

Memorandum



To: Ron Rodjenski, Town of Hyde Park
From: Watershed Consulting Associates, LLC
Date: February 19, 2021
Re: **Hyde Park Main Street GSI Project – Streetscape Features Review**

Dear Ron:

This memorandum summarizes the research done by Watershed Consulting Associates reaching out to the municipalities of Middlebury, Stowe, Vergennes, and Winooski about their implemented streetscape infrastructure. These streetscape features, particularly bump-outs, were investigated as they are used for traffic calming, pedestrian mobility, and stormwater management in their constrained downtown areas. Specific feedback on maintenance considerations and public perception was requested. The feedback was obtained by contacting the municipalities from the public works and/or planning departments. A summary of the feedback is provided here:

- ✓ Town of Middlebury: Bill Kernan, Public Works Operations Director in Middlebury spoke specifically to bump-outs at sidewalks, saying that these could be problematic for plowing. However, bump-outs installed more recently were done with pavers set at grade level so a plow or vehicle could run over them. He mentioned that there are no new plans for green infrastructure to calm traffic in the works. The Public Works Planning Director in Middlebury, Dan Werner, also commented on the concern about how the stormwater flows around/through the bump-outs as this could add costs to a project.
- ✓ Town of Stowe: Tom Jackson, Director of Planning in Stowe, said bump-outs were done where feasible. His Planning Department thought the Highway Department would have concerns because of plowing but they apparently have been accepting of the practices. Installing bump-outs meant having to eliminate several parking spaces but the overall feeling from the community is that they are great safety features for pedestrians. Also, he mentioned that bump-outs add a nice style touch to the new sidewalks. He pointed out that they did leave a green strip between the sidewalk and curb to plant trees on both sides of the street, using structural soil under the sidewalk to help the trees flourish. This was a significant expense, but he thought it was worth it in the long term. Another improvement was burying utility lines on Main Street and removing utility poles and installed ornamental streetlights on both sides of the street. He referred to a video that includes drone footage of the final project and input from stakeholders and town managers on the success of the project. The video can be found [here](#).

Harry Shepard, Public Works Director in Stowe, said the bump-outs were for pedestrian safety and traffic calming, not for stormwater. He mentioned that there was a fair amount of concern when first installed but now that the practices have been installed, most agree that they were a significant improvement for pedestrian safety. They do introduce additional snow maintenance

burden, but it is manageable, and the Public Works Department thinks it is worth the extra effort required.

- ✓ City of Vergennes: Jim Larrow, the Public Works Supervisor in Vergennes, mentioned that bump-outs are a challenge to work around during the winter but do have good feedback from the residents and visitors as it is much safer to get across the street as they enable pedestrians to be out in the road more and be noticed by oncoming traffic rather than standing behind parked cars. Also, he mentioned how Main Street in Vergennes is on a steep grade and had to design some of the bump-outs for the stormwater to go through and not around them, suggesting Hyde Park may have to look at the elevation of their site as well.

- ✓ City of Winooski: Jon Rauscher, Public Works Director in Winooski, talked about a recent project for 4 bioretention bump-outs on a local dead-end street, installed as part of a detention pond expansion project. This was initiated as part of the ongoing “flow restoration plan” (FRP) under Winooski’s MS4 permit. The purpose of the FRP is to return a tributary brook to its attainment condition. He has not heard of any on-going maintenance and operation concerns. One maintenance suggestion was that the town placed markers at the bump-out curb line as a reminder for the plow drivers. John Choate, the Utility Manager for Winooski, also mentioned that the reflective markers are left up year-round, not just for snowplows and that the curbs were spray painted to help with the visibility of the bump-outs. Jon said that residents have not voiced any concerns and vegetation seems to be relatively maintenance free. He did comment that he would be concerned placing these on a more heavily traveled street. A main travel corridor or stormwater collection area that is a priority for plowing is not somewhere they would want to worry about detailed plowing around bump-outs.

Overall, the feedback suggests that streetscape projects within constrained downtown areas are feasible and can add a high degree of value. In addition, the feedback suggests that preconceived concerns related to plowing and maintenance are not necessarily valid. The feedback does suggest that detailed planning is needed to ensure the practices are compatible with the expectations of the residents and road crews, and that some simple techniques such as markers to identify curbs and inlets will go a long way to ensuring the success of these practices.

Sincerely,



Andres Torizzo
Principal



Maddie SanAngelo
Water Quality Intern