



**Civil
Site Planning
Environmental
Engineering**

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**DRIFTWOOD TOWNHOUSES –
REVISED FILL VOLUME CALCULATIONS
BASED ON PLAN REVISIONS DATED OCTOBER 18, 2019**

Date: October 18, 2019
 To: Rye Planning Board
 From: Eric Weinrieb, PE
 Altus Engineering, Inc.
 Copy: Tim Phoenix, Esq.
 John Samonas, Samonas Realty Trust

Samonas Realty Trust (“Samonas”) submitted a site plan review application for the Driftwood Townhouses project which was heard at the Planning Board Public Hearing on February 12, 2019. Some of the residents then expressed concern about the height and fill for the proposed buildings. Although the applicant’s desire was to set the building finished floor at elevations of 12.0 to provide protection from the 100 year floodplain elevation of 9.0 and additional protection due to rising sea levels, (for which Samonas was granted Zoning relief for building heights from 36.0 to 36.3 feet. Samonas has lowered the building finished floor elevation to 10.0 to reduce the amount of fill on site and the overall height of the buildings to a range between 35.2 feet and 35.4 feet. Ocean Boulevard adjacent to the site is approximately elevation 9.0, only one foot lower than the proposed finished floor, and approximately 50 feet away.

Additionally, the revised plans reduced the number of buildings/units from four to three/eight to six, to address concerns by the Planning Board and residents. This resulted in reductions in the fill volumes for the project. The table below depicts the reduction in fill volumes based on the proposed grading plans in comparison the original project submission.

Table 1: Volume Calculations Table

| <i>DESCRIPTION</i> | <i>Original Submittal (January 25, 2019)</i> | <i>Revised Plans (March 26, 2019)</i> | <i>Revised Plans (October 18, 2019)</i> | <i>Percentage Reduction*</i> |
|---|--|---|---|----------------------------------|
| Fill in Floodplain | 1,760 cubic yards / 1.09 acre-ft | 1,650 cubic yards / 1.02 acre-ft | 1,585 cubic yards / 0.98 acre-ft | 9.9% |
| Fill within 100 Foot Wetlands Buffer | 2,710 cubic yards | 1,480 cubic yards | 1,465 cubic yards** | 45.9% |
| Total Fill volume on Site | 5,200 cubic yards | 3,480 cubic yards | 3,325 cubic yards | 36.1% |

* Percent reduction based on original submission

** 4,000 cubic yards allowed by the Rye Zoning Board of Adjustment

As depicted in the ***Volume Calculations Table***, the total fill for the site will be reduced by over one-third and the fill within the 100 foot wetlands buffer will be reduced by almost one-half the original volume. The Zoning Board Variance to Section 301.8 B(1) was granted for approximately 4,000 cubic yards of fill within the Wetlands Buffer. Based on the current plans, this volume has been reduced to 1,465 cubic yards, which is approximately 36.6% of the volume approved by the variance. The fill in the floodplain will be reduced by approximately 9.9% of the previous volume, which was approved by NHDES and supported by the Town independent consultants who have reviewed the plans and documents. This significant fill reduction reduces even more the nearly imperceptible effect upon the 200+ acre adjacent marsh/floodplain controlled by the Ocean tide elevations.