## Construction Protocol

The Sunrise of Newton is being constructed with a below ground garage that is primarily built on spread footings (not piles). However, driven or drilled soldier piles and lagging (sheeting and shoring) may be used in the location of the ramp and retaining wall down into the garage and possibly along Hovey and a portion of Washington Street. The location along the drive aisle closest to the Conroy and Cedrone residences is the area most in need for construction impact / vibration consideration. See the attached graphic for that work. Given our plan we expect no vibration impacts on the remaining adjacent neighbor homes. Our plan with regard to the construction will be as follows:

- 1. No blasting is envisioned for any rock removal given the Geotech report findings.
- 2. Rock excavation, if encountered, will be accomplished with hoe ram, which will cause vibration.
- 3. For the installation of the driven or drilled soldier piles and lagging:
  - a. This can be done without encroachment onto any adjacent property.
  - b. Test pile will be installed to assess initial vibration impacts.
  - c. 8' drive aisle buffer will be maintained.
  - d. Driven piles will cause vibration.
  - e. Installation of the piles / lagging will likely take 10 weeks.
- 4. Home protection methods:
  - a. All adjacent homes will have photos taken both inside and out prior to construction to set baseline of existing conditions.
  - b. Vibration monitoring devices will be set on adjacent foundations / buildings.
  - c. Structural engineer will evaluate homes' existing foundations and construction, and produce survey.
  - d. Structural engineer will take measurements of static ground vibration prior to construction start and with test pile.
  - e. Vibration thresholds will be established considering adjacent structures.
  - f. Vibration will be monitored during construction.
  - g. All work will be performed within engineered tolerances.
  - h. Alarms will be set if thresholds exceeded.
  - i. Following construction, structural engineer will re-inspect all adjacent homes.