

## 17 Stiles Lane, Greenwich, CT 06831

### EMAC P&Z subgroup Comments on Section 6-14 (22) Energy & Renewables Narrative

The proposed energy features are a model of reuse and energy efficiency. The subgroup is very supportive of the plan as described. We are particularly pleased to note that:

- The project reflects the understanding that energy efficiency is the output of all the project elements COMBINED, as they work together. For example, the tight envelope enables a right-sized electric heat pump, the high-performance windows (U-Factor .25-.29 and SHGC .22-.25) enable ample daylighting without sacrificing thermal loss, supported by LED lighting throughout.
- The project embraces **electric** fuel source in the heat pump, water heater, vehicle charging capacity
- The project reflects a long planning horizon, consistent with the building's useful life, in choosing low maintenance, long-lasting exterior roof, trim and other elements.
- The concrete slab will remain/be reused and extended, and other demolition materials will be recycled as feasible.
- The use of solar pv was evaluated, even if site shading made it not feasible.

We would welcome additional information post-construction, if possible, to retrospectively understand the relationship (on a per square foot basis) between the investment cost of the construction elements, versus anticipated operating cost /year, for this project, versus a "typical" new construction small residence.

In addition, the applicant would have helped the review process greatly by specifying a total building EUI (Energy Use Intensity) rough result.