ADIRONDACK PARK AGENCY Division of Regulatory Programs

PO Box 99, 1133 NYS Route 86 Ray Brook, New York 12977 Telephone (518) 891-4050 www.apa.ny.gov



APPLICATION FOR VARIANCE FROM SHORELINE RESTRICTIONS

APPENDIX D

Appendix D

Construction of a retaining wall or other structure for shoreline stabilization

- 1. Please evaluate the alternatives listed below. If any of the following alternatives could meet the applicant's objectives, please contact the Agency before completing the remainder of this application because a variance may not be required. If the alternatives listed below are not feasible, please provide a narrative describing why and include any supporting documentation:
 - a. Non-structural shoreline stabilization methods, including:
 - 1. preserving the natural shoreline by not mowing grass or cutting trees or shrubs along the shoreline,
 - 2. planting the shoreline with native vegetation within the eroded area,
 - toe root wads,
 - 4. coir logs with plantings,
 - 5. live staking,
 - 6. contour wattling (live fascines),
 - 7. brush layering/matting, and
 - 8. erosion control matting.

Please see the Agency's Shoreline Stabilization flyer for additional information on these non-structural shoreline stabilization methods.

- b. If a lawfully constructed retaining wall currently exists, replacement of the retaining wall with a new retaining wall that is no larger than the original wall, as measured in elevation (face) view or plan (top) view, whichever is larger. Note that the replacement wall may be constructed of different building materials than the original wall (e.g. replacing railroad ties with boulders).
- c. Construction of one or more retaining walls 100 square feet in size or less, that are: (1) not adjacent to each other, (2) not structurally dependent on each other, and (3) not less than 8 feet apart and used together. *

- d. Construction of a retaining wall that meets the following criteria: *
 - 1. consists of dry laid stone or untreated natural logs,
 - 2. is smaller than 200 square feet in size,
 - 3. does not exceed two feet in height above the mean high water mark,
 - 4. is designed to control an on-going erosion problem,
 - 5. is limited to the area necessary to control such erosion, and
 - 6. follows the existing natural elevation and contour of the shoreline.
- * Note that these alternatives are not exempted from the shoreline restrictions of the Wild, Scenic and Recreational Rivers System Act; therefore, a variance is required within a designated river area.
- 2. Attach a site plan map prepared by a qualified professional (NYS licensed surveyor, engineer, architect, etc.) and clearly labeled with the scale, north arrow, date of preparation, and name of preparer. Draw the map to an appropriate engineer's scale between 1" = 10' and 1" = 50' to show the entire variance site. Depict and label the following on the plan, as applicable:
 - a. property boundary lines, including dimensions of each line, and any applicable local setbacks from roads, water bodies, property lines, etc.;
 - b. existing structures (retaining walls, single family dwellings, mobile homes, sheds, docks, decks, boathouses, etc.), including location and size;
 - c. proposed retaining wall or other shoreline stabilization structure (clearly differentiate between existing and proposed dimensions if a replacement structure is being proposed);
 - d. APA land use areas;
 - e. mean high water mark of any lake, pond, or navigable river or stream (to be determined or verified by Agency staff);
 - f. centerline of all non-navigable streams, including intermittent streams;
 - g. wetlands as delineated in the field by Agency staff or a qualified wetlands biologist;
 - h. topography within 100 feet of the retaining wall or other shoreline stabilization structure (minimum 10-foot field-verified contour intervals);
 - i. existing areas of steep slopes (greater than 15%) within 100 feet of the retaining wall or other shoreline stabilization structure;
 - j. existing areas of vegetation and cover types (fields, woodlands, shrub areas, lawns, etc.);
 - k. proposed erosion and sediment control measures such as plantings, turbidity curtains, silt fence, and straw bales;
 - I. proposed areas of vegetative clearing; and
 - m. proposed landscape plantings.
- 3. Provide an elevation (face) view and a plan (top) view of the proposed shoreline stabilization structure prepared by a qualified professional (NYS licensed surveyor, engineer, architect, etc.) and include the material of construction. Please note that

- for Agency purposes retaining walls are measured either in elevation (face) view or plan (top) view, whichever is larger.
- 4. Submit a planting plan that provides for shoreline stabilization and screening of the proposed wall. The planting plan should depict any proposed plantings and identify the plant names, size, number, and location. Note that the proposed plants must consist of vegetation native to the region. Please also describe the proposed methods for protection of existing vegetation to be retained in the vicinity of the proposed retaining wall.
- 5. Provide an Erosion and Sediment Control Plan that prevents impacts to water quality during construction activities. The Erosion and Sediment Control Plan should include a schedule of construction activities to coincide with low water levels and any necessary sediment control practices such as turbidity curtains and silt fence.
- 6. Variance Justification:

Minimization

- a. Describe how the requested variance represents the minimum relief necessary from the shoreline restrictions. As part of this description, please include any technical analysis justifying the proposed structure. This could include an explanation of how the size of the structure or construction material was selected to address any erosion issues, such as wave energy, ice, or soil type. In addition, please describe and provide photographs or other documentation of any characteristics of the variance site that make compliance with the shoreline restrictions difficult or impossible. These characteristics may include areas of existing erosion, steep slopes, wetlands, and other features, as well as the size or dimensions of the lot.
- b. Describe any efforts that were made prior to the current proposal to minimize the request. Include a description of any efforts to minimize the size, including length, height, and footprint of the proposed retaining wall or other shoreline stabilization structure.

Potential Impacts

- c. Describe the extent to which the variance, if granted, would create impacts to the natural, scenic, open space, or other resources of the Park. Describe and provide photographs depicting the existing character of the shoreline near the variance site, on the same and opposite sides of the water body, and describe how the variance, if granted, would change the character of the shoreline in this area. Provide supporting facts and documentation. Please note that supplemental information may be requested as part of the application review, including photo-simulations or photographs altered to depict post-development conditions.
- d. Describe any potential impacts that the variance, if granted, would cause to water quality, including stormwater runoff, erosion, and sedimentation, or any other project components that may impact water quality. Please include any

- potential benefits to water quality from the proposal.
- e. Describe any other effects, such as grading, stormwater runoff, and visual impacts that the variance, if granted, would have on adjoining and nearby properties. Provide supporting facts and documentation, including photographs, as appropriate.

Variance Site History

f. Describe how the need for a variance arose. This may involve the characteristics of the variance site and/or changes to the site that have occurred over time.

Adverse Consequences

g. Describe and provide supporting documentation of any adverse consequences that would result from denial of the variance, such as loss of property due to erosion and/or potential damage to existing structures from continued erosion.