



February 23, 2024

Robert Pollock  
P.O. Box 444  
Milton, NY 12547

Re: Responses to Planning Board Consultant Comments  
Buttermilk Falls  
Town of Marlborough, New York

Dear Mr. Pollock:

As requested, I am providing my responses to comments made by Planning Board Consultant Creighton Manning (CM) in a letter dated January 26, 2024.

The traffic impact related comments were essentially three-fold:

1. Discuss the anticipated frequency of large events at the site.
2. Provide a sensitivity analysis of conditions that may result should there be an overlap of use at the larger seating facilities.
3. The departure traffic could use North Road to Milton Turnpike and turn left onto Route 9W instead of the much more difficult left turn from Mahoney Road onto southbound Route 9W.

Other CM comments regarding the Site Plan will be addressed by the site engineers.

**Responses:**

1. Large attendance – or full attendance at the 300-seat banquet hall – would occur primarily on Saturday evening and Sunday afternoon when traffic on the adjacent streets is significantly lower than during the peak times evaluated in the study. Also, at those off-peak times, there would be less traffic generated by the other uses within the site – including the restaurant, spa and other lodging uses. The owners have confirmed that large events will be infrequent and will be scheduled so as to avoid the higher peak traffic hours on the adjacent streets – i.e., not during the Friday evening peak hour.
2. A sensitivity analysis was conducted that assumed some overlapping of events, and to include the larger venue on the site. The sensitivity scenario for a Friday evening/night included the following trip generators:
  - a. Full occupancy at the hotel
  - b. Fine dining restaurant is open
  - c. A nighttime event at the banquet hall for 300 guests, of which half arrive during the Friday evening peak hour of the adjacent streets.

The generated trips would be as follows:

Friday Evening Event with ½ Banquet Hall Traffic		
Use	Entering Traffic	Exiting Traffic
Hotel	24	22
Restaurant	11	5
Banquet Hall	51	6
<b>Total</b>	<b>86</b>	<b>33</b>

The trips noted above were distributed to the Route 9W intersections similar to the pattern used in the original study – with one exception. As suggested by CM, traffic departing the site that was distributed to Mahoney Road in order to turn left onto southbound Route 9W could instead simply turn left out of the site onto North Road and then use Milton Turnpike and the traffic signal at Route 9W to turn left. Directional signs at the site exits will be added to encourage departing traffic to use that alternate route.

The resulting Friday Evening traffic volumes are shown in the attached Figure as are the resulting Level of Service analysis summaries for Route 9W at Milton Road and at Mahoney Road. Conditions would be marginally acceptable at Mahoney Road for that time period under a scenario with an overlapping large event. At all other times, conditions would be acceptable. The impacts of the sensitivity scenario would be minimal.

Conclusions: The owners intend to manage the facility to provide conditions that give visitors the best experience possible. It is simply good business practice; easy access and plentiful parking are part of that practice. While the analyses showed increases in average delay times due to the increase in vehicle traffic on the adjacent streets – and even with some overlapping of large event traffic – conditions would remain acceptable. Longer delays may be possible but only for a short period of time – one hour or less – on a Friday evening. However, this condition would be considered acceptable. At all other times during the day and on the weekends, conditions would be better.

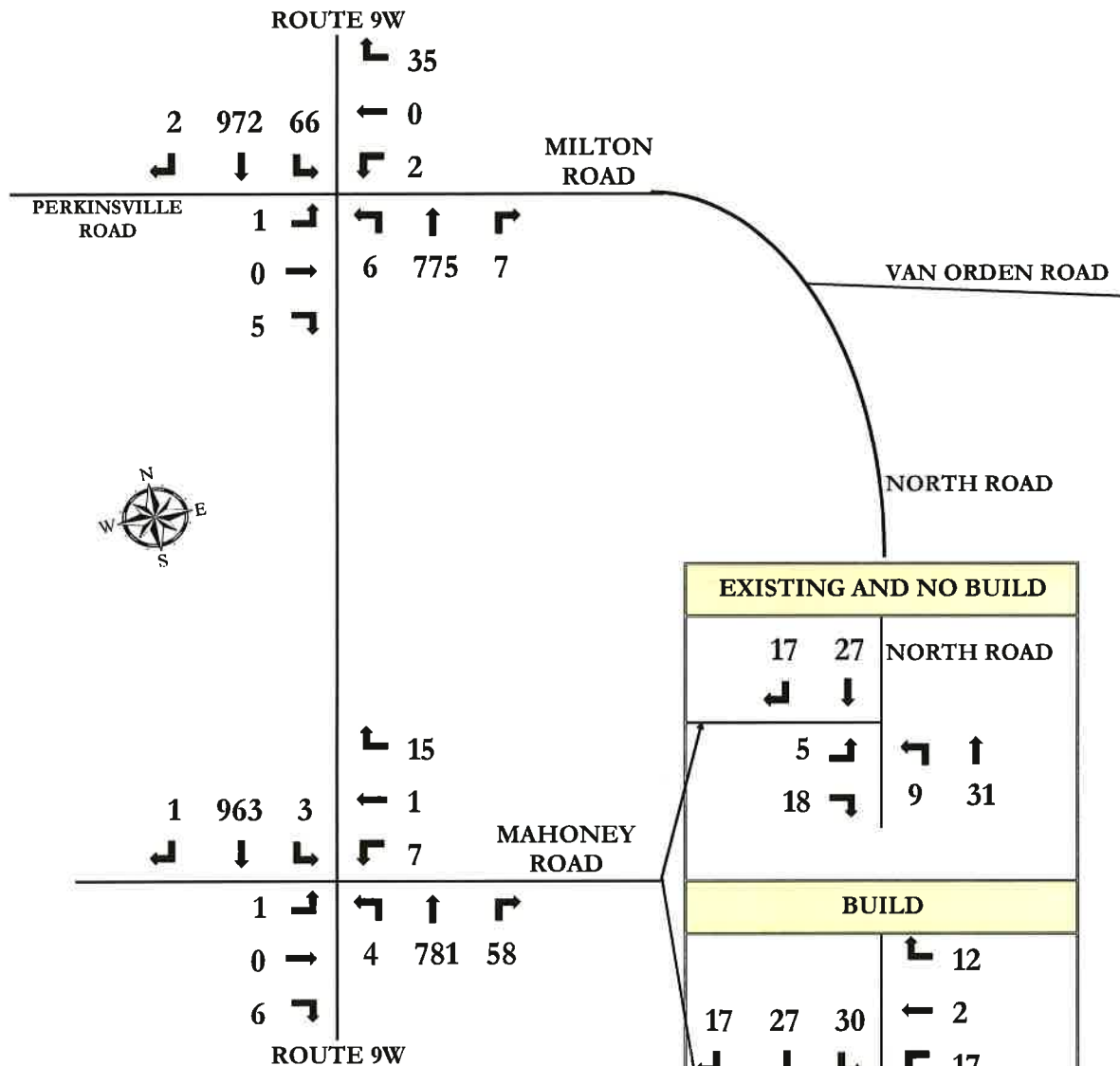
Let me know if you have any questions. Thank you.

Sincerely,



Stephan A. Maffia, P.E.  
Principal

NOT TO SCALE



KEY: FRIDAY EVENING = 4:00 TO 6:00 PM

FRIDAY NIGHT = 7:00 TO 9:00 PM

SATURDAY = 1:00 TO 3:00PM

**BUTTERMILK FALLS**

**Marlborough, New York**

Prepared by: STEPHAN A. MAFFIA, P.E.

**FIGURE 10**

**FRIDAY EVENING**

**2025 BUILD**  
TRAFFIC VOLUMES

Buttermilk Falls  
1: Route 9W & Perkinsville Road/Milton Road

Friday Evening Peak  
Timing Plan: Build

Intersection

Int Delay, s/veh 1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕			↕			↕			↕		
Traffic Vol, veh/h	1	0	5	2	0	35	6	775	7	66	972	2
Future Vol, veh/h	1	0	5	2	0	35	6	775	7	66	972	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	6	2	2	6	2
Mvmt Flow	1	0	5	2	0	38	7	852	8	73	1068	2

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2104	2089	1069	2088	2086	856	1070	0	0	860	0	0
Stage 1	1215	1215	-	870	870	-	-	-	-	-	-	-
Stage 2	889	874	-	1218	1216	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	38	53	269	39	53	357	651	-	-	781	-	-
Stage 1	222	254	-	346	369	-	-	-	-	-	-	-
Stage 2	338	367	-	221	254	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	27	40	269	31	40	357	651	-	-	781	-	-
Mov Cap-2 Maneuver	27	40	-	31	40	-	-	-	-	-	-	-
Stage 1	217	195	-	339	361	-	-	-	-	-	-	-
Stage 2	295	359	-	166	195	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	40.5	24.2	0.1	0.6
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	651	-	-	108 228	781	-	-
HCM Lane V/C Ratio	0.01	-	-	0.061 0.178	0.093	-	-
HCM Control Delay (s)	10.6	0	-	40.5 24.2	10.1	0	-
HCM Lane LOS	B	A	-	E C	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2 0.6	0.3	-	-

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	1	0	6	7	1	15	4	781	58	3	963	1
Future Vol, veh/h	1	0	6	7	1	15	4	781	58	3	963	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	6	2	2	6	2
Mvmt Flow	1	0	7	8	1	17	4	868	64	3	1070	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1994	2017	1071	1988	1985	900	1071	0	0	932	0	0
Stage 1	1077	1077	-	908	908	-	-	-	-	-	-	-
Stage 2	917	940	-	1080	1077	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	45	58	268	46	61	337	651	-	-	734	-	-
Stage 1	265	295	-	330	354	-	-	-	-	-	-	-
Stage 2	326	342	-	264	295	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	41	57	268	44	60	337	651	-	-	734	-	-
Mov Cap-2 Maneuver	41	57	-	44	60	-	-	-	-	-	-	-
Stage 1	262	292	-	326	349	-	-	-	-	-	-	-
Stage 2	305	338	-	255	292	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	30.3		50.5		0.1		0	
HCM LOS	D		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	651	-	-	150 104	734	-	-
HCM Lane V/C Ratio	0.007	-	-	0.052 0.246	0.005	-	-
HCM Control Delay (s)	10.6	0	-	30.3 50.5	9.9	0	-
HCM Lane LOS	B	A	-	D F	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2 0.9	0	-	-

