



## Zoning Resolution

THE CITY OF NEW YORK

Eric Adams, Mayor

CITY PLANNING COMMISSION

Daniel R. Garodnick, Chair

# 105-30 - PRESERVATION OF NATURAL FEATURES

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## 105-30 - PRESERVATION OF NATURAL FEATURES

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LAST AMENDED

2/2/2005

The provisions of this Section are applicable to all #developments#, #enlargements# and #site alterations# within the #Special Natural Area District#, pursuant to Section [105-02](#) (General Provisions). When pursuant to Sections [105-41](#) (Certification) or [105-021](#) (Actions not requiring special review), it is not necessary for an applicant for a #development#, #enlargement# or a #site alteration# to apply for an authorization or special permit, such #development#, #enlargement# or #site alteration# shall nonetheless comply with the #natural feature# preservation requirements of this Section, inclusive.

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## 105-31 - Botanic Environment and Tree Preservation Requirements

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LAST AMENDED

2/2/2005

To the maximum extent possible, existing trees and vegetation shall be retained. Trees of six-inch #caliper# or more and vegetation may only be removed or destroyed as a result of a #development#, #enlargement# or #site alteration#, provided that:

- (a) such trees or vegetation are located in areas to be occupied by #buildings#, #private roads#, driveways, areas for required #accessory# parking, or within a distance of 15 feet of the exterior walls of such #building#, provided that it is not possible to avoid such removal by adjustments in the arrangement of such #buildings#, driveways or required parking areas;
- (b) the continued presence of such tree would create special hazards or dangers to persons or property, which would not be possible or practical to eliminate by pruning;
- (c) the continued presence of such tree would interfere with the growth or health of another tree of six-inch #caliper# or more, designated for preservation and belonging to a species listed in Appendix D (Tree Selection List for On-site Trees) of this Chapter; or
- (d) an authorization pursuant to Section [105-425](#) (Modification of botanic environment and tree preservation and planting requirements) has been granted by the City Planning Commission approving the removal of such trees or vegetation.

Any tree of six-inch #caliper# or more that cannot be preserved as a result of a proposed #development#, #enlargement# or #site alteration# shall be replaced pursuant to the provisions of Section [105-32](#) (Botanic Environment and Tree Planting Requirements).

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## 105-32 - Botanic Environment and Tree Planting Requirements

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LAST AMENDED

2/2/2005

Any vegetation that cannot be saved as a result of #site alteration#, #enlargement# or #development# shall be replaced with alternative vegetation to be approved by the City Planning Commission. All #developments#, #enlargements# and #site alterations# shall comply with the tree planting requirements set forth in this Section, whether or not existing trees are removed as a result of such #development#, #enlargement# or #site alteration#.

The replanting of elements of vegetation that are parts of an association or community shall be such as to reestablish, as rapidly as is reasonable, the vigor and character of the association. When necessary to establish ecological balance, the Commission may also require additional vegetation to be planted.

(a) Tree planting

For the purposes of this Section, the following minimum standard shall apply for tree planting:

- (1) For any #development#, #enlargement# or #site alteration# within a #Special Natural Area District#, trees of at least three-inch #caliper#, pre-existing or newly planted, shall be provided on the #zoning lot# at the rate of one tree for each 1,000 square feet of #lot area# or portion thereof or shall equal a total of 51 percent of all #tree credits# for trees originally on site, whichever is greater.
- (2) For any existing tree of at least six-inch #caliper# that is preserved, credit for one tree shall be given for the first six inches of #caliper# and, for each additional four inches of #caliper#, credit for an additional tree shall be given.

Single-trunk trees, newly planted to meet this requirement, shall be of at least three-inch #caliper# at the time of planting. Multiple-trunk trees and low-branching coniferous evergreens shall be at least 10 feet in height at the time of planting. Trees newly planted to meet this requirement shall be of a species selected from Appendix D of this Chapter, and acceptable from the standpoint of hardiness, appearance and habit of growth suitable to the site.

The Commission may grant a waiver of the tree planting requirements by certification to the Department of Buildings, where the Commission finds that the ecology of the site is such that the substitution of other plant material would be more appropriate than the tree planting requirements and a detailed plan for planting has been filed with the Commission for its approval.

(b) Botanic Environment Planting

For the purposes of this Section, the following minimum standard shall apply for the planting of vegetation.

Any vegetation or #topsoil# that cannot be preserved as a result of a proposed #development#, #enlargement# or #site alteration# and is not permitted to be removed pursuant to the regulations of Sections [105-31](#) (Botanic Environment and Tree Preservation Requirements) or [105-425](#) (Modification of botanic environment and tree preservation and planting requirements), shall be replaced as follows: for every square foot of #lot area# of removed vegetation or #topsoil#, plantings shall be provided of the size and number indicated in paragraphs (b)(1), (b)(2), (b)(3) and (b)(4) of this Section. The area of removed vegetation shall be measured so as to include any portions of the #zoning lot# that were located within the #critical root zone# of a removed tree of six-inch #caliper# or more. Species of ground cover and shrubs shall be selected from Appendix C (Selection List for Ground Covers and Shrubs) of this Chapter. Species of on-site trees shall be selected from Appendix D (Tree Selection List for On-site Trees) of this Chapter.

- (1) Ground cover shall be planted one at one-foot-on-center and at the rate of one plant for every square foot of #lot area# of removed vegetation; and
- (2) Large trees shall be planted at the rate of one three-inch #caliper# tree for every 500 square feet of #lot area# of removed vegetation; or
- (3) Small trees shall be planted at a rate of one eight-foot high tree for every 100 square feet of #lot area# of removed vegetation; or
- (4) #Shrubs# shall be planted at a rate of one gallon container-grown material for every 25 square feet of #lot area# of removed vegetation.

The planting of species shall not be limited to woody plant materials, but shall include trees, shrubs, vines, ferns, grasses, herbs, annuals, biennials, perennials, mosses and other associated vegetation. All vegetation to be planted shall be either

of the species which characterized the area's biological community prior to #site alteration#, #enlargement# or #development#, or of an alternative biologic community found in the area. Species selection shall give particular attention to the relationship of the species to each other and to the surrounding plant community and to the quality of the soil and the vertebrate and invertebrate populations associated with and dependent upon the proposed plants.

**105-33 - Residential Lot Coverage Regulations on Tier II Sites or on Sites Granted an Authorization Pursuant to Section 105-422**

LAST AMENDED  
2/2/2005

The maximum permitted percentage of #lot coverage# for #residences# on a #zoning lot# shall be determined by Table I or Table II of this Section, as applicable.

TABLE I

PERMITTED PERCENTAGE OF LOT COVERAGE ON A TIER II ZONING LOT BY ZONING DISTRICT, AVERAGE PERCENT OF SLOPE AND RESIDENCE TYPE

	#Residence District#*						
							R6
#Average Percent of Slope#	R1	R2	R3	R4	R5	1-2 Family	Other
10-14.9	22.5	22.5	22.5	36.0	45.0	48.6	32.4
15-19.9	20.0	20.0	20.0	32.0	40.0	43.2	28.8
20-24.9	17.5	17.5	17.5	28.0	35.0	37.8	25.2

\* or #Residence District# equivalent when #zoning lot# is located within a #Commercial District#

If an authorization is granted for a #development#, #enlargement# or #site alteration# on a #zoning lot# or portion of a #zoning lot# having a #steep slope# or #steep slope buffer# pursuant to Section [105-422](#), the maximum permitted percentage of #lot coverage# for such #zoning lot# shall not exceed the maximum set forth in Table II of this Section.

TABLE II

PERMITTED PERCENTAGE OF LOT COVERAGE ON ANY ZONING LOT OR PORTION OF ANY ZONING LOT WITH A STEEP SLOPE GRANTED AN AUTHORIZATION PURSUANT TO SECTION [105-422](#)

#Residence District#*
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					R6	
R1	R2	R3	R4	R5	1-2 Family	Other
12.5	12.5	12.5	20.0	25.0	27.0	18.0

\* or #Residence District# equivalent when #zoning lot# is located within a #Commercial District#

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### 105-34 - Grading Controls for Tier II Sites

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LAST AMENDED  
2/2/2011

With the exception of #private roads# and driveways, no grading shall take place beyond 15 feet of the location of a #building# foundation, measured from the foundation perimeter. The following grading requirements shall apply to all #Tier II sites#.

- (a) Cut slopes shall be no steeper than two horizontal to one vertical; subsurface drainage shall be provided as necessary for stability.
- (b) Fill slopes shall be no steeper than two horizontal to one vertical; fill slopes shall not be located on natural slopes 2:1 or steeper, or where fill slope toes out within 12 feet horizontally of the top of an existing or planned cut slope.
- (c) Excavating for fill shall be prohibited unless the material is obtained from a cut permitted under an approved grading plan obtained for some purpose other than to produce fill material, or imported from outside the #Special Natural Area District#.
- (d) Fills shall be compacted to at least 95 percent of maximum density, as determined by AASHTO T99 or ASTM D698.
- (e) All retaining walls or cuts with a total vertical projection in excess of three feet and associated with cut or fill surfaces shall be designed as structural members keyed into stable foundations and capable of sustaining the design loads.
- (f) The top and toe of any cut or fill slope, or where any excavation meets the grade existing on February 2, 2005, should be rounded in a vertical arc with a radius of not less than five feet.
- (g) Tops and toes of cut and fill slopes and retaining walls shall be set back from #lot lines# for a horizontal distance of three feet plus one-fifth the height of the cut or fill but need not exceed a horizontal distance of 10 feet; tops and toes of cut and fill slopes shall be set back from #buildings# and structures for a horizontal distance of six feet plus one-fifth the height of the cut or fill but need not exceed a horizontal distance of 10 feet.

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### 105-35 - Tier II Site Requirements for Driveways and Private Roads

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LAST AMENDED  
2/2/2011

The provisions set forth in this Section and Section [105-34](#) (Grading Controls for Tier II Sites) shall apply to driveways and to #private roads# that provide access to #buildings# #developed# after February 2, 2005. The provisions for #private roads# set

forth in Article II, Chapter 6, shall not apply.

(a) Driveways

- (1) The maximum grade of a driveway shall not exceed 10 percent.
- (2) The paved width of a driveway shall not exceed 18 feet.
- (3) The maximum length of a driveway from a #private road# or #street# to an #accessory# parking space shall not exceed 80 feet.

(b) #Private roads#

- (1) The maximum grade of a #private road# shall not exceed 10 percent.
- (2) The width of the graded section beyond the curb back or edge of pavement of a #private road# shall extend no more than three feet beyond the curb back or edge of pavement on both the cut and the fill sides of the roadway. If a sidewalk is to be installed parallel to the roadway, the graded section shall be increased by the width of the sidewalk plus no more than one foot beyond the curb back.
- (3) The paved width of a #private road# shall not exceed 34 feet.
- (4) Curbs shall be provided along each side of the entire length of a #private road# and #accessory# parking spaces may be located between the required roadbed and curb.
- (5) A curb cut, excluding splays, from a #street# to a #private road# may be as wide as such #private road#.
- (6) Curb cuts providing access from #private roads# to parking spaces shall not exceed the width of the driveway served and in no event shall exceed a width of 18 feet, including splays.
- (7) A minimum distance of 16 feet of uninterrupted curb space shall be maintained between all curb cuts.
- (8) Along the entire length of a #private road#, trees shall be provided and maintained at the rate of one tree for every 25 feet of #private road# frontage and shall comply with the requirements set forth in Section [105-32](#) (Botanic Environment and Tree Planting Requirements).
- (9) No building permit shall be issued by the Department of Buildings without approval by the Fire Department regarding the adequacy of vehicular access to and within the #development# for fire safety. Such approval may include the modification of #private road# width as set forth in paragraph (b)(3) of this Section.

The City Planning Commission may by authorization pursuant to Section [105-434](#) (Modification of requirements for private roads and driveways), allow modifications to, or waivers of, the requirements of this Section. The prior approval of the Fire Department regarding the adequacy of vehicular access to and within the #development# for fire safety shall be a condition for any modification or waiver.

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## 105-36 - Controls During Construction

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LAST AMENDED  
2/2/2005

The following requirements must be met during construction and identified on the construction plan:

- (a) No construction equipment of any kind shall operate beyond 15 feet of the perimeter of a #building# foundation except

those vehicles engaged in the construction of #private roads#, driveways or required #accessory# parking areas. This provision may be waived by the Commissioner of Buildings should it be determined that the particular conditions of the site make a 15-foot limit infeasible or impractical.

- (b) Construction fences shall be erected around all vegetation proposed for preservation and all #areas of no disturbance#, and those portions of the fence that are downhill from the construction site shall have hay bales placed adjacent to them.
- (c) Excavating for fill shall be prohibited unless the material is obtained from a cut permitted under an approved grading plan obtained for some purpose other than to produce fill material, or imported from outside the #Special Natural Area District#.
- (d) The #staging area# shall be located in an area that would most minimize destruction of the #natural features# of the landscape. Such area shall be as close to the construction area on the #zoning lot# as practical, and shall be either on the flattest portion of the #zoning lot# or behind a containment wall where it will not erode any #area of no disturbance# or endanger any tree designated for preservation.
- (e) #Topsoil# shall be used in the area to be replanted as soon as construction is complete.
- (f) Any exposed earth area shall have straw, jute matting or geotextiles placed on it within two days of exposure and be seeded with annual rye grass during construction.

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## **105-37 - Special Erosion and Sedimentation Prevention Requirements for Authorizations for Tier II Sites**

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LAST AMENDED  
2/2/2011

Any #development#, #enlargement# or #site alteration# that is on a #Tier II site# and requires an authorization shall be subject to the provisions of this Section. The requirements of this Section shall supplement any other requirements set forth in Section [105-40](#) (SPECIAL REVIEW PROVISIONS) that also must be met.

Prior to construction, at least one of the erosion and sedimentation control measures described in paragraphs (a) through (e) of this Section shall be selected. A plan describing how the selected erosion and sedimentation control measure will be implemented and justifying its selection on the basis of the particular conditions of the site shall be prepared by a professional engineer or landscape architect and submitted to the City Planning Commission.

- (a) Benches and berms

These are level terraces or ledges constructed across sloping land to provide a relatively flat construction site or reduce the length and grade of the slope. Benches and berms reduce runoff and erosion hazards by slowing down the velocity of water and providing greater intake opportunity.

- (b) Diversion channels

These are earth channels with a supporting ridge on the lower side constructed across the slope lengths to break up concentration of runoff and move water to stable outlets at a non-erosive velocity.

- (c) Debris or sediment basins

These consist of a dam or embankment, a pipe outlet and an emergency spillway situated at the low corner of the site to provide a temporary means of trapping and storing sediment while releasing the water. They protect property below the

installation from damage by excessive sedimentation and debris.

(d) Retention ponds

These are impoundment-type ponds that temporarily store runoff water and release it at rates that minimize erosion and prevent flooding. They may be located above the site to trap water before it enters the area or within the site to protect properties below the site.

(e) Grassed waterways or outlets

These are natural or excavated channels to dispose of excess runoff water from diversions, berms, benches and other areas at non-erosive velocities. Waterways or outlets are shaped or graded and established in suitable vegetation as needed, depending on the supplemental measure used to slow the velocity of runoff.

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## 105-38 - Special Submission Requirements for Authorizations on Tier II Sites

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LAST AMENDED

2/2/2011

When a #development#, #enlargement# or #site alteration# is on a #Tier II site#, an application to the City Planning Commission for an authorization shall include the following submission requirements. These requirements shall be in addition to the requirements set forth in Section [105-40](#) (SPECIAL REVIEW PROVISIONS).

- (a) A drainage plan and soil report prepared by a professional engineer to protect #natural features#. The drainage plan shall describe the temporary (during construction) and permanent measures to collect, direct and discharge stormwater drainage from the site, indicating the direction of drainage flow and providing detailed plans and locations of all surface and subsurface drainage devices, walls, dams, sediment basins, stormwater storage (detention and retention) facilities, and other drainage facilities and protective devices. Such report shall include an estimate of runoff from the site after completion of proposed #developments#, #enlargements# or #site alterations# and provide a description with supporting information of the manner in which the proposed #development#, #enlargement# or #site alteration# complies with the requirements of Local Law 103 of 1989.
- (b) An erosion and sedimentation plan as described in Section [105-37](#) (Special Erosion and Sedimentation Prevention Requirements for Authorizations for Tier II Sites).
- (c) For any #development# or #site alteration# on a tract of land 40,000 square feet or greater, a landscape plan prepared by a registered landscape architect that shows the location and species of all new plantings of trees, shrubs and ground covers and the proposed method of preserving existing trees, shrubs and ground covers.
- (d) Any other information the Commission may deem necessary to evaluate the request.

The applicant's submission shall also include a statement admitting authorized Department of City Planning personnel to the site for the purposes of recording or verifying survey data.