

STONEFIELD

July 14, 2020

Last Revised: July 15, 2020

Chairman and Members of the West Orange Zoning Board
Zoning Board of Adjustment
Township of West Orange
66 Main Street
West Orange, NJ 07052

RE: Building Height Calculation Narrative
955 Pleasant Valley Way LLC – Application No. ZB 1910
Proposed Self-Storage Facility
Block 172.02, Lot 8.01
955 Pleasant Valley Way (County Route 636)
Township of West Orange, Essex County, New Jersey

The Applicant is proposing a self-storage facility at the above referenced property consisting of three-story building with an upper and lower cellar. The building height and stories have been determined in accordance with the Township of West Orange Land Use Regulations, please refer to the below summary outlining the proposed calculations and supporting materials. It should be noted based on the Township of West Orange Department of Planning and Development Review Letter, dated December 24, 2020, revised June 8, 2020 the Township Planning Director, Paul Grygiel, AICP, PP was in agreement with the Applicants interpretation of the Land Use Regulations and with the relief being sought by the Applicant. As highlighted within the Departments review, the intention of this requirement is to address unique situations on steeply sloped sites such as the subject property.

As part of the Preliminary & Final Major Site Plan our office prepared a Mean Grading Plan (Sheet C-18) which included detailed calculations in order to determine the 'Mean Elevation' surrounding the proposed building (adjacent to the building foundation) to be utilized within the 'Height of Building Calculations'. Based on the ordinance definition highlighted below the proposed building height was determined to be 46.32-feet.

"Height of a building shall mean the vertical distance measured from the mean elevation of the finished grade adjacent to the building foundation to the highest point of the roof"

In accordance with the Township of West Orange Land Use Regulations definitions the proposed structure consists of three-story building with two cellars below (upper and lower). The ordinance definition of 'First Story' has been highlighted below for reference:

Story, first shall mean any story having its finished floor surface entirely above grade, except a basement shall be considered a story above grade when the distance from the grade to the finished surface of the floor above the basement is more than six (6) feet for more than fifty (50%) percent of the total perimeter or for more than twelve (12) feet at any point.

Furthermore, the definitions of 'Cellar' and 'Basement' have been referenced below which outline that the two lowest floors meet the definition of 'cellars':

"Cellar shall mean that portion of a building, which is partly or completely below grade or having at least one-half (1/2) its height below grade."

"Basement shall mean that portion of a building, which is partly below and partly above grade, and having more than one-half (1/2) its height above grade."

Please find enclosed supporting calculations in the determination of the building height.

$$\text{Building Height} = 430.55 - 384.23 = 46.32$$

Mean Grading Plan (Sheet C-18) – Floor Definition Summary Table

MEAN ELEVATION CALCULATION					
CODE SECTION	REQUIREMENT	LEVEL	FLOOR ELEVATION	LEVEL TO LEVEL HEIGHT	FLOOR DEFINITION
§25-4	CELLARS SHALL MEAN THAT PORTION OF A BUILDING, WHICH IS PARTLY OR COMPLETELY BELOW GRADE, HAVING AT LEAST $\frac{1}{2}$ ITS HEIGHT BELOW GRADE	LOWER CELLAR	364.05	11.0 FT	TOTAL PERIMETER LENGTH - 795.9 FT PERIMETER BELOW GRADE - 795.9 FT (100.0%)
§25-4	CELLARS SHALL MEAN THAT PORTION OF A BUILDING, WHICH IS PARTLY OR COMPLETELY BELOW GRADE, HAVING AT LEAST $\frac{1}{2}$ ITS HEIGHT BELOW GRADE	UPPER CELLAR	375.05	17.0 FT	TOTAL PERIMETER LENGTH - 829.8 FT PERIMETER BELOW GRADE - 466.5 FT (56.2%) PERIMETER ABOVE GRADE - 363.3 FT (43.8%)
§25-4	A BASEMENT SHALL BE CONSIDERED A STORY ABOVE GRADE WHEN THE DISTANCE FROM THE GRADE TO THE FINISHED SURFACE OF THE FLOOR ABOVE THE BASEMENT IS MORE THAN SIX FEET FOR MORE THAN 50% OF THE TOTAL PERIMETER OR FOR MORE THAN 12 FEET AT ANY POINT				TOP OF UPPER CELLAR - 392.05 MEAN ELEVATION - 384.23 DIFFERENCE - 392.05 - 384.23 = 7.82 FT < 12 FT PERIMETER >SIX FEET ABOVE GRADE (390.23) - 305.4 FT (36.8%)
§25-4	ANY STORY HAVING ITS FINISHED FLOOR SURFACE ENTIRELY ABOVE GRADE SHALL BE CONSIDERED A FULL STORY	1ST FLOOR	392.05	11.0 FT	TOTAL PERIMETER LENGTH - 799.3 FT PERIMETER ABOVE GRADE - 799.3 FT (100.0%)
		2ND FLOOR	403.05	11.0 FT	TOTAL PERIMETER LENGTH - 799.3 FT PERIMETER ABOVE GRADE - 799.3 FT (100.0%)
		3RD FLOOR	414.05	13.0 FT / 16.5 FT*	TOTAL PERIMETER LENGTH - 799.3 FT PERIMETER ABOVE GRADE - 799.3 FT (100.0%)

* THE HIGHEST POINT OF THE BUILDING IS ALONG THE PARAPET ON TOP OF THE ROOF (3.5 FT ABOVE ROOF LEVEL) WHICH BRINGS THE HIGHEST ELEVATION TO 430.55 FT