



MEMORANDUM

DATE: February 13, 2023

TO: Dustin Conroy | Pioneer Survey and Engineering, Inc.

FROM: Reah Flisakowski | DKS Associates

SUBJECT: White Salmon Residential Development Traffic Assessment Project #2002-000

This memorandum summarizes the transportation assessment conducted for the proposed White Salmon residential development, located on the west side of N Main Avenue, north of NW Spring Street.

PROJECT DESCRIPTION

The proposed project site is located on the west side of N Main Avenue between NW Spring Street and NW Loop Road. The site is across from a private driveway that serves an engineering materials and manufacturing business. The project site is zoned for single-family detached residential units with 7,000 square-foot lots. The current site plan shows one driveway on N Main Avenue to access the subdivision. In total, the project proposes up to 31 single-family lots. The site plan is shown in Figure 1.

EXISTING INFRASTRUCTURE

N Main Avenue is a two-lane roadway with curb-tight sidewalks provided on the west side of the facility. There are no bicycle facilities provided on the facility. There is an approximate three-foot wide shoulder area in the northbound direction and no shoulder area in the southbound direction. The posted speed limit is 25 miles per hour. N Main Avenue is classified as a Major Collector¹ by Klickitat County.

¹ KLICKITAT COUNTY REGIONAL TRANSPORTATION PLAN, SOUTHWEST WASHINGTON REGIONAL TRANSPORTATION COUNCIL, FUNCTIONAL CLASSIFICATION UPDATE, AMENDED FEBRUARY 2012.

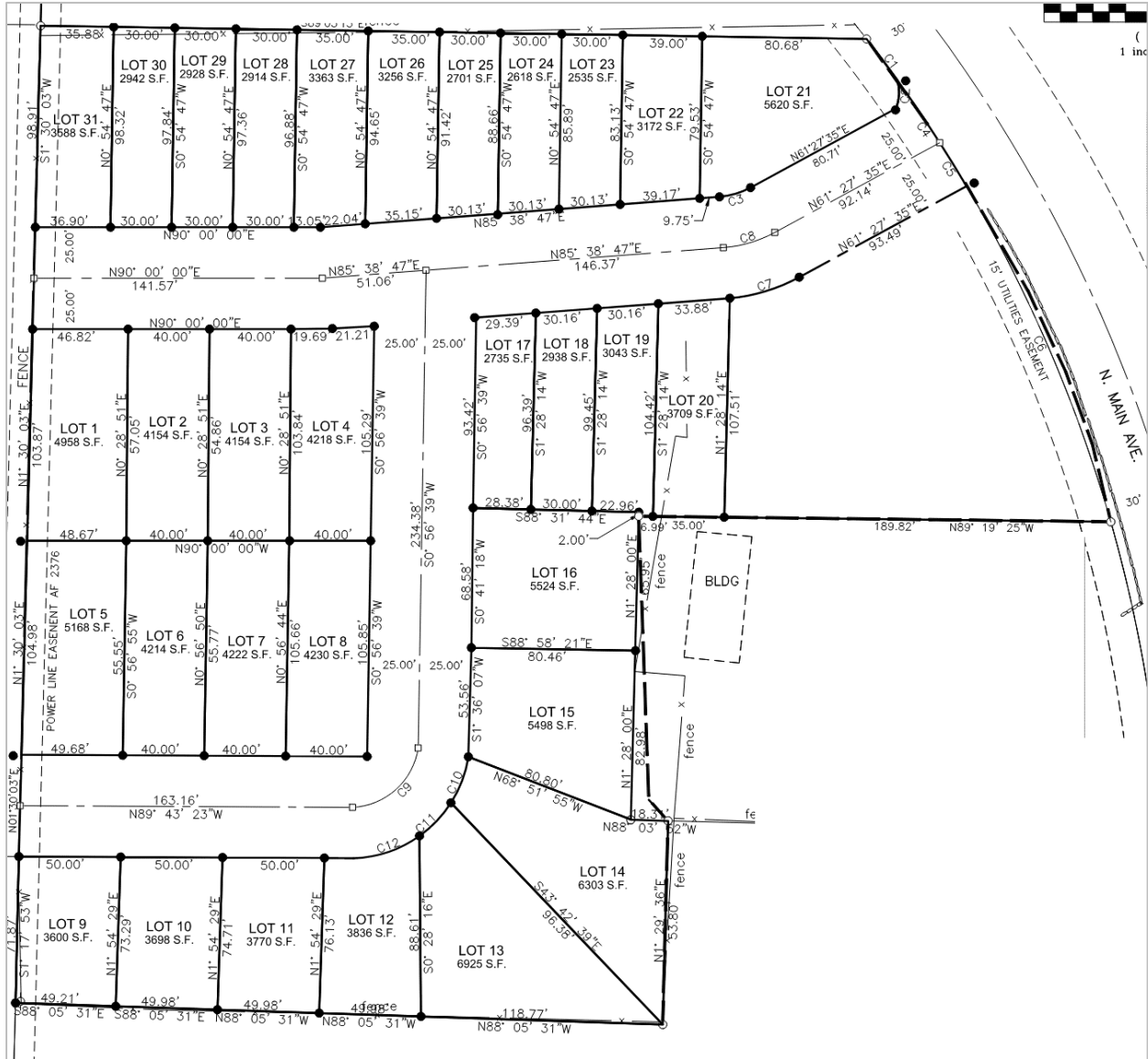


FIGURE 1: SITE PLAN

CRASH ANALYSIS

The last five years of available crash data (2014 to 2018) was reviewed to determine historic safety issues in the study area. There have been no reported crashes along N Main Avenue between NW Spring Street and NW Loop Road in the last five years. There are no documented transportation safety issues in the study area.

TRIP GENERATION

Trip generation is the method used to estimate the number of vehicles that are added to the surrounding roadway network as a result of a proposed project. The trip generation analysis for the proposed White Salmon subdivision was estimated using similar land uses as reported by the Institute of Transportation Engineers (ITE)². The potential trip generation was conducted for the AM and PM peak hours using the Single-Family Detached Housing (ITE Code 210) land use.

Table 1 summarizes the expected trip generation for the proposed project. Based on the potential to build up to 31 single-family houses, the proposed project is expected to generate 22 AM peak hour trips, 29 PM peak hour trips and 292 daily trips.

TABLE 1: TRIP GENERATION FOR PROPOSED WHITE SALMON SUBDIVISION

ITE LAND USE	ITE CODE	SIZE (DWELLING UNITS)	DAILY TRIPS	A.M. PEAK HOUR			P.M. PEAK HOUR		
				IN	OUT	TOTAL	IN	OUT	TOTAL
Single-Family Detached Housing	210	31	292	5	17	22	18	11	29

Source: Institute of Transportation Engineers (ITE) manual, Trip Generation, 10th Edition.

SIGHT DISTANCE EVALUATION

The proposed development will result in a new intersection on N Main Avenue. The intersection should meet American Association of State Highway and Transportation Officials (AASHTO) intersection sight distance requirements for safe egress as measured from 15 feet back from the edge of the travelled way.³ During a field visit, it was noted that vehicles appear to drive faster than the posted 25 mile per hour speed limit. Based on a speed of 30 miles per hour (posted speed plus five miles per hour), the intersections would require a minimum of 335 feet of intersection sight distance for left-turn movements. In addition, the sight distance triangle at the site access to N Main Avenue should be clear of permanent objects (large signs, landscaping, etc.) that could potentially limit vehicle sight distance.

The available sight distance at the proposed site access location was measured in the field to ensure the proposed project can be safely accommodated. The intersection sight distance north along N Main Avenue (looking left from the planned site access) meets the 335-foot requirement, with sight distance measured to be approximately 380 feet. However, it is recommended the tree

² INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) MANUAL, TRIP GENERATION, 11TH EDITION.

³ GEOMETRIC DESIGN OF HIGHWAYS AND STREETS, AASHTO, EXHIBIT 9-55.

line within the right of way along the west side of N Main Avenue to the north be trimmed back to allow additional sight distance.

The intersection sight distance south along N Main Avenue (looking right from the planned site access) is close to meeting the requirement, a fence along a neighboring property begins to obstruct views around 335 feet. it is recommended the vegetation within the right of way along the west side of N Main Avenue to the south be trimmed back to allow additional sight distance.

Sight distance at the proposed site access should be measured after construction of the project to ensure AASHTO standards are met.