5.0	34.9	5.1	27.0	5.1	34.8				
Max Q Clear Time (g_c+I1), s	6.0	4.1	2.0	13.3	3.2	10.4	3.1	10.4				
Green Ext Time (p_c), s	0.1	0.3	0.0	2.6	0.0	2.5	0.0	4.5				
Intersection Summary												
HCM 6th Ctrl Delay	16.6											
HCM 6th LOS	B											

HCM 6th AWSC  
1: NE 152nd Avenue & NE 99th Street

05/14/2019

Intersection	
Intersection Delay, s/veh	21.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔			↔			↔	
Traffic Vol, veh/h	84	78	95	18	48	37	77	366	30	26	287	39
Future Vol, veh/h	84	78	95	18	48	37	77	366	30	26	287	39
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	3	3	3	3	3	3	2	2	2	1	1	1
Mvmt Flow	88	81	99	19	50	39	80	381	31	27	299	41
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	13.1	12.2	29.6	18.6
HCM LOS	B	B	D	C
























Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	16%	52%	0%	17%	7%
Vol Thru, %	77%	48%	0%	47%	82%
Vol Right, %	6%	0%	100%	36%	11%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	473	162	95	103	352
LT Vol	77	84	0	18	26
Through Vol	366	78	0	48	287
RT Vol	30	0	95	37	39
Lane Flow Rate	493	169	99	107	367
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.811	0.356	0.182	0.214	0.62
Departure Headway (Hd)	5.924	7.597	6.612	7.194	6.091
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	611	473	541	497	594
Service Time	3.964	5.348	4.363	5.263	4.136
HCM Lane V/C Ratio	0.807	0.357	0.183	0.215	0.618
HCM Control Delay	29.6	14.5	10.8	12.2	18.6
HCM Lane LOS	D	B	B	B	C
HCM 95th-tile Q	8.2	1.6	0.7	0.8	4.2



## HCM 6th Signalized Intersection Summary

### 2: NE 152nd Avenue & NE Padden Parkway






05/14/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	606	145	6	548	227	67	265	9	129	237	174
Future Volume (veh/h)	178	606	145	6	548	227	67	265	9	129	237	174
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		0.97	1.00		0.99	0.99		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	1885	1885	1885	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	191	652	156	6	589	244	72	285	10	139	255	187
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	3	3	3	2	2	2	2	2	2
Cap, veh/h	412	782	661	197	1151	500	326	381	13	331	449	378
Arrive On Green	0.10	0.42	0.42	0.01	0.33	0.33	0.06	0.21	0.21	0.08	0.24	0.24
Sat Flow, veh/h	1795	1885	1592	1767	3526	1532	1781	1795	63	1781	1870	1573
Grp Volume(v), veh/h	191	652	156	6	589	244	72	0	295	139	255	187
Grp Sat Flow(s),veh/h/ln	1795	1885	1592	1767	1763	1532	1781	0	1858	1781	1870	1573
Q Serve(g_s), s	4.2	19.9	4.1	0.1	8.7	8.2	2.0	0.0	9.5	3.8	7.7	6.6
Cycle Q Clear(g_c), s	4.2	19.9	4.1	0.1	8.7	8.2	2.0	0.0	9.5	3.8	7.7	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	412	782	661	197	1151	500	326	0	394	331	449	378
V/C Ratio(X)	0.46	0.83	0.24	0.03	0.51	0.49	0.22	0.00	0.75	0.42	0.57	0.49
Avail Cap(c_a), veh/h	569	1659	1401	321	2730	1186	381	0	897	444	1017	855
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	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.9	16.8	12.2	15.8	17.5	17.3	18.2	0.0	23.7	18.0	21.4	21.0
Incr Delay (d2), s/veh	0.8	2.4	0.2	0.1	0.4	0.7	0.3	0.0	2.9	0.8	1.1	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	1.4	7.2	1.2	0.1	3.0	2.5	0.8	0.0	4.1	1.5	3.2	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.8	19.2	12.4	15.9	17.8	18.0	18.5	0.0	26.6	18.9	22.6	22.0
LnGrp LOS	B	B	B	B	B	B	B	A	C	B	C	C
Approach Vol, veh/h		999			839			367			581	
Approach Delay, s/veh		16.9			17.9			25.0			21.5	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.9	18.1	5.0	31.1	8.1	19.9	10.7	25.5				
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	9.5	31.0	5.0	56.5	5.6	34.9	11.8	49.7				
Max Q Clear Time (g_c+I1), s	5.8	11.5	2.1	21.9	4.0	9.7	6.2	10.7				
Green Ext Time (p_c), s	0.1	1.6	0.0	4.8	0.0	2.1	0.2	4.8				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			19.2									
HCM 6th LOS			B									

HCM 6th AWSC  
1: NE 152nd Avenue & NE 99th Street

05/14/2019

Intersection	
Intersection Delay, s/veh	78.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	46	107	28	87	34	46	237	12	15	550	95
Future Vol, veh/h	58	46	107	28	87	34	46	237	12	15	550	95
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	13	13	13	1	1	1	2	2	2	5	5	5
Mvmt Flow	64	51	119	31	97	38	51	263	13	17	611	106
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

























Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	13.7	15.1	19.7	139
HCM LOS	B	C	C	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	16%	56%	0%	19%	2%
Vol Thru, %	80%	44%	0%	58%	83%
Vol Right, %	4%	0%	100%	23%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	295	104	107	149	660
LT Vol	46	58	0	28	15
Through Vol	237	46	0	87	550
RT Vol	12	0	107	34	95
Lane Flow Rate	328	116	119	166	733
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.595	0.262	0.237	0.339	1.231
Departure Headway (Hd)	6.981	8.787	7.773	8.034	6.043
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	521	411	465	450	601
Service Time	4.981	6.487	5.473	6.034	4.098
HCM Lane V/C Ratio	0.63	0.282	0.256	0.369	1.22
HCM Control Delay	19.7	14.6	12.9	15.1	139
HCM Lane LOS	C	B	B	C	F
HCM 95th-tile Q	3.8	1	0.9	1.5	27.1

# HCM 6th Signalized Intersection Summary

## 2: NE 152nd Avenue & NE Padden Parkway

05/14/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	582	110	3	877	185	70	103	10	237	439	336
Future Volume (veh/h)	72	582	110	3	877	185	70	103	10	237	439	336
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		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	1737	1737	1737	1841	1841	1841	1796	1796	1796	1811	1811	1811
Adj Flow Rate, veh/h	80	647	122	3	974	206	78	114	11	263	488	373
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	11	11	11	4	4	4	7	7	7	6	6	6
Cap, veh/h	228	706	583	137	1251	555	213	362	35	525	554	469
Arrive On Green	0.05	0.41	0.41	0.00	0.36	0.36	0.05	0.22	0.22	0.13	0.31	0.31
Sat Flow, veh/h	1654	1737	1434	1753	3497	1551	1711	1612	156	1725	1811	1532
Grp Volume(v), veh/h	80	647	122	3	974	206	78	0	125	263	488	373
Grp Sat Flow(s),veh/h/ln	1654	1737	1434	1753	1749	1551	1711	0	1767	1725	1811	1532
Q Serve(g_s), s	2.3	27.4	4.3	0.1	19.3	7.7	2.7	0.0	4.6	8.6	19.9	17.4
Cycle Q Clear(g_c), s	2.3	27.4	4.3	0.1	19.3	7.7	2.7	0.0	4.6	8.6	19.9	17.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	228	706	583	137	1251	555	213	0	397	525	554	469
V/C Ratio(X)	0.35	0.92	0.21	0.02	0.78	0.37	0.37	0.00	0.31	0.50	0.88	0.80
Avail Cap(c_a), veh/h	247	792	654	242	1595	707	233	0	479	525	617	521
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	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	21.8	15.0	19.5	22.3	18.5	22.7	0.0	25.2	17.8	25.7	24.8
Incr Delay (d2), s/veh	0.9	14.4	0.2	0.1	1.9	0.4	1.1	0.0	0.4	0.7	13.0	7.7
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	0.8	12.2	1.2	0.0	7.2	2.5	1.1	0.0	1.9	3.3	10.0	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.7	36.2	15.2	19.5	24.2	18.9	23.7	0.0	25.6	18.5	38.7	32.4
LnGrp LOS	B	D	B	B	C	B	C	A	C	B	D	C
Approach Vol, veh/h	849			1183			203			1124		
Approach Delay, s/veh	31.5			23.3			24.9			31.9		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.9	22.0	4.8	36.1	8.6	28.3	8.6	32.3				
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	10.4	21.1	5.0	35.5	5.0	26.5	5.0	35.5				
Max Q Clear Time (g_c+I1), s	10.6	6.6	2.1	29.4	4.7	21.9	4.3	21.3				
Green Ext Time (p_c), s	0.0	0.5	0.0	2.2	0.0	1.9	0.0	5.9				
Intersection Summary												
HCM 6th Ctrl Delay	28.3											
HCM 6th LOS	C											

Intersection	
Intersection Delay, s/veh	142.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶	↷		↶↷			↶↷			↶↷	
Traffic Vol, veh/h	125	116	142	27	72	55	115	546	45	39	428	58
Future Vol, veh/h	125	116	142	27	72	55	115	546	45	39	428	58
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	3	3	3	3	3	3	2	2	2	1	1	1
Mvmt Flow	130	121	148	28	75	57	120	569	47	41	446	60
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
























Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	22.6	20.1	261.6	106.3
HCM LOS	C	C	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	16%	52%	0%	18%	7%
Vol Thru, %	77%	48%	0%	47%	82%
Vol Right, %	6%	0%	100%	36%	11%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	706	241	142	154	525
LT Vol	115	125	0	27	39
Through Vol	546	116	0	72	428
RT Vol	45	0	142	55	58
Lane Flow Rate	735	251	148	160	547
Geometry Grp	2	7	7	5	2
Degree of Util (X)	1.511	0.605	0.317	0.392	1.114
Departure Headway (Hd)	7.714	9.905	8.9	10.513	8.289
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	478	367	407	345	443
Service Time	5.714	7.605	6.6	8.513	6.289
HCM Lane V/C Ratio	1.538	0.684	0.364	0.464	1.235
HCM Control Delay	261.6	26.7	15.7	20.1	106.3
HCM Lane LOS	F	D	C	C	F
HCM 95th-tile Q	37	3.8	1.3	1.8	16.9

## HCM 6th Signalized Intersection Summary

### 2: NE 152nd Avenue & NE Padden Parkway






05/14/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	904	216	9	817	339	100	395	13	192	354	260
Future Volume (veh/h)	266	904	216	9	817	339	100	395	13	192	354	260
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		0.99
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	1885	1885	1885	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	286	972	232	10	878	365	108	425	14	206	381	280
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	3	3	3	2	2	2	2	2	2
Cap, veh/h	353	948	801	83	1425	620	227	442	15	225	522	440
Arrive On Green	0.11	0.50	0.50	0.01	0.40	0.40	0.05	0.25	0.25	0.09	0.28	0.28
Sat Flow, veh/h	1795	1885	1593	1767	3526	1534	1781	1800	59	1781	1870	1575
Grp Volume(v), veh/h	286	972	232	10	878	365	108	0	439	206	381	280
Grp Sat Flow(s),veh/h/ln	1795	1885	1593	1767	1763	1534	1781	0	1859	1781	1870	1575
Q Serve(g_s), s	10.3	58.5	9.9	0.4	23.0	21.7	5.3	0.0	27.1	9.9	21.5	18.1
Cycle Q Clear(g_c), s	10.3	58.5	9.9	0.4	23.0	21.7	5.3	0.0	27.1	9.9	21.5	18.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	353	948	801	83	1425	620	227	0	457	225	522	440
V/C Ratio(X)	0.81	1.03	0.29	0.12	0.62	0.59	0.48	0.00	0.96	0.91	0.73	0.64
Avail Cap(c_a), veh/h	482	948	801	138	1425	620	227	0	457	225	522	440
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	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.6	28.9	16.8	29.5	27.5	27.1	32.1	0.0	43.3	32.4	38.0	36.8
Incr Delay (d2), s/veh	7.2	36.0	0.2	0.6	0.8	1.5	1.5	0.0	32.2	37.4	5.1	3.0
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	4.6	32.9	3.4	0.2	9.2	7.7	2.3	0.0	16.3	6.6	10.4	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	64.9	17.0	30.1	28.3	28.6	33.7	0.0	75.5	69.9	43.1	39.8
LnGrp LOS	C	F	B	C	C	C	C	A	E	E	D	D
Approach Vol, veh/h	1490			1253			547			867		
Approach Delay, s/veh	50.5			28.4			67.3			48.4		
Approach LOS	D			C			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.4	33.1	5.9	63.0	10.5	37.0	17.4	51.5				
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	9.9	28.6	5.0	58.5	6.0	32.5	21.2	42.3				
Max Q Clear Time (g_c+I1), s	11.9	29.1	2.4	60.5	7.3	23.5	12.3	25.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	2.3	0.5	6.4				
Intersection Summary												
HCM 6th Ctrl Delay	45.6											
HCM 6th LOS	D											

HCM 6th AWSC  
1: NE 152nd Avenue & NE 99th Street

05/14/2019

Intersection	
Intersection Delay, s/veh	72.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	46	100	27	87	34	48	240	12	15	539	95
Future Vol, veh/h	58	46	100	27	87	34	48	240	12	15	539	95
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	13	13	13	1	1	1	2	2	2	5	5	5
Mvmt Flow	64	51	111	30	97	38	53	267	13	17	599	106
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

























Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	13.6	14.9	19.8	128.4
HCM LOS	B	B	C	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	16%	56%	0%	18%	2%
Vol Thru, %	80%	44%	0%	59%	83%
Vol Right, %	4%	0%	100%	23%	15%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	300	104	100	148	649
LT Vol	48	58	0	27	15
Through Vol	240	46	0	87	539
RT Vol	12	0	100	34	95
Lane Flow Rate	333	116	111	164	721
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.601	0.262	0.222	0.336	1.204
Departure Headway (Hd)	6.909	8.74	7.727	7.963	6.012
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	527	414	468	454	606
Service Time	4.909	6.44	5.427	5.963	4.074
HCM Lane V/C Ratio	0.632	0.28	0.237	0.361	1.19
HCM Control Delay	19.8	14.5	12.6	14.9	128.4
HCM Lane LOS	C	B	B	B	F
HCM 95th-tile Q	3.9	1	0.8	1.5	25.6

## HCM 6th Signalized Intersection Summary

### 2: NE 152nd Avenue & NE Padden Parkway

05/14/2019

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	582	110	3	877	177	70	46	10	239	452	339
Future Volume (veh/h)	57	582	110	3	877	177	70	46	10	239	452	339
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		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	1737	1737	1737	1841	1841	1841	1796	1796	1796	1811	1811	1811
Adj Flow Rate, veh/h	63	647	122	3	974	197	78	51	11	266	502	377
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	11	11	11	4	4	4	7	7	7	6	6	6
Cap, veh/h	220	701	579	133	1261	559	209	323	70	585	565	478
Arrive On Green	0.05	0.40	0.40	0.00	0.36	0.36	0.05	0.23	0.23	0.14	0.31	0.31
Sat Flow, veh/h	1654	1737	1434	1753	3497	1551	1711	1431	309	1725	1811	1532
Grp Volume(v), veh/h	63	647	122	3	974	197	78	0	62	266	502	377
Grp Sat Flow(s),veh/h/ln	1654	1737	1434	1753	1749	1551	1711	0	1739	1725	1811	1532
Q Serve(g_s), s	1.8	27.9	4.4	0.1	19.5	7.3	2.7	0.0	2.3	8.8	20.8	17.7
Cycle Q Clear(g_c), s	1.8	27.9	4.4	0.1	19.5	7.3	2.7	0.0	2.3	8.8	20.8	17.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	220	701	579	133	1261	559	209	0	392	585	565	478
V/C Ratio(X)	0.29	0.92	0.21	0.02	0.77	0.35	0.37	0.00	0.16	0.45	0.89	0.79
Avail Cap(c_a), veh/h	247	771	636	237	1552	688	229	0	426	624	620	524
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	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	22.3	15.3	19.8	22.4	18.5	23.0	0.0	24.5	17.5	25.8	24.8
Incr Delay (d2), s/veh	0.7	15.7	0.2	0.1	2.0	0.4	1.1	0.0	0.2	0.6	13.9	7.3
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	0.6	12.6	1.3	0.0	7.3	2.4	1.1	0.0	0.9	3.3	10.5	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	38.1	15.5	19.8	24.3	18.9	24.1	0.0	24.7	18.1	39.8	32.1
LnGrp LOS	B	D	B	B	C	B	C	A	C	B	D	C
Approach Vol, veh/h	832			1174			140			1145		
Approach Delay, s/veh	33.2			23.4			24.4			32.2		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.4	22.3	4.8	36.4	8.6	29.1	8.2	32.9				
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	12.7	19.3	5.0	35.0	5.0	27.0	5.0	35.0				
Max Q Clear Time (g_c+I1), s	10.8	4.3	2.1	29.9	4.7	22.8	3.8	21.5				
Green Ext Time (p_c), s	0.2	0.2	0.0	1.9	0.0	1.8	0.0	5.7				
Intersection Summary												
HCM 6th Ctrl Delay	29.0											
HCM 6th LOS	C											

HCM 6th AWSC  
1: NE 152nd Avenue & NE 99th Street

05/14/2019

Intersection	
Intersection Delay, s/veh	132.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰	↱		↰			↰			↰	
Traffic Vol, veh/h	125	116	137	26	72	55	108	535	44	39	420	58
Future Vol, veh/h	125	116	137	26	72	55	108	535	44	39	420	58
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	3	3	3	3	3	3	2	2	2	1	1	1
Mvmt Flow	130	121	143	27	75	57	113	557	46	41	438	60
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
























Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	22.4	19.8	242.2	99.3
HCM LOS	C	C	F	F

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	16%	52%	0%	17%	8%
Vol Thru, %	78%	48%	0%	47%	81%
Vol Right, %	6%	0%	100%	36%	11%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	687	241	137	153	517
LT Vol	108	125	0	26	39
Through Vol	535	116	0	72	420
RT Vol	44	0	137	55	58
Lane Flow Rate	716	251	143	159	539
Geometry Grp	2	7	7	5	2
Degree of Util (X)	1.466	0.604	0.306	0.388	1.094
Departure Headway (Hd)	7.656	9.798	8.794	10.343	8.188
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	479	372	411	351	447
Service Time	5.656	7.498	6.494	8.343	6.188
HCM Lane V/C Ratio	1.495	0.675	0.348	0.453	1.206
HCM Control Delay	242.2	26.4	15.3	19.8	99.3
HCM Lane LOS	F	D	C	C	F
HCM 95th-tile Q	34.8	3.8	1.3	1.8	16.3



# HCM 6th Signalized Intersection Summary 2: NE 152nd Avenue & NE Padden Parkway

05/14/2019

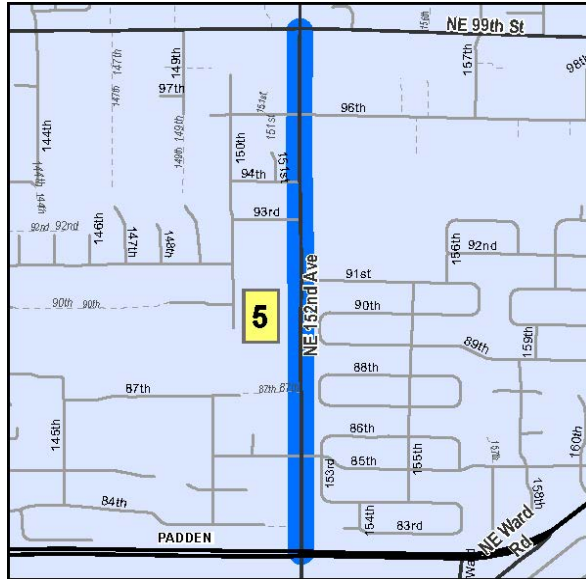
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	255	904	216	9	817	333	100	353	13	184	299	245
Future Volume (veh/h)	255	904	216	9	817	333	100	353	13	184	299	245
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.99	1.00		0.99
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	1885	1885	1885	1856	1856	1856	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	274	972	232	10	878	358	108	380	14	198	322	263
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	3	3	3	2	2	2	2	2	2
Cap, veh/h	356	983	830	88	1518	661	237	406	15	232	498	419
Arrive On Green	0.10	0.52	0.52	0.01	0.43	0.43	0.05	0.23	0.23	0.09	0.27	0.27
Sat Flow, veh/h	1795	1885	1593	1767	3526	1534	1781	1791	66	1781	1870	1574
Grp Volume(v), veh/h	274	972	232	10	878	358	108	0	394	198	322	263
Grp Sat Flow(s),veh/h/ln	1795	1885	1593	1767	1763	1534	1781	0	1857	1781	1870	1574
Q Serve(g_s), s	9.4	59.1	9.5	0.4	21.9	20.1	5.3	0.0	24.2	9.7	17.7	17.1
Cycle Q Clear(g_c), s	9.4	59.1	9.5	0.4	21.9	20.1	5.3	0.0	24.2	9.7	17.7	17.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	356	983	830	88	1518	661	237	0	421	232	498	419
V/C Ratio(X)	0.77	0.99	0.28	0.11	0.58	0.54	0.45	0.00	0.94	0.85	0.65	0.63
Avail Cap(c_a), veh/h	495	983	830	144	1518	661	237	0	426	232	503	423
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	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.9	27.5	15.6	28.5	25.1	24.5	33.9	0.0	44.1	32.7	37.8	37.5
Incr Delay (d2), s/veh	4.8	26.0	0.2	0.6	0.6	0.9	1.4	0.0	28.2	25.2	2.8	2.9
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	3.9	30.5	3.2	0.2	8.6	7.0	2.4	0.0	14.2	5.7	8.4	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.7	53.4	15.7	29.1	25.6	25.5	35.3	0.0	72.2	58.0	40.6	40.4
LnGrp LOS	C	D	B	C	C	C	D	A	E	E	D	D
Approach Vol, veh/h	1478			1246			502			783		
Approach Delay, s/veh	42.2			25.6			64.3			44.9		
Approach LOS	D			C			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.4	30.8	5.9	65.0	9.8	35.4	16.4	54.5				
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	9.9	26.6	5.0	60.5	5.3	31.2	20.9	44.6				
Max Q Clear Time (g_c+I1), s	11.7	26.2	2.4	61.1	7.3	19.7	11.4	23.9				
Green Ext Time (p_c), s	0.0	0.1	0.0	0.0	0.0	2.2	0.5	6.9				
Intersection Summary												
HCM 6th Ctrl Delay	40.3											
HCM 6th LOS	D											



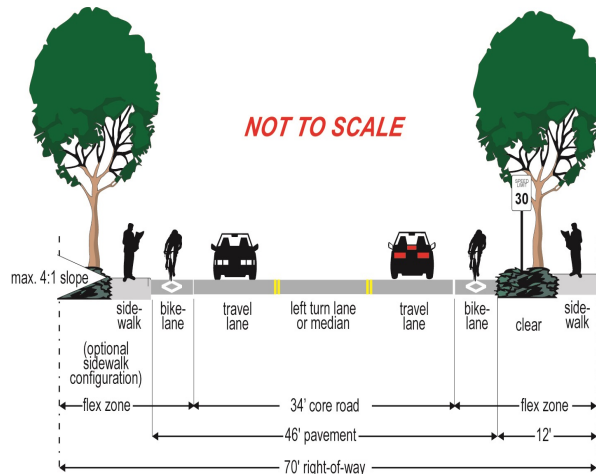
# 2019 - 2024 Transportation Improvement Program

Project: 5. NE 152nd Avenue - Padden Parkway to NE 99th Street

## Vicinity Map



## Cross-Section Detail



## Project Summary

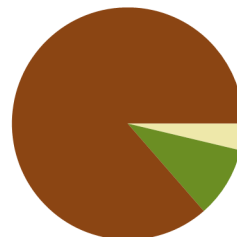
<b>Project Number:</b>	TBD	<b>Project Length (mi.):</b>	0.75
<b>Project Manager:</b>	Troy Pierce	<b>Client:</b>	Christopher Carle/Susan Wilson
<b>Basis for Project:</b>	Safety; Mobility/Traffic Circulation; Incomplete roadway, scattered sidewalks		
<b>Timeline:</b>	PE 2019-2023; ROW 2023-Post 2024; CN Post 2024		
<b>Project Description:</b>	Improve to 2-lane collector with bike lanes and sidewalks.		

**Notes:**

**Status:** Scoping in 2019 including updated cost estimate.

## Project Cost Summary

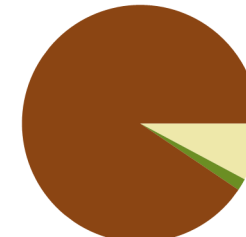
Engineering:	\$300,000
Real Property:	\$800,000
Construction:	\$7,000,000
<b>Total:</b>	<b>\$8,100,000</b>



Engineering  
Real Property  
Construction

## Funding Summary

County Road Fund:	\$620,000
TIF:	\$130,000
Federal Grant:	\$0
State Grants:	\$0
Loan:	\$0
Other:	\$0
Projected Funds:	\$150,000
Unfunded:	\$7,200,000
<b>Total:</b>	<b>\$8,100,000</b>



CRF  
TIF  
All Other Funds