



February 1st, 2022

To: Eric Zweber, Planning Consultant for City of Wayzata

From: Katie Schmidt, PE

Re: Traffic Study Addendum – Proposed Wayzata Beach Club, Wayzata, MN

Per your request, S² Traffic Solutions, LLC has prepared an addendum to the **Wayzata Beach Club Traffic and Parking Analysis Memorandum** dated December 1st, 2021. This addendum includes the intersection of Lake St E and Ferndale Rd in the study area analysis. This addendum documents the existing conditions, the anticipated site-generated traffic, and reviews the No-Build and Build traffic operations at the of Lake St E and Ferndale Rd intersection for the year 2024.

The following notes the existing conditions of the study area intersection:

- **Lake St E & Ferndale Rd** – is a four-legged all-way stop-controlled intersection with marked crosswalks on all legs. The eastbound, westbound and southbound approaches have two lanes; a left turn lane and a shared through/right turn lane. The northbound approach has two lanes; a shared left turn/through lane and a right turn lane. Both roadways have a 30 mph speed limit.

The City of Wayzata provided PM peak hour turning movement counts for this intersection from 2018. In line with the fully traffic study, a 1.5% annual growth rate was applied to these 2018 volumes to “grow” them up to the 2024 conditions. Site-generated traffic was distributed through this intersection per traffic patterns defined in the full study and in updated Figure 5 (attached).

The following figures from the full traffic study, attached at the end of this addendum, have been updated to include the Lake St E & Ferndale Rd intersection:

- **Figure 4** - 2024 No-Build Traffic Volumes
- **Figure 5** – Trip Assignment & Distribution
- **Figure 6** – 2024 Build Traffic Volumes

A PM peak hour traffic analysis for the included Lake St E and Ferndale Rd intersection is detailed in **Table 1**. AM peak hour data is not available from the City for this intersection. Review of study area volumes and trip assignment volumes indicate the PM peak hour has higher traffic volumes and the subsequent analysis should encompass any AM peak hour concerns. The same analysis procedures and methodology defined in the full traffic study was used in this analysis and Level of Service (LOS) and 95th percentile queues are reported for 2024 No-Build and Build scenarios.

Table 1 – 2024 Peak Hour Operations for the Lake St & Ferndale Intersection

Intersection	Approach	Lane	PM Peak - No-Build			PM Peak - Build			
			LOS	Delay (sec/veh)	95th %ile Queue (ft)	LOS	Delay (sec/veh)	95th %ile Queue (ft)	
Lake St E & Ferndale Rd (All-Way Stop-Controlled)	EB	Left	B	10.2	46	B	10.3	46	
		Thru/Right	A	9.3	56	A	9.5	56	
	WB	Left	C	16.1	78	C	17.0	82	
		Thru/Right	A	8.6	41	A	8.7	42	
	NB	Left/Thru	A	9.9	52	B	10.0	54	
		Right	B	10.1	57	B	10.4	59	
	SB	Left	B	10.1	46	B	10.3	47	
		Thru/Right	B	10.5	63	B	10.6	62	
	Overall			B	12.1	--	B	12.5	--

1. Delay from Syncho’s HCM 6 reports for worst movement in each approach lane.
2. Reported queues are 95th percentile queues from an average of 10 SimTraffic simulations.

The results shown in Table 1 indicate the 2024 No-Build and Build operations of the Lake St E and Ferndale Rd intersection is acceptable with LOS B for overall operations and LOS C or better for travel lane operations, with manageable vehicle queuing. The addition of site-generated traffic slightly increases delay and queuing but not above unacceptable levels as the existing roadway network has available capacity.

In conclusion traffic operations at the Lake St E and Ferndale Rd intersection are acceptable for 2024 No-Build and Build operations and site traffic related mitigation measures are not recommended at this intersection.

Please contact Katie Schmidt at katie@s2traffic.com or 952-212-7625 with any questions.

Attachments: Figures 4-6

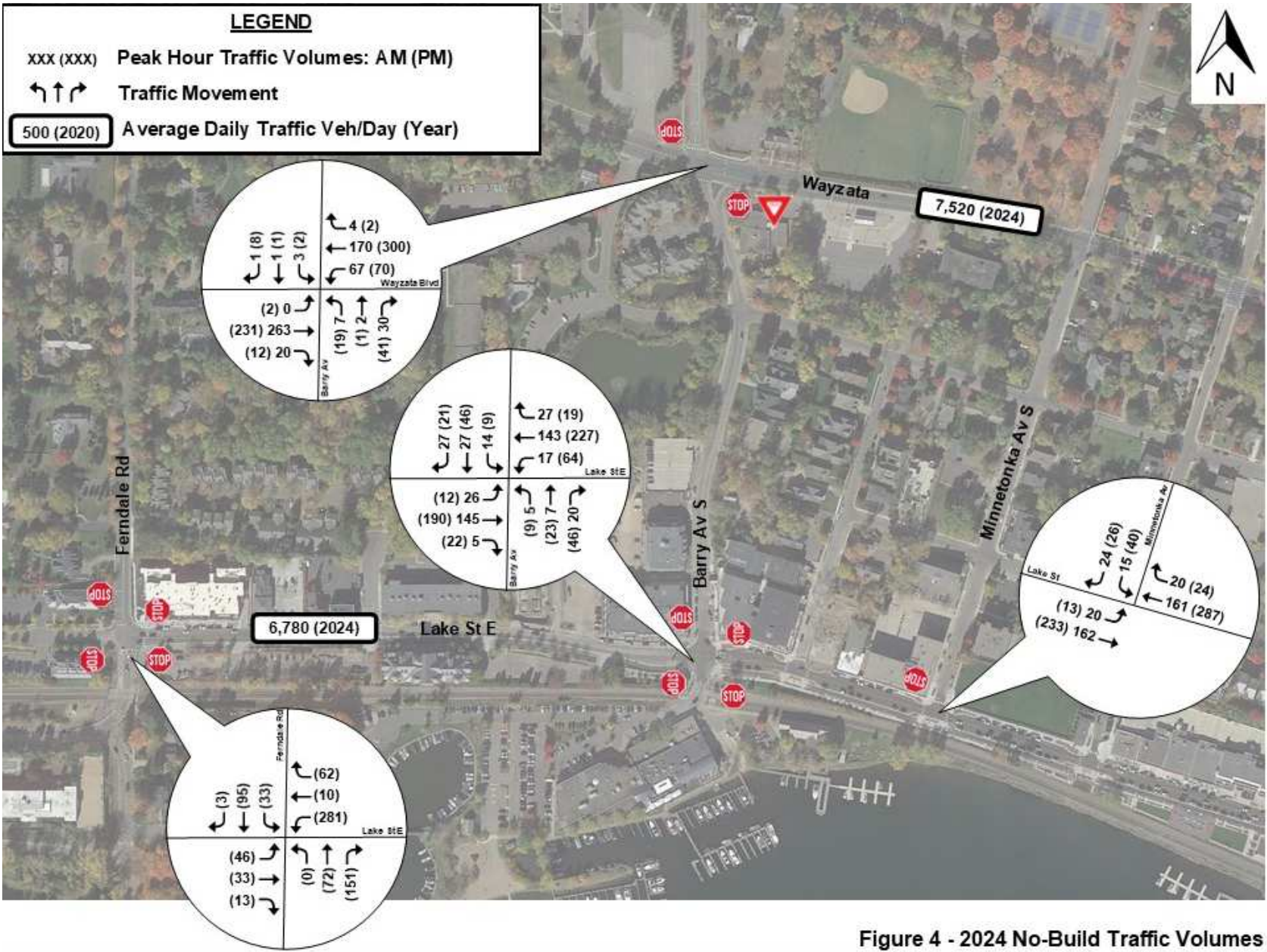
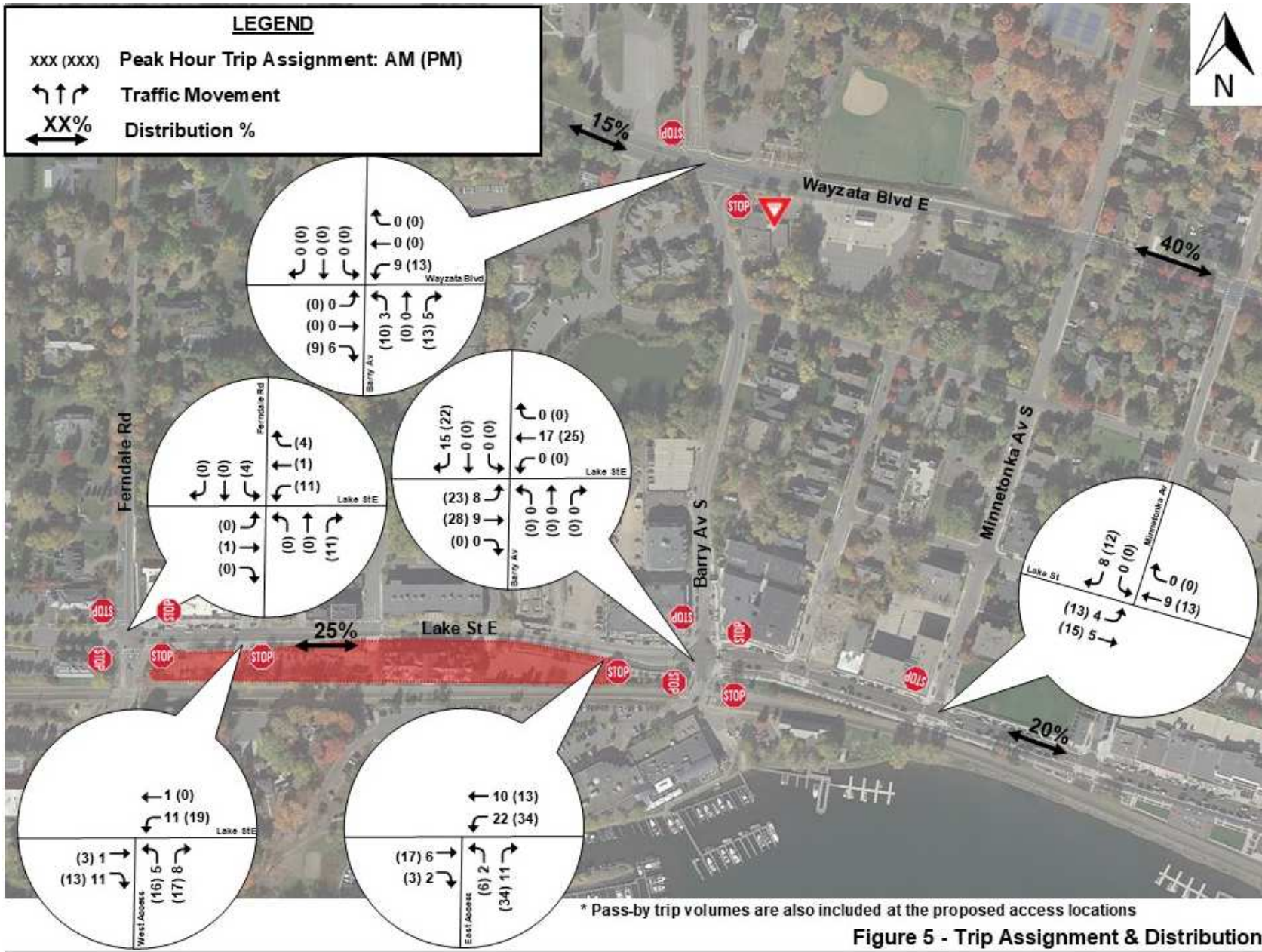


Figure 4 - 2024 No-Build Traffic Volumes



LEGEND

xxx (xxx) Peak Hour Traffic Volumes: AM (PM)

↔ ↕ ↗ ↘ Traffic Movement

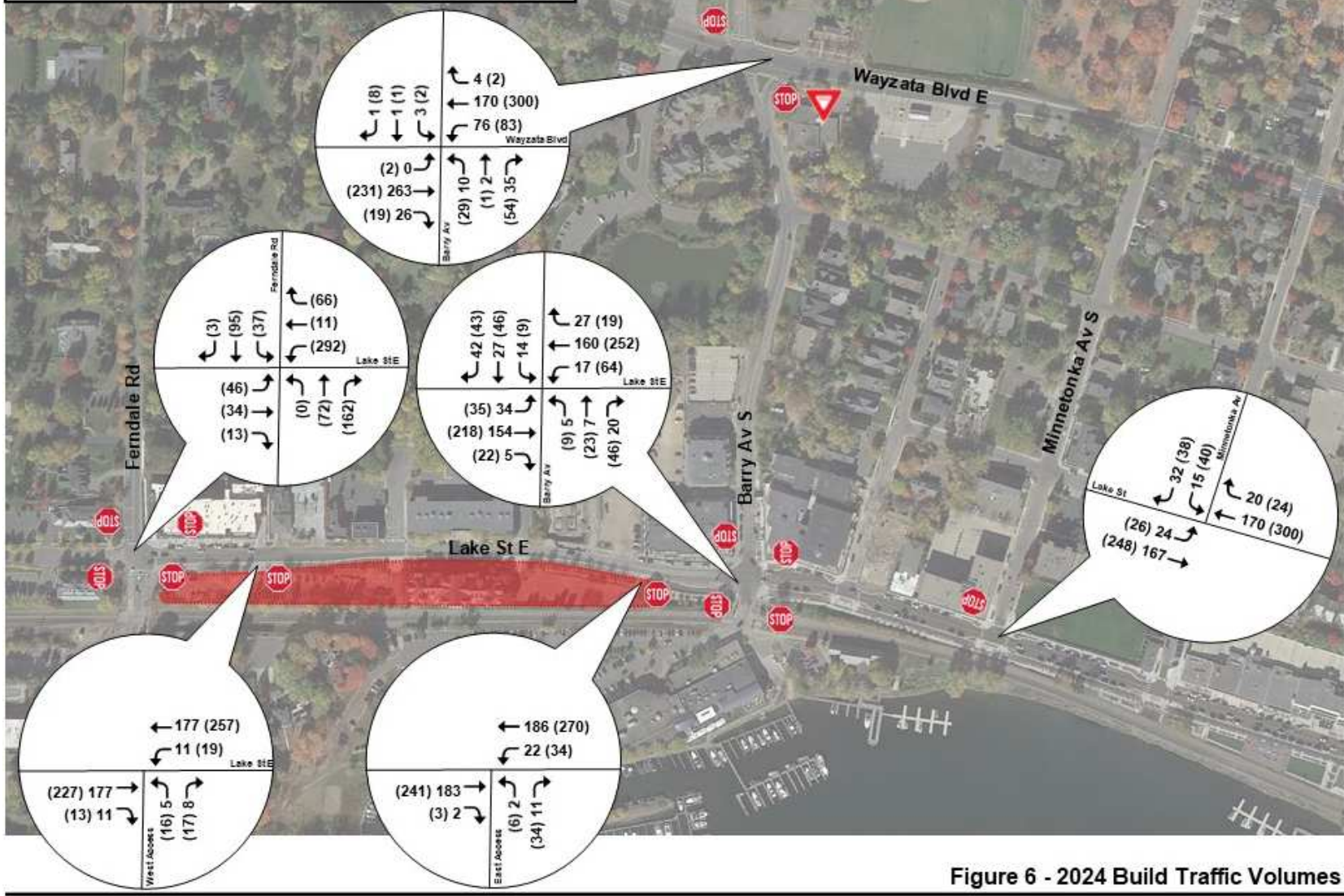


Figure 6 - 2024 Build Traffic Volumes