

December 14, 2021

Mr. Eric Morrissey Village Administrator Village of Pleasantville 80 Wheeler Avenue Pleasantville, New York 10570

Subject Traffic Evaluation – Options to Modify Directional Traffic Flow – Vanderbilt Avenue and Depew Street, Pleasantville, New York

Dear Mr. Morrissey:

As requested, we have completed this Traffic Evaluation to provide the Village with our recommendations to either maintain the existing two-way traffic flow for both Vanderbilt Avenue and Depew Street or consider converting one or both roadways to one-way traffic flow either in the eastbound/southbound or northbound/westbound directions. This may be needed to address traffic congestion, traffic safety and to address potential impacts related to the planned development of One Vanderbilt Avenue development.

Project Understanding

Vanderbilt Avenue and Depew Street are Village-maintained, local roadways. Both roads are narrow and serve existing residential and commercial development in this two-block section. For purposes of describing area roads and completing this Traffic Evaluation it is assumed that Depew Street is an east-west, local roadway. It begins to the west at Grant Street and connects to and continues to the south as Vanderbilt Avenue. Vanderbilt Avenue is a north-south, local road, beginning as an extension of Depew Street to the north and terminating to the south at Manville Road. Both roads provide two-way traffic flow and generally with narrow travel lanes in each direction. These roadways do not provide any pavement markings. The Depew Street approach to Grant Street is controlled with a STOP sign and the southbound approach on Vanderbilt Avenue to Manville Road is controlled with a STOP sign. Currently there are no turning restrictions; however, as part of the development of the property at the intersection of Depew Street and Vanderbilt Avenue a NO LEFT TURN sign will be installed on Grant Street for southbound movements turning left into Depew Street.

This Evaluation is based on the continuing concerns with traffic flow and overall safety on both Depew Street and Vanderbilt Avenue. As part of the One Vanderbilt Avenue development and its approval, both roadways are to be maintained as two-way roads. However, Depew Street along the site frontage includes road improvements, curbing and sidewalks and a minor widening.

The following sections describe the different options for consideration to either maintain existing conditions or modify directional traffic flow to minimize potential congestion and address overall safety concerns.

Mr. Eric Morrissey Page 2 December 14, 2021

Options to Modify Directional Traffic Flow

<u>Option 1</u> – This option maintains the current two-way traffic flow for both Vanderbilt Avenue and Depew Street. It assumes the planned improvements along the One Vanderbilt Avenue site frontage.

The benefits or pros to maintaining the two-way traffic flow as is currently the case, this would continue to spread out traffic to the two intersections including Grant Street at Depew Street and Vanderbilt Avenue at Manville Road. Traffic flow would remain the same except for the increase in traffic related to the approved development. This option assumes the installation of a left turn restriction for southbound Grant Street to Depew Street to address the concerns with motorists stopping to wait to turn left onto Depew Street and the potential for rear-end collisions or backups onto the mainline of Saw Mill River Parkway. This should improve overall traffic safety and traffic flow.

The negatives or cons to maintaining the existing conditions on both roadways is that Vanderbilt Avenue is a narrow, limited two-lane, two-way, traffic flow pattern and maintains on-street parking. Essentially this road functions as a one-way roadway, with parking permitted along the westerly side. There are no options to eliminate parking on this road to provide an appropriate width for two travel lanes on this roadway.

<u>Option 2</u> – This option is to convert Vanderbilt Avenue to a one-way traffic flow for northbound movements only from Manville Road to Depew Street. Further, this option would convert Depew Street to a one-way traffic flow in a westbound direction from Vanderbilt Avenue to Grant Street.

Under the benefits or pros this option eliminates exiting movements from Vanderbilt Avenue to Manville Road, which currently has a sightline restriction to the east (left) when exiting Vanderbilt Avenue at Manville Road. One option to mitigate this sightline restriction due to the bridge abutment is to install a white shoulder line to shift westbound through traffic on Manville road away from the curb and align with the parking lane west of the Vanderbilt Avenue intersection. This would shift vehicles away from the bridge abutment.

Under the cons or negatives this modification to a one-way traffic flow for both Depew Street and Vanderbilt Avenue is that it would add 14 and 16 vehicles, during the weekday morning and weekday afternoon peak hours, to the left turn movement from Depew Street to Grant Street for a southbound flow. A benefit of converting Vanderbilt Avenue to one-way traffic flow in either direction is that the on-street parking can be maintained, and one wide travel lane can be provided for one directional flow. This is a significant disadvantage since this intersection currently experiences traffic delays and congestion. Often the Depew Street approach to Grant Street is blocked by motorists waiting in the northbound lane on Grant Street to access the Saw Mill River Parkway. As an approval to the development on Depew Street at Vanderbilt Avenue, the southbound left turn movements from Grant Street to Depew Street will be prohibited.

<u>Option 3</u> – This option would convert Depew Street to a one-way traffic flow for eastbound movements from Grant Street to Vanderbilt Avenue. Further, Vanderbilt Avenue would be converted to a one-way traffic flow for southbound movements from Depew Street to Manville Road. With benefits or pros this option eliminates vehicles exiting from Depew Street to Grant Street, which is a difficult movement due to the vehicle queuing on Grant Street at the approach to the Saw Mill River Parkway. Further, the southbound left turn entering movements will be restricted in the future in conjunction with the planned development at One Vanderbilt

Mr. Eric Morrissey Page 3 December 14, 2021

Avenue. It is also assumed that any traffic currently exiting Depew Street to reach Grant Street, which is 25 and 21 vehicles during the weekday morning and weekday afternoon peak hours, respectively, will need to turn right on Manville Road. With this option there will be no new traffic turning left and exiting Vanderbilt Avenue to Manville Road. Under the negatives or cons for this option there is the previously identified sightline restriction for motorists exiting Vanderbilt Avenue and looking to the east (right) when exiting onto Manville Road.

<u>Option 4</u> – It maintains Depew Street at a two-way roadway, between Grant Street to the west and Vanderbilt Avenue to the east. It includes converting Vanderbilt Avenue to a one-way traffic flow in a southerly direction from Depew Street to Manville Road. This option could add vehicles to Vanderbilt Avenue at Manville Road, which is a negative.

Under the negatives or cons this option also adds 14 and 16 vehicles to the left turn movement from Depew Street to Grant Street southbound during the weekday morning and weekday afternoon peak hours, respectively. This is a difficult left turn to complete under existing conditions and adding additional traffic to this movement will be a significant concern.

Previous discussions included restricting left turn movements exiting Depew Street due to the traffic congestion and motorists blocking the Depew Street intersection on the northbound travel on Grant Street.

Findings

Based on our assessment of all the options to convert Depew Street and Vanderbilt Avenue to one-way in either direction or maintain Depew Street as two-way and Vanderbilt Avenue as one-way have negative impacts. Although it would be beneficial to convert Vanderbilt Avenue to one-way due to its narrow width and on-street parking, the low volume of traffic and the disadvantages of sightline issues at the Vanderbilt Avenue/Manville Road intersection and traffic congestion at the Grant Street intersection with Depew Street it is our recommendation, as it was several months ago, that the two roadways should be maintained with two-way traffic flow to distribute traffic onto both roadways for existing conditions and for the planned new development. Further, it was recommended and should be implemented so that left turns are not permitted from Grant Street onto Depew Street when approaching from the Saw Mill River Parkway. Consideration for installing a painted shoulder line for westbound Manville Road east of Vanderbilt Avenue at the railroad bridge. The attached Table 1 provides a summary of the descriptions noted above.

Respectfully submitted,

Wichin

Michael A. Galante Director of Traffic Hardesty & Hanover, LLC

Enclosure y:\shared\projects\05119-village of pleasantville-2021\500-technica\\50x-template\5119.13 vanderbilt ave & depew street\word\21-000.mag.docx: td

Table 1 OPTIONS TO MODIFY DIRECTIONAL TRAFFIC FLOW Vanderbilt Avenue and Depew Street Pleasantville, New York

OPTIONS	PRO'S	CON'S
1) Maintain two-way traffic flow on both Vanderbilt Avenue and Depew Street.	1. Spreads out traffic volume to the intersection with Grant Street and Manville Road	1. Vanderbilt Avenue is narrow with on-street parking.
2) Convert Vanderbilt Avenue to one-way away from Manville Avenue to Depew Street. Convert Depew Street to one-way in a westerly direction away from Vanderbilt Avenue to Grant Street.	1. Eliminates exiting vehicles from Vanderbilt Avenue to Manville Road, which has limited sight lines.	 Adds 14 and 16 vehicles to the left turn movement from Depew Street to Grant Street southbound during the AM and PM, respectively. There were discussions previously that the left turn exit should maybe be restricted because this roadway is routinely blocked by northbound traffic and a left turn exiting movement is difficult
3) Convert Depew Street to one-way eastbound away from Grant Street to Vanderbilt Avenue. Convert Vanderbilt Avenue to one-way southbound from Depew Street to Manville Road.	 Eliminates exiting vehicles from Depew Street to Grant Street, which is difficult due to the northbound Grant Street queueing. Southbound left turn entering movements are restricted, as per the approval for One Vanderbilt Ave. It is assumed that any traffic currently exiting Depew Street to Grant Street (25 and 21 AM and PM) turn right onto Manville Road. No new traffic is anticipated to make a left turn exiting Vanderbilt Avenue to Manville Road 	1. Limited sight lines

OPTIONS	PRO'S	CON'S
4) Maintain Depew Street as a two-way roadway between Grant Street on the west to the intersection with Vanderbilt Avenue to the east. Convert Vanderbilt Avenue to a one-way traffic flow in a southerly direction from Depew Street to Manville Road.	1. Eliminates exiting vehicles from Vanderbilt Avenue to Manville Road, which has limited sight lines.	 Adds 14 and 16 vehicles to the left turn movement from Depew Street to Grant Street southbound during the AM and PM, respectively. There were discussions previously that the left turn exit should maybe be restricted because this roadway is routinely blocked by northbound traffic and a left turn exiting movement is difficult

Hardesty & Hanover, LLC Y:\Shared\Projects\05119-Village of Pleasantville-2021\500-Technical\50X-Template\5119.13 Vanderbilt Ave & Depew Street\Word\21-001.stc.docx 11/29/2021