

MEMORANDUM

Date: July 26, 2018

Re: **Windermere EAW Update Traffic Impact Study – Response to Comments**
File 0014194.00

To: Fran Hagen, Westwood

From: Steve Manhart, PE, PTOE, PTP

This week, we received comments from the City of Shakopee regarding the traffic impact study prepared as part of the Windermere EAW Update. Please find below the responses to the City comments (*in red italics*):

- In the Updates from 2006 EAW Design document, include a comparison of trip generation for the proposed development from the 2006 plan to the 2018 plan. Provide an apples to apples comparison (did 2006 study factor internal capture and pass-by?)

Response: The 2006 EAW prepared by SRF Consulting group estimated the following 2015 Build trips for the site (using ITE Trip Generation Report, Seventh Edition, 2003), including the Bruggeman Residential Development:

“Table 4 – Trip Generation Estimates” (from 2006 SRF Study)

Land Use	Size	Daily Trips	A.M. Peak		P.M. Peak	
			In	Out	In	Out
<i>Bluffs at Marystown Development</i>						
Single Family Homes	451 units	4,157	81	244	262	154
Town homes	292 units	1,596	21	101	97	48
Neighborhood Commercial	22,500 sq. ft	2,983	45	29	130	141
Office	22,500 sq. ft.	423	50	7	18	86
Elementary School	600 students	774	139	113	76	92
Subtotal		9,933	335	494	583	522
<i>Bruggeman Residential Development</i>						
Single Family Homes	750 units	6,637	134	401	414	243
<i>Total from No-Build analysis(Table2)</i>		6,689	877	434	459	386
Grand Total (2015) Build		23,259	1,346	1,329	1,456	1,151

In comparison, Westwood estimated the following trip generation for the recent EAW Update. The ITE Trip Generation Manual, Tenth Edition (2017)

was utilized for these estimates. Note that the table has been modified to provide a more direct comparison with the 2006 trip generation estimates, and incorporates the estimated trips from the Bruggeman development:

Land Use	Size	Daily	A.M. Peak		P.M. Peak	
		Trips	In	Out	In	Out
Windermere Development						
Single Family Housing	590 units	4,784	100	300	272	160
Multifamily Housing (Low-Rise)	38 units	222	4	14	12	7
Multifamily Housing (Low-Rise)	312 units	2,084	30	102	79	46
Gasoline/Service Station w/ Convenience Market	16 fueling positions	2,816	100	96	88	85
Pharmacy/Drugstore w/o Drive-Thru	10 ksf	798	16	8	42	43
Senior Adult Housing - Attached	185 beds	646	12	23	26	21
Assisted Living	68 beds	158	8	5	5	9
Nursing Home	24 employees	114	8	2	3	6
Shopping Center	78 ksf	4,564	111	68	168	182
Subtotal		16,186	389	618	695	559
Bruggeman Residential Development						
Single Family Homes	750 units	6,148	129	387	340	199
Grand Total (2025 Build)		22,334	518	1,005	1,035	758

It is noted that in the 2006 report, traffic was added to the No-Build analysis to account for developments east of Marystown Road. These developments were in place at the time of the traffic counts taken in 2015 and have been assumed in the Westwood EAW update to be part of the background traffic along Marystown Road.. Therefore, no additional “No-Build” development traffic was assumed, other than applying the overall 2% background growth rate.

Therefore, to provide a more accurate comparison between the two studies, the “Total from No-Build analysis (Table 2)” line item has been removed from the 2006 SRF Table. Thus the following “apples-to-apples” comparison is provided:

Land Use	Size	Daily	A.M. Peak		P.M. Peak	
		Trips	In	Out	In	Out
<i>Bluffs at Marystown + Bruggeman Developments</i>		16,570	469	895	997	765
<i>Windermere + Bruggeman Developments</i>		22,334	518	1,005	1,035	758

Regarding the question whether the 2006 study factored internal capture and pass-by trips into the analysis, it is not apparent from the text of the report. However, when adding the outbound peak hour Build volumes, it appears that internal capture must account for the reduction in outbound trip totals.

- Add figure showing lane configuration for all intersections (existing, 2025 no-build and 2025 build) or discuss in the report.

Response: *The figures have been added to the study, as requested.*

- Similar to the 2006 study, the trip generation table should include the Bruggeman property.

Response: *The table has been modified to include the Bruggeman property, as requested.*

- Report should clarify which improvements will be required as part of the Windermere development. Any improvements not triggered by the proposed development should be removed from the report.

Response: *Side street stop control at intersections with Marystown Road, 130th Street or Old Brick Yard Road appear to be the only traffic control improvements required as part of the Windermere development. Turn lanes along 17th Avenue internally and at the intersections with Marystown Road and Old Brick Yard Road will be required. Any other improvements will be the result of background traffic growth and other development impacts.*