



Whipple Consulting Engineers, Inc.

September 23, 2020
W.O. No. 2020-2564

City of Spokane
Department of Engineering Services
801 W. Spokane Falls Boulevard
Spokane, WA 99201

Attn: Inga Note, P.E.

Re: **Latah Glen Residential Community**
3504 S Inland Empire Way
Trip Generation and Distribution Letter.

Dear Inga,

The purpose of this document is to provide a Trip Generation and Distribution letter (TGDL) for the proposed US 195 Mobile Home development located between Marshall Road and Inland Empire Way, as shown on Figure 2, Preliminary Site Plan. This letter will follow the standards for doing Trip Distribution Letters as required by the City of Spokane and the Institute of Transportation Engineers (ITE).

PROJECT DESCRIPTION

The project proposes to develop 157 lots for manufactured homes within a residential development on approximately 42.03 ± acres. The project site has been used for multiple land uses over the years. The most recent was an auto wrecker business. The remainder of the property is undeveloped area with trees, field grass and weeds. The project site is proposed upon portions of two parcels. The project proposes to build six (6) new north-south private roads and three (3) new east-west private roads, for a total of 9 new private roads. The projects main access is proposed at the east end of the project with a connection to Inland Empire Way, and its connection to US 195. The project also proposes a Fire Access to Marshal Road. The access is proposed to be gated per local fire requirements, thus reducing the potential for cut through traffic on private roads. Please see Figure 2 preliminary site plan.

VICINITY / SITE PLAN

The project site is listed as Residential Single Family on the Comprehensive Plan and zoned as RSF. The site lies on the NE & SE 1/2 of Section 36, T. 24N., R. 42 E., W.M. within the City of Spokane, Washington. The parcel numbers for the site are 25364.0001, and 25361.0004 A vicinity map is included as Figure 1, along with a preliminary site plan as Figure 2.

TRIP GENERATION AND DISTRIBUTION

Trip Types

The proposed land use is a residential development; ITE has developed data regarding various trip types that all developments experience. These are found in several places, however, for this analysis the *Trip Generation Manual 10th Edition* as well as the Institute of transportation Engineers (ITE) *Trip Generation Handbook* were used to develop the criteria for this analysis.

Generally, all existing and proposed developments will be made up of one or more of the following four trip types: new (destination) trips, pass-by trips, diverted trips, and shared (internal trips). In order to better understand the trip types available for land access a description of each specific trip type follows.

New (Destination) Trips - These types of trips occur only to access a specific land use such as a new retail development or a new residential subdivision. These types of trips will travel to and from the new site and a single other destination such as home or work. This is the only trip type that will result in a net increase in the total amount of traffic within the study area. The reason primarily is that these trips represent planned trips to a specific destination that never took trips to that part of the City prior to the development being constructed and occupied. This project will develop new trips.

Pass-by Trips - These trips represent vehicles which currently use adjacent roadways providing primary access to new land uses or projects and are trips of convenience. These trips, however, have an ultimate destination other than the project in question. They should be viewed as customers who stop in on their way home from work. An example would be on payday, where an individual generally drives by their bank every day without stopping, except on payday. On that day, this driver would drive into the bank, perform the prerequisite banking and then continue on home. In this example, the trip started from work with a destination of home, however on the way, the driver stopped at the grocery store/latte stand and/or bank directly adjacent to their path. Pass-by trips are most always associated with commercial/retail types of development along major roadways. Therefore, for this project pass-by trips will not be considered.

Diverted (Linked) Trips - These trips occur when a vehicle takes a different route than normal to access a specific facility. Diverted trips are similar to pass-by trips, but diverted trips occur from roadways, which do not provide direct access to the site. Instead, one or more streets must be utilized to get to and from the site. For this project, no diverted trips are anticipated.

Trip Generation Characteristics for the Existing and Proposed land uses

As noted earlier, trip generation rates for the AM and PM peak hours are determined by the use of the *Trip Generation Manual, 10th Edition* published by the Institute of Transportation Engineers (ITE). The purpose of the *Trip Generation Manual* is to compile and quantify empirical data into trip generation rates for specific land uses within the US, UK and Canada.

Proposed Land Use

For the proposed 157 units of senior living development, Land Use Code (LUC) #251, Senior Adult Housing-Detached, which consists of detached independent living developments, including retirement communities, age-restricted housing, and active adult communities, was used to establish the number of potential trips generated by the proposed land use for mobile home units. The trip generation rates and the anticipated number of AM and PM peak hour trips for the senior adult housing-detached land use are shown on Table 1.

Table 1-Trip Generation Rates for LUC # 240 – Mobile Home Park (Fig. 3)

Dwelling Units	AM Peak Hour Trips			PM Peak Hour Trips		
	Vol. @ 0.26 trips/units	Directional Distribution		Vol. @ 0.46 trips / Units	Directional Distribution	
		31% In	69% Out		62% In	38% Out
157	41	13	28	73	45	28
Average Daily Trip Ends (ADT)						
Units	Rate	ADT				
157	5.00	785				

As shown in Table 1, the proposed land uses are anticipated to generate a total of 41 trips in the AM peak hour with 13 trips entering the site and 28 trips exiting the site. In the PM peak hour, the proposed land use is anticipated to generate a total of 73 trips in the PM peak hour with 45 trips entering the site and 28 trips exiting the site. The proposed land use is anticipated to generate 785 average daily trips to/from the project. Please see Figure 3 for Trip Distribution.

TRIP DISTRIBUTION

The site will be accessed via one (1) proposed access road on Inland Empire Way.

Marshall Road is generally a two-way, 2-lane north/south, local access road. Marshall Road extends northwest from Cheney Spokane Road and crosses over the railroad track before turning sharply northeast and passing under Fish Lake Trail, and continues through 44th Avenue and west side of the project site before terminating at Thorpe Road. Marshall Road primarily serves rural and residential area. The speed limit on Marshall Road within the study area is 25 MPH.

Inland Empire Way is generally a two-way, 2-lane north/south, local access road that extends west from US 195 and turns sharply south along the railroad track through east side of the project

area before transaction to Victoria Lane. Inland Empire Way primarily serves rural land use. The speed limit on Marshall Road within the study area is 25 MPH.

State Route 195 is generally a north/south, two-way, 4-lane highway. State Route 195 extends south from Interstate 90 at Exit 279 and goes through 16th Avenue, Thorpe Road and Cities of Spangle, Freedom, Plaza, Rosalia, Thornton, Cashup, Steptoe, Colfax, Pullman, Johnson, Colton, and Uniontown before merging with State Route 95.

Considering many factors such as the surrounding transportation facilities, typical commuting patterns, existing development in the area, and Average Daily Traffic counts, traffic for the proposed development is anticipated as follows: 50% of the trips are anticipated to go to/from the north via US 195, 20% of the trips are anticipated to go to/from the north via Thorpe Road, 15% of the trips are anticipated to go to/from the south via Cheney Spokane Rd, and 15% of the trips are anticipated to go to/from the south via US 195.

Traffic Impact Fee

A transportation impact fee for the City of Spokane has been noted and considered here. The City of Spokane code has established transportation impact fees under Spokane Municipal Code Title 17 Chapter 17D.075.180. The proposed project is in the South Service area and as such is subject to the current Impact Fee Schedule. Since LUC #240 Mobile Home Park is not listed in the current Impact Fee Schedule, base rate per PM trip, \$992, is used for the Impact Fee calculation. Table 1 calculates the anticipated Impact fee for the proposed project.

Table 1 – Proposed Land Use Impact Fee

Land Use	LUC	Quantity	Unit of Measure	Fee per unit	Fee
LUC # 240 Mobile Home Park	240	73	PM Peak Hour Trips	\$992	\$72,416.00

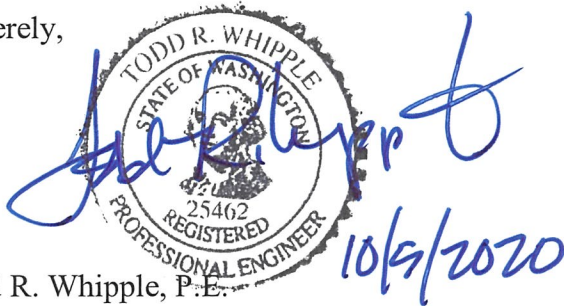
It is recommended that all improvements completed by the project be given credit against the impact fee per Spokane Municipal Code 17D.075.040 (D).

CONCLUSIONS AND RECOMMENDATIONS

It is anticipated that the proposed project will generate 41 trips in the AM peak hour and 73 trips in the PM peak hour trips. Based upon the number of anticipated trips, and the distribution of those trips, we believe that the generated trips may have a minimal impact on the transportation system at the intersections identified within the letter. Therefore, we recommend that the project pay the City of Spokane Traffic Impact Fee as allowed by the current code at the time of building permit, and that the project should be allowed to move forward without further traffic analysis.

Should you have any questions related to this document please do not hesitate to contact us at (509) 893-2617.

Sincerely,



The image shows a circular professional engineer seal for Todd R. Whipple, State of Washington, No. 25462. The seal is stamped in black ink. Overlaid on the seal is a blue ink signature that reads "Todd R. Whipple" and a date "10/5/2020".

Todd R. Whipple, P.E.

TRW/bng

encl. Appendix (Vicinity Map, Site Plan, Trip Dist %)

cc:

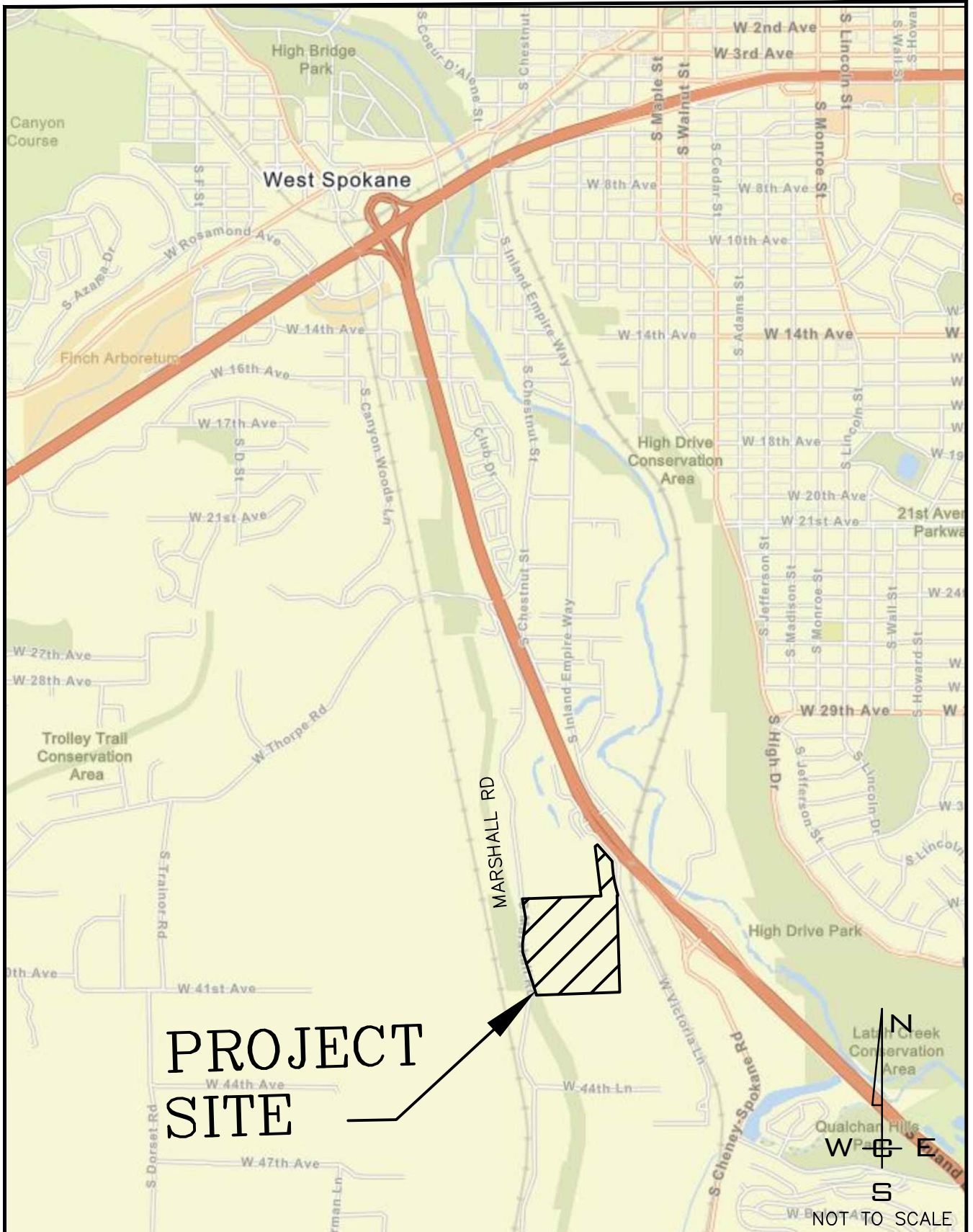
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APPENDIX

1. Vicinity Map

2. Site Plan

3. Trip Distribution by Percent



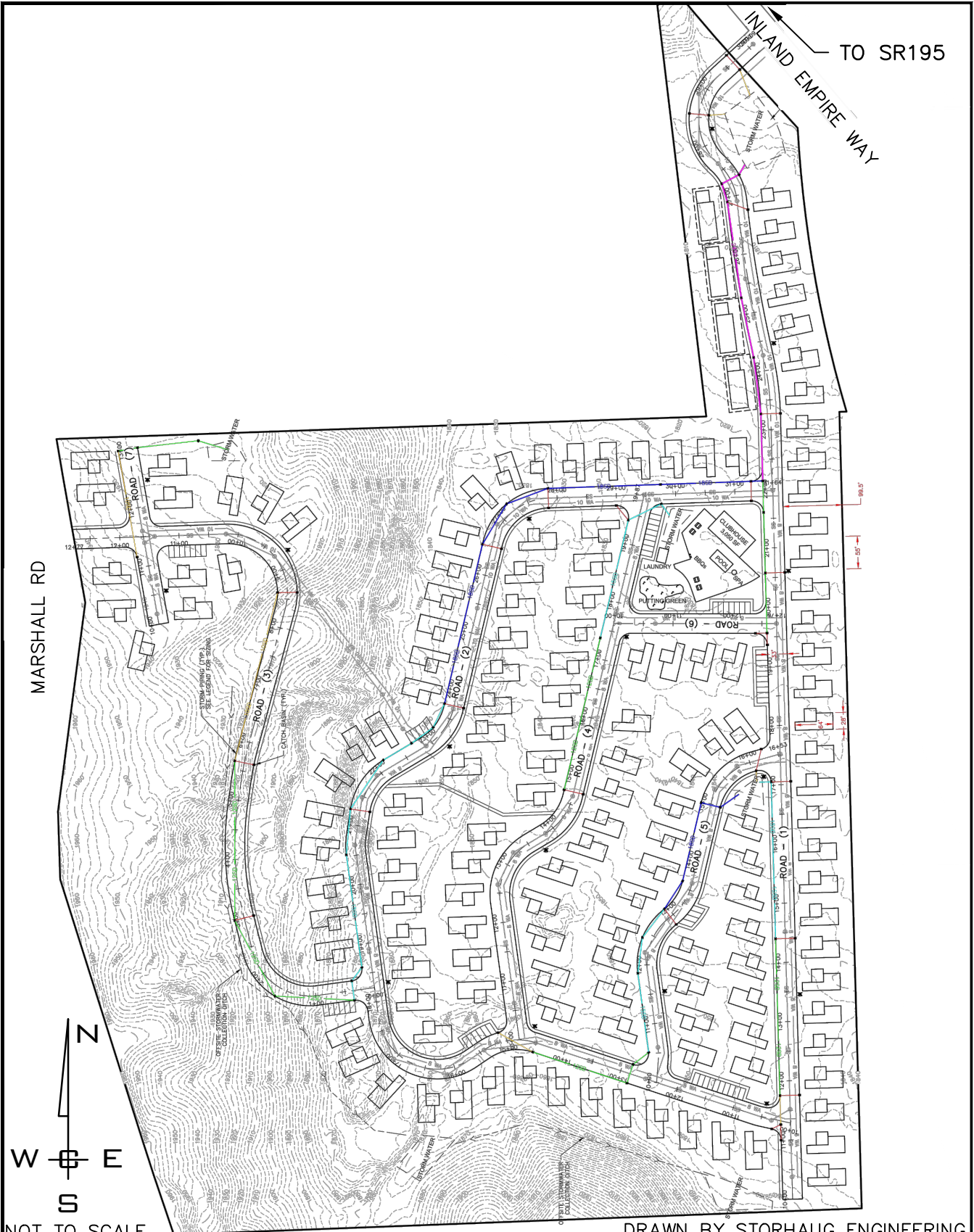
PROJ #: 20-2564
 DATE: 09/23/20
 DRAWN: KMK
 APPROVED: TRW

TRIP GENERATION AND DISTRIBUTION
LATAH GLEN RESIDENTIAL
 3504 S INLAND EMPIRE WAY
 SPOKANE, WASHINGTON

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 WHIPPLE CONSULTING ENGINEERS
 CIVIL AND TRANSPORTATION ENGINEERING
 21 SOUTH PINES ROAD
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FIGURE 1

VICINITY MAP



NOT TO SCALE

DRAWN BY STORHAUG ENGINEERING

PROJ #: 20-2564
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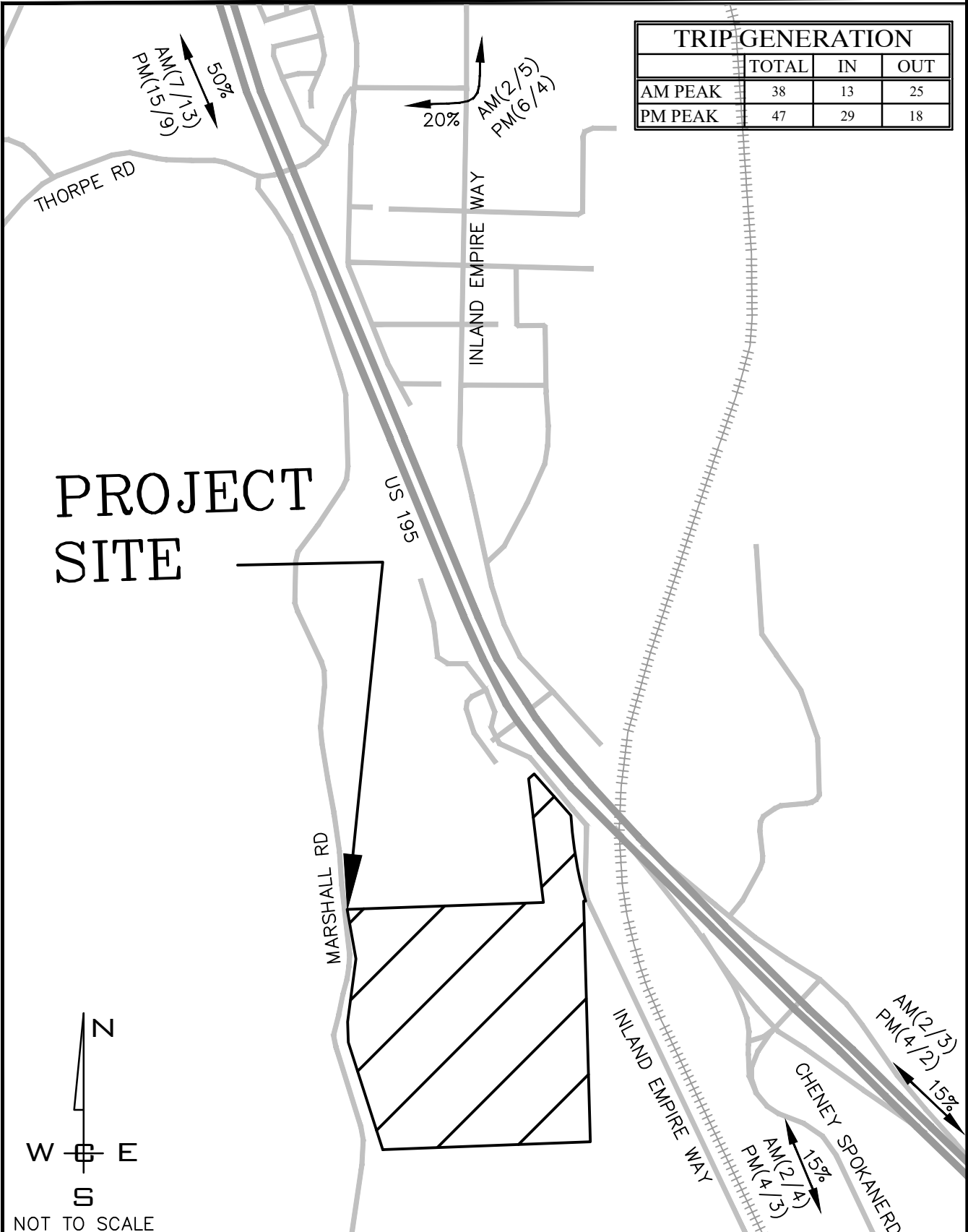


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FIGURE 2

PRELIMINARY SITE PLAN

TRIP GENERATION			
	TOTAL	IN	OUT
AM PEAK	38	13	25
PM PEAK	47	29	18



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FIGURE 3

PROJECT TRIP DISTRIBUTION