



March 25, 2022

Ref: 20926.00

Mr. Gavin Vuillaume, RLA
Environmental Design Partnership
900 Route 146
Clifton Park, NY 12065

Re: Traffic Evaluation, Voorheesville Blackbirds, Village of Voorheesville, NY

Dear Mr. Vuillaume:

VHB Engineering, Surveying, Landscape Architecture and Geology, PC (VHB) has conducted a traffic evaluation to assess the potential traffic impacts associated with the construction of the two restaurants located on South Main Street in the Village of Voorheesville, New York. The proposed Site Plan, prepared by Environmental Design Partnership, is attached to this letter. This letter includes an assessment of the weekday AM and PM peak hour site generated trips for the proposed development.

Site Location and Proposed Development

The proposed project is located on the northeast and northwest quadrants of the South Main Street/Voorheesville Road/Center Street intersection in the Village of Voorheesville. The project includes the following:

- Demolition of the existing buildings on the northeast quadrant of the South Main Street/Voorheesville Avenue/Center Street intersection at 40 and 42 South Main Street (including a former Stewart's Shop) and construction of a one-story 5,300 square foot (sf) Blackbirds Tavern and associated parking.
- Access to Blackbirds Tavern will be provided via two full access driveways to the parking lot at 40 South Main Street further away from the existing intersection than the current site access. The curb cuts on South Main Street and Voorheesville Avenue associated with the former Stewart's Shop located close to the intersection will be closed.
- Demolition of the existing buildings on the northwest quadrant of the South Main Street/Voorheesville Avenue/Center Street intersection at 43 South Main Street and construction of a two-story building with a 1,610 sf Blackbirds Bike Café on the first floor and two apartment units on the second floor.
- Access to Blackbirds Bike Café at 43 South Main Street will continue to be provided via Center Street but will be clarified with new curbing to narrow the curb cut width and delineate a one-way enter and one-way exit to the parking lot.

The South Main Street/Voorheesville Avenue/Center Street intersection is a four-leg intersection operating under stop sign control on the Voorheesville Avenue and Center Street approaches to the intersection. Each approach provides a single lane for shared travel movements. Sidewalks are provided on both sides of the approaches to the intersection with the exception of the south side of Center Street. Marked pedestrian crosswalks are provided on



the southbound, eastbound, and westbound intersection approaches. The proposed project is located in a walkable area of the community with a mix of residential, commercial, and recreational uses.

Site Generated Traffic Volumes

To estimate the site-generated traffic anticipated at the project site, the Institute of Transportation Engineers' (ITE) publication *Trip Generation Manual, 11th Edition*¹ was utilized. Limited data is available for tavern and café uses; therefore, the number of vehicle trips generated by the proposed project was estimated based on ITE land use code (LUC) 932 – High-Turnover (Sit-Down) Restaurant for the café and tavern and LUC 220 – Multifamily Residential (Low Rise) for the apartment units. The tavern is not expected to be open during the weekday AM peak hour; therefore, trips were not assigned to this land use for the AM peak hour. The trip generation estimate for the proposed project is summarized in Table 1.

It can be expected that some of the trips to the café and tavern will originate from traffic that is already on the adjacent roadway network. The pass-by trip percentages applied to the applicable commercial land uses included at the site are based on data published by ITE in the *Trip Generation Handbook, 3rd Edition*².

Table 1 Trip Generation Summary

Land Use	AM Peak Hour			PM Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
40 and 42 South Main Street						
Blackbirds Tavern ^a	0	0	0	29	19	48
Pass-by (45%) ^b	0	0	0	-11	-11	-22
New Trips	0	0	0	18	8	26
43 South Main Street						
Multifamily Residential (Low Rise) ^c	0	1	1	1	0	1
Blackbirds Bike Café ^a	8	7	15	8	6	14
Pass-by (0% AM, 45% PM) ^b	0	0	0	-3	-3	-6
New Trips	8	8	16	6	3	9
Total New Trips	8	8	16	24	11	35

a Trip generation estimate based on ITE LUC 932 – High-Turnover (Sit-Down) Restaurant for 5,300 sf and 1,600 sf respectively

b Pass-by percentage of 45% based on ITE LUC 932 – High-Turnover (Sit-Down) Restaurant

c Multifamily Residential (Low Rise) for 2 units

¹ Trip Generation Manual, 11th Edition, Institute of Transportation Engineers, Washington D.C., September 2021

² Trip Generation Handbook, 3rd Edition, Institute of Transportation Engineers, Washington D.C., September 2017



Based on the projections outlined above, the proposed project is expected to generate 16 new vehicle trips during the weekday AM peak hour (8 entering and 8 exiting) and 35 new vehicle trips during the weekday PM peak hour (24 entering and 11 exiting). Using ITE LUC 851 – Convenience Store, as previously occupied with a Stewart's Shop, the site at 40 South Main Street generated approximately 55 to 70 new vehicle trips during the weekday AM and PM peak hours., a magnitude of traffic that is greater than the redevelopment of the three parcels as proposed.

The magnitude of site generated trips results in less than the NYSDOT and ITE trip thresholds of the generation of 100 vehicle trips on a single intersection approach for determining the need for detailed off-site intersection analysis. These agency thresholds were developed as a tool to identify locations where the magnitude of traffic generated has the potential to impact operations at off-site intersections and screen out locations that do not meet the threshold and are therefore unlikely to require mitigation. The traffic associated with the proposed project will be accommodated for by the existing roadway network. No additional analysis or site-related mitigation is recommended.

Conclusions

VHB has conducted a traffic evaluation to assess the potential traffic impacts associated with the construction of the 5,300 sf Blackbirds Tavern, 1,610 sf Blackbirds Bike Café with two upstairs apartment units in the northeast and northwest quadrants of the South Main Street/Voorheesville Avenue/Center Street intersection. The following is noted regarding redevelopment of 40, 42, and 43 South Main Street:

- Access to Blackbirds Tavern will be provided via two full access driveways to the parking lot at 40 South Main Street further away from the adjacent intersection than the current site access. The curb cuts on South Main Street and Voorheesville Avenue associated with the former Stewart's Shop located close to the intersection will be closed representing good access management practices.
- Access to Blackbirds Bike Café at 43 South Main Street continue to be provided via Center Street but will be clarified with new curbing to narrow the curb cut width and delineate a one-way enter and one-way exit to the parking lot.
- The project is expected to generate 16 new vehicle trips during the AM peak hour and 35 new vehicle trips during the PM peak hour. This is less than the trip generation of the former Stewart's Shop located at 42 South Main Street.
- The magnitude of site generated trips results in less than the NYSDOT and ITE trip thresholds of the generation of 100 vehicle trips on a single intersection approach for determining the need for detailed off-site intersection analysis. The proposed project will be accommodated for by the existing roadway network. No additional analysis or site-related mitigation is recommended.

Mr. Gavin Vuillaume, RLA
Ref: 20926.00
March 25, 2022
Page 4



Please call with any questions on the above evaluation.

Sincerely,

VHB

A handwritten signature in blue ink, appearing to read "Alanna Moran".

Alanna Moran, PE
Project Manager

Attachment

