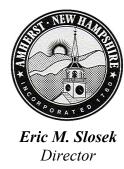
## **DEPARTMENT OF PUBLIC WORKS**

22 Dodge Road, Amherst, NH 03031 Tel. (603) 673-2317



July 30, 2025

Amherst Planning Board Office of Community Development 2 Main Street Amherst, NH 03031

Re: Support for Waiver Requests – Jacobson Farm Subdivision Tax Map 5, Lots 100 & 148 – Christian Hill Road

Dear Members of the Planning Board,

The Department of Public Works has reviewed the two waiver requests submitted as part of the Final Subdivision Application for the Jacobson Farm project (formerly known as TransFarmation Sustainable Community), which proposes 33 single-family lots and a 4-unit barn. Upon detailed review and consultation with applicable stakeholders, the Department finds both waiver requests to be consistent with the intent of the Town's development regulations and supportive of safe, sustainable, and efficient infrastructure design.

## Waiver Request #1 – Cul-De-Sac Design (Part 3, Table 3-1 and "Two-Way Cul-De-Sac" Detail)

The applicant has requested relief from the current dimensional and geometric requirements for cul-de-sacs under Table 3-1 and the standard "Two-Way Cul-De-Sac" detail. The proposed design offers several notable improvements:

- Compliance with Current Practice: The applicant's design reflects standards used in the majority of existing cul-de-sacs within Amherst, many of which do not meet the current regulatory specifications. The updated design aligns with modern transportation norms and observed travel behaviors in cul-de-sacs, especially the common counterclockwise circulation pattern.
- **Safety Enhancements**: The proposed cul-de-sac improves pedestrian and vehicular safety by reducing overall size—discouraging high speeds—and incorporating one-way travel to reduce conflict. Testing conducted with the Town's largest emergency apparatus and plow trucks confirmed safe maneuverability, especially with the proposed 33' internal radius and 20' pavement width plus 3' shoulders.

• Environmental and Maintenance Benefits: The new design significantly reduces impervious surface area—by nearly 60% compared to the existing standard—resulting in reduced stormwater runoff, smaller detention basins, less salt/sand use, and lower long-term maintenance costs.

In summary, the DPW believes this waiver promotes a more effective, safer, and environmentally sensitive roadway design and is in harmony with the goals of the Town Master Plan.

## Waiver Request #2 – Roadway Slope Design at Intersections (Section 302.5.B.1)

This waiver seeks minor relief from the vertical alignment requirement at the intersection of the proposed roadway with Christian Hill Road. Instead of a continuous 2–3% slope for 100 feet, the proposed profile includes:

- A -1.5% slope for 40 feet (away from the through street),
- Followed by a +3.25% slope for 50 feet,
- Then transitioning to a standard 8% grade.

This configuration offers several benefits:

- **Preservation of Natural Topography**: The modified slope allows the roadway to better conform to the existing terrain, minimizing cut and fill and preserving wetland buffers. This approach supports the goals of the Amherst Conservation Commission by limiting disturbance in sensitive areas.
- **Drainage Functionality**: The revised grades facilitate positive drainage into a proposed stormwater basin, which is essential for stormwater management in this area.
- **Maintained Safety**: Despite the deviation from prescribed grades, safety is not compromised. The design retains a relatively flat 3% approach over 90 feet at the intersection, ensuring safe vehicle stopping and acceleration, while also preventing stormwater from entering Christian Hill Road.

This waiver maintains the spirit and purpose of the roadway standards by supporting a safe and well-drained intersection design while enabling a more environmentally responsible and constructible outcome.

## Conclusion

Both waiver requests offer practical, safety-conscious, and environmentally beneficial alternatives to the existing standards. The Department of Public Works is confident that these

requests satisfy the intent of the Town's development regulations and align with best practices in road and utility design.

We respectfully recommend that the Planning Board grant both waivers as proposed.

Sincerely,

Eric M. Slosek

Director of Public Works Town of Amherst, NH

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CC: Community Development; Town Administrator