


# Memo

**To:** City of Beacon Planning Board  
**CC:** Rodney Weber, Tina Andress-Landolfi, Aryeh Siegel, AIA, Taylor M. Palmer, Esq.  
**From:** Mike Bodendorf, P.E.   
**Date:** June 12, 2018  
**Re:** Reduced Density Proposal – Avoidance of Newly Defined Very Steeps Slopes Wherever Practicable

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City of Beacon Zoning Code Section 223-16 provides that: "[f]or the purpose of preventing erosion, minimizing stormwater runoff and flooding, preserving the City's underground water resources, and protecting the City's character and property values, it is the intent of this chapter to avoid the development of... very steep slopes, and toward this end, **wherever practicable**, new construction shall avoid such areas, and existing vegetation in such areas shall not be disturbed **wherever practicable**" (emphasis added).

While the Applicant's denser 307-Unit Proposal was previously reviewed by the Planning Board during the 2017 SEQR and LWRP review process, at which time the 307-Unit Proposal *did not* involve development on Very Steep Slopes as previously defined,<sup>1</sup> the Applicant provides the following analysis and comments in response to the City's recent adoption of the density reduction law, which also changed the local definition of a "Very Steep Slope".<sup>2</sup>

The following is a summary of the ways that the Reduced Density Proposal avoids development or impacts to the newly defined Very Steep Slopes, wherever practicable. Indeed, while it is our professional opinion that the development of 307-Unit Proposal and the stormwater and related mitigation measures proposed therein adequately mitigated and prevented erosion; minimized stormwater runoff and flooding; preserved the City's underground water resources; and protected the City's character and property values, changing the local definition of a Very Steep Slope should not change the technical analysis of how the features are considered or accounted for in the relevant site engineering for the proposed development.

Notwithstanding, in response to the new Law that changed the local definition of what is considered a "Very Steep Slope", the Applicant revised the Site Plan for the Reduced Density Proposal to respond to comments from the City's consultants in reviewing the calculation of pre-development lot area, and to confirm and reaffirm that the Reduced Density Proposal satisfies the criteria outlined in Zoning Code §223-16(B) for the following reasons:

- (1) ***"That there is no other suitable alternative area within the lot available for the proposed use, improvement or development of such lot;"***

A Very Steep Slopes Analysis was prepared to determine how the Law's new definition of "Very Steep Slope" together with the revised pre-development lot area per dwelling unit calculation as applied to the

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<sup>1</sup> **Old Definition:** "An area of land with a gradient of 25% or more extending over a horizontal length of at least 100 feet and extending over a horizontal width of at least 100 feet."

<sup>2</sup> **New Definition:** "An area of land with a gradient of 25% or more extending over a contiguous land area of at least 10,000 square feet."

RD-1.7 Zoning District, significantly reduce the density of the project. A copy of the Very Steep Slopes Analysis is included in the Application's submission. In summary, our analysis shows that the new Law results in the loss of 55 units, permitting a maximum of 252 units, which maximum is inclusive of 10 density incentive units as more fully detailed in the Applicant's submission. The Applicant is proposing to develop six (6) fewer units than what is otherwise permitted under the new Law in response to comments from the City Council regarding density. The Reduced Density Proposal avoids and minimizes development on the newly defined Very Steep Slopes as much as possible by clustering the development away from such areas that have not already been disturbed by past developments on the Premises. Said another way, there are on-site Very Steep Slopes that were created by previous development of the property. Additionally, the Reduced Density Proposal includes buildings that have been placed as close to one another as possible to reduce the need for additional area.

Additionally, following a meeting with the City's consultants on June 11<sup>th</sup>, the revised site plan for the Reduced Density Proposal includes the following modifications to further avoid the newly defined Very Steep Slopes and to mitigate or reduce any perceived impacts:

- A retaining wall is proposed along the parking area along Buildings 1 and 2 to minimize impacts to very steep slopes along Bank Street and to maintain existing vegetation;
- The access trail along the bluff that overlooks the Hudson River and Bioretention Area 2 have been moved approximately 20 to 30 feet away from the ridgeline. In addition, the parking spaces and retaining wall that were once located behind Buildings 6 and 7 have been removed now that there are significantly fewer units;
- Parallel parking spaces have been eliminated from the access road that connects the upper and lower parking areas, which reduces impacts to fragmented interior Very Steep Slopes; and
- The retaining wall along the west side of the site entrance to the Premises off of Branch Street has been moved closer to the road to minimize impacts to Very Steep Slopes.

The Applicant has made every effort to avoid or otherwise mitigate any potential impacts to the newly defined on-site Very Steep Slopes; however, disturbing a small portion of them is necessary for any type of development on this property. A looped road with two (2) points of ingress/egress was recommended by the City for safety purposes. This would likely be required for any type of multi-family and transit-oriented development on this property, which is further evidenced by prior disturbance of these slopes for previous development. Further, the interior travel ways have been positioned and graded to provide ADA accessibility through most of the site and for connectivity to the Metro-North railroad. Moving these travel ways in any direction would decrease ADA accessibility because of the existing tie-in grades at both ingress/egress points (approximately 60 feet in elevation change between Branch Street and Tompkins Avenue). It is important to point out that most of the on-site Very Steep Slopes with the exception of the bluff area overlooking the River appear to be man-made from previous developments on the site and from construction of Bank Street. Historical photos show several former buildings and former development of roads and parking areas on the property in areas where many of these Very Steep Slopes exist. Edgewater Place once extended into the property and continued down to Branch street. The long and thin upper slope adjacent to former Edgewater Place appears to be material that either imported or graded to create a flat road and parking area for the previous house that once stood on the property. Accordingly, there is no other suitable alternative area within the lot available for the proposed use, improvement or development of such lot.

***(2) "That the activity proposed is the minimum necessary to make reasonable use of the land;"***

Clustering the development and maximizing the number of units located within in each of the proposed seven (7) buildings reduces the need for a larger footprint that would be created by development additional buildings. Parking areas and travel lanes have been reduced from previous standards to allow for maximized green space. The Reduced Density Proposal includes the minimum amount of parking spaces required, and further proposes to land-bank parking and provide parking underneath buildings.

Indeed, as noted in the Applicant's submission, the density reduction law significantly reduced the density of the project from 307 units down to 252 units. The Reduced Density Proposal, and the location of the site components involves the minimum impacts to the newly defined Very Steep Slopes to make reasonable use of the land.

**(3) *"That all feasible construction standards and precautions will be taken to assure that environmental impacts will be minimized; and"***

Temporary erosion and sediment control (E&SC) measures will be implemented during construction, and permanent E&SC measures are incorporated into the project design for the Reduced Density Proposal. Proposed temporary E&SC measures on this project include silt fencing, erosion control matting, temporary seed and mulch of disturbed slopes, retaining walls and topsoil and seeding, thus minimizing environmental impacts during and after construction. Weekly inspections of the temporary E&SC measures by a qualified professional is required as part of obtaining the necessary State Pollutant Discharge Elimination System coverage under General Permit GP-0-015-002. The City of Beacon will also have rights to enter the site during construction ensure that the temporary and permanent E&SC measures are being properly implemented. Accordingly, as previously reviewed in the 2017 SEQR review, the project and the Reduced Density Proposal incorporate all feasible construction standards and precautions to assure that the environmental impacts will be minimized. Indeed, while the Applicant has also made every effort to avoid and otherwise mitigate any potential impacts to the newly defined Very Steep Slopes with certain site plan changes recommend by the City's consultants, the site conditions have not changed since the 2017 SEQR determination – only the definition of what constitutes a Very Steep Slope has. Accordingly, the Reduced Density Proposal would have less potential impacts than the denser 307-Unit Proposal.

**(4) *"That the purpose and intent of this section are satisfied to the maximum degree feasible."***

The siting of the Reduced Density Proposal is within the footprint of denser 307-Unit Development, and as noted above most of the on-site Very Steep Slopes with the exception of the bluff area overlooking the River appear to be man-made. Indeed, much of the property was also previously disturbed by prior developments. While the purpose and intent of this section are satisfied to the maximum degree feasible as set forth herein and through the Applicant's submissions to this Board to date, in addition to the measures mentioned above, the final grades proposed on the Reduced Density Proposal will also be protected by a vigorous landscaping plan. The Applicant also proposes special seeding requirements on the site plan that will provide permanent stabilization of all disturbed/graded Very Steep Slopes. Given the nature and topography of the site, no additional adjustments are feasible for the internal travel-ways, while providing two (2) points of ingress/egress to the property, which includes ADA accessibility and connectivity to Metro-North as noted above. Accordingly, existing newly defined Very Steep Slopes, particularly on the perimeter of the development area are being avoided to the maximum extent practical and will continue to exist with existing stabilized vegetative cover.

## **Conclusion**

For the aforementioned reasons, and as submitted in the Applicant's site plan and related submissions, the Reduced Density Proposal for Edgewater avoids development and disturbance of newly defined Very Steep Slopes wherever practicable, and further, the stormwater and related mitigation measures included in the Reduced Density Proposal mitigate and prevent erosion; minimize stormwater runoff and flooding; preserve the City's underground water resources; and protected the City's character and property values and satisfy the criteria in Zoning Code Section 223-16(B).