As noted in my memo to the Board dated July 14, 2020, an existing grade plane analysis was not submitted with the application. Sheet 1 of the architectural plans includes a "story above grade" calculation giving the entire perimeter of the first floor as 164.33 feet (95.23'+69.1''). The applicant has since submitted a grade plane analysis prepared by 3 Wire Surveying, LLC, dated 08-24-20 which calculates the grade lane to be 97.03 feet. I have reviewed the grade points and accept the finding that the grade plane elevation is 97.03 feet. The architect has provided a first floor footprint plan superimposed on the elevation points provided by 3 Wires Surveying, LLC. Both are attached to this memo.

The "story above grade" analysis is based on three (3) methods:

1. **Is the first floor more than 6 feet above the grade plane?** The first floor is designated as 100, the first floor is 5.97 feet above the grade plane, i.e., not more than 6 feet above the grade plane.

2. **Is the first floor more than 6 feet above the finished ground level for more than 50% of the perimeter?** Based on the plan provided by the architect, it is obvious that the first floor perimeter has less length where the distance to the first floor is more than 6 feet and more than 50% of the perimeter is less than 6 feet above the finished grade. The attached diagram is highlighted for clarity showing the two points where the distance to the outside surrounding finished grade is more and less than 6 feet from the first floor.

3. **Is there any point where the first floor is more than 12 feet above the surrounding grade?** There is no point where the first floor is more than 12 feet above the surrounding grade.

Applying all three of the above criteria results in a conclusion that the lowest level is not a story above grade when analyzed in conjunction with the footprint of the story above the lowest level. Additionally, the building height is unchanged as there is no expansion of the foundation which would create a lower grade plane from the existing grade plane.
Notes

1. This sketch is the result of an actual field survey performed during August of 2020 to determine average grade at the dwelling with respect to floor elevation.

2. Elevations depicted hereon are referenced to a site specific datum, finished floor of existing dwelling set at elevation 100.00.

3. Average grade was derived by computing the mean of spot elevations depicted hereon, observed by field survey.