

MEMORANDUM

DATE: June 30, 2022
TO: Jesse Hannahs, P.E.
 City of Marysville
FROM: Grayson Reim / Curtis Chin, P.E.
 TENW
SUBJECT: Traffic Impact Analysis
 Marysville 44 Residential – Toll Brothers
 TENW Project No. 2022-203

This memorandum documents the traffic impact analysis (TIA) completed for the proposed Marysville 44 Residential project located at 7315 and 7417 44th Street NE. This memo includes a project description, trip generation calculations, and a project trip distribution/assignment.

Project Description

The proposed Marysville 44 Residential site is located east of 67th Ave NE and north of 44th Street NE as shown in the **Attachment A** Vicinity Map. The project proposal includes up to 38 single-family detached units on site that is currently occupied by two (2) existing single-family homes; both existing homes will be removed as part of the development of the proposed project. Vehicular access is proposed via two new full-access driveways on the proposed extension of 75th Ave NE between 46th Place NE and 44th Street NE. A preliminary site plan is shown in **Attachment B**.

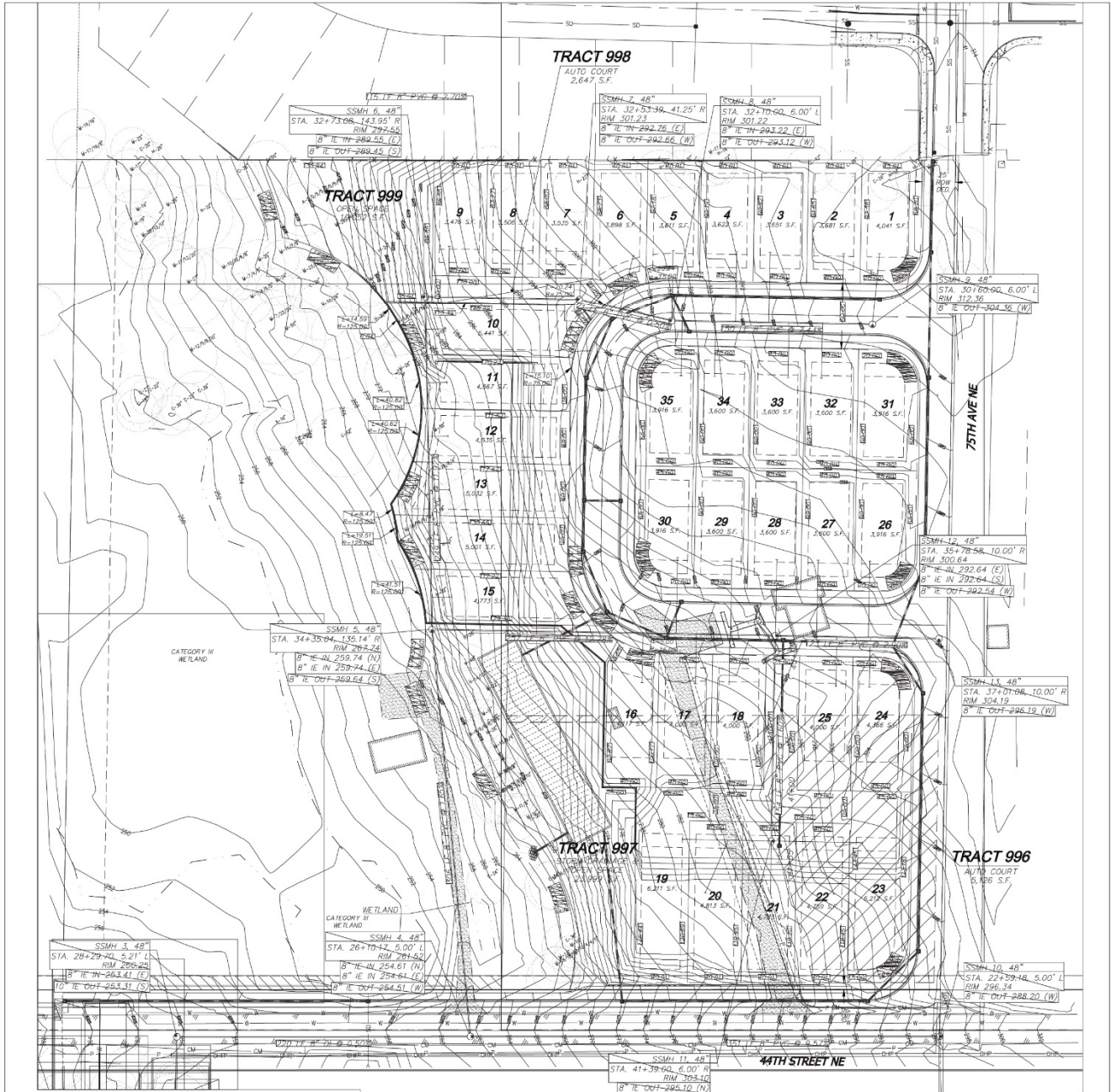
Project Trip Generation

Trip generation for the proposed and existing uses were determined using methodology included in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition for Land Use Codes (LUC) 210 (Single-Family Detached Housing). The resulting net new weekday daily, AM, and PM peak hour trips (proposed less existing) are summarized in **Table 1**. A detailed trip generation estimate is included in **Attachment C**.

Table 1. Trip Generation Summary

Time Period	Net New Trips Generated		
	In	Out	Total
Weekday Daily	193	193	386
Weekday AM Peak Hour	7	22	29
Weekday PM Peak Hour	23	14	37

As shown in **Table 1**, the proposed project is estimated to generate 386 net new weekday daily trips, with 29 trips occurring during the weekday AM peak hour and 37 trips during the weekday PM peak hour.



Attachment B: Preliminary Site Plan



NOT TO SCALE

ATTACHMENT C

Trip Generation Calculations

Land Use	Units ¹	ITE LUC ²	Directional Distribution ²		Trip Rate or Equation ²	Trips Generated		
			In	Out		In	Out	Total
Daily								
Proposed Use:								
Single-Family Detached Housing	38 DU	210	50%	50%	$\ln(T)=0.92\ln(X)+2.68$	207	207	414
Existing Uses:								
Single-Family Detached Housing	2 DU	210	50%	50%	$\ln(T)=0.92\ln(X)+2.68$	-14	-14	-28
Gross Proposed Weekday Daily Trips =						207	207	414
Less Existing Uses =						-14	-14	-28
Net New Weekday Daily Trips =						193	193	386
AM Peak Hour								
Proposed Use:								
Single-Family Detached Housing	38 DU	210	26%	74%	$\ln(T) = 0.91\ln(X)+0.12$	8	23	31
Less Existing Uses:								
Single-Family Detached Housing	2 DU	210	26%	74%	$\ln(T) = 0.91\ln(X)+0.12$	-1	-1	-2
Gross Proposed AM Peak Hour Trips =						8	23	31
Less Existing Uses =						-1	-1	-2
Net New AM Peak Hour Trips =						7	22	29
PM Peak Hour								
Proposed Use:								
Single-Family Detached Housing	38 DU	210	63%	37%	$\ln(T)=0.94\ln(X)+0.27$	25	15	40
Less Existing Uses:								
Single-Family Detached Housing	2 DU	210	63%	37%	$\ln(T)=0.94\ln(X)+0.27$	-2	-1	-3
Gross Proposed PM Peak Hour Trips =						25	15	40
Less Existing Uses =						-2	-1	-3
Net New PM Peak Hour Trips =						23	14	37

Notes:

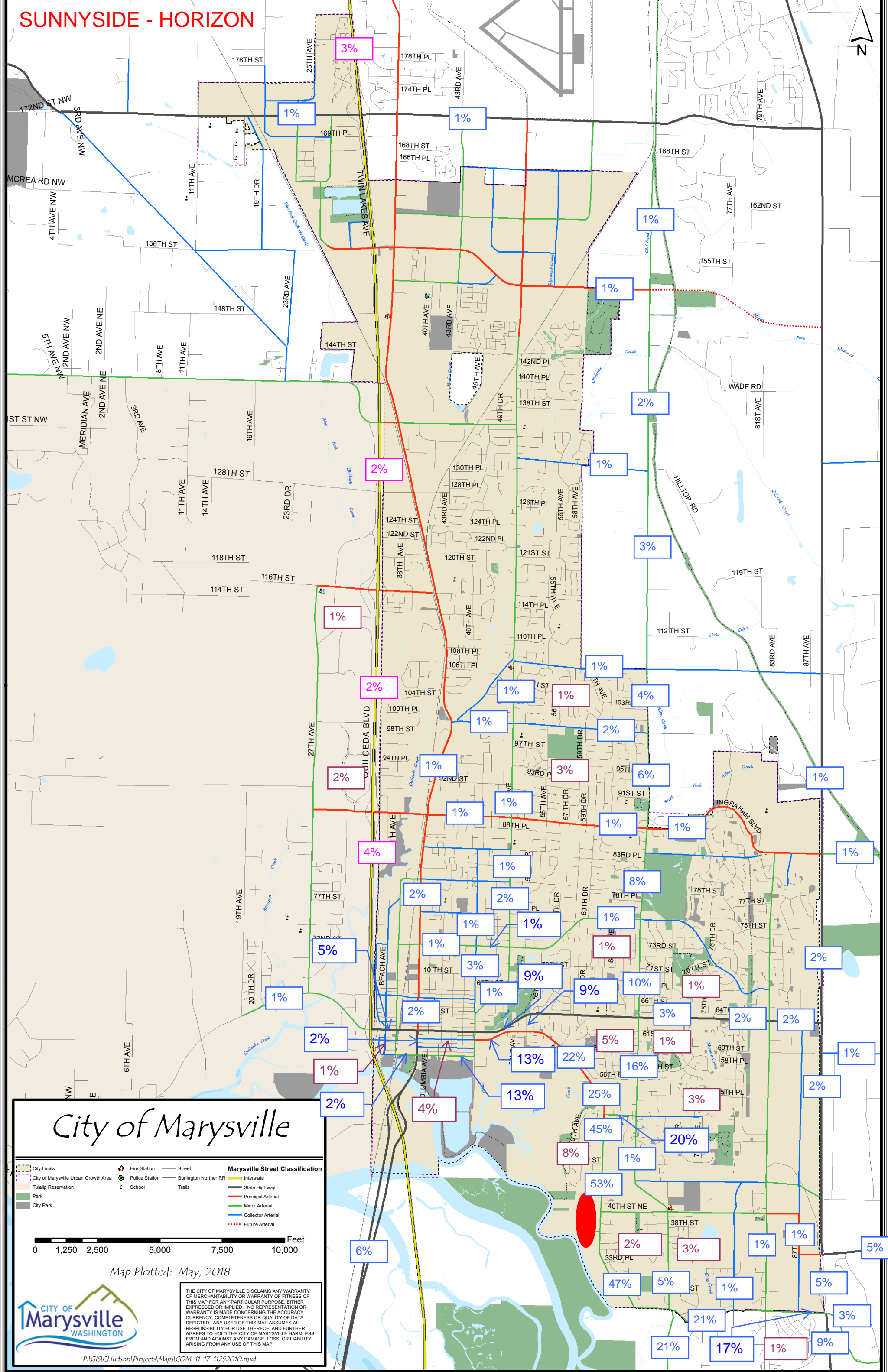
1. DU = Dwelling Units

2. Land use code, directional distribution and trip rates/equations from Institute of Transportation Engineers (ITE), *Trip Generation Manual (11th Edition)*, 2021.

ATTACHMENT D

City of Marysville Trip Distribution Exhibits

SUNNYSIDE - HORIZON



City of Marysville

			Marysville Street Classification

0 1,250 2,500 5,000 7,500 10,000 Feet

Map Plotted: May, 2018

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SUNNYSIDE - EXISTING



City of Marysville

November 2017

- Marysville City Limits
- Other City Limits
- Urban Growth Boundary
- Tulalip Reservation
- Parks and open space
- Interstate Highway
- State Highway
- Arterial
- Schools



0 2,000 4,000 6,000 Feet

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