

Proposed Midland Park Draft Retaining Wall Ordinance

{The below is based largely on the Wyckoff Ordinance, which combines the requirements for retaining walls and fences, as there is a lot of overlap between the two. I might suggest doing the same – modifying the existing MP fence ordinance § 34-13.2 to include retaining walls. Portions of the ordinance that aren't applicable or would need to be updated to correlate with the MP ordinances are shown struck through. My comments/suggestions are highlighted in yellow. Below the complete Wyckoff ordinance are some smaller excerpts from other local ordinances that I thought might be worth considering to be included. If the board is in favor of including those additional excerpts, we can incorporate them into the proposed wall ordinance section.}

~~§ 186-29~~

Fences, retaining walls and freestanding walls.

~~[Amended 3-6-1984 by Ord. No. 917; 7-17-1990 by Ord. No. 1098; 11-6-2000 by Ord. No. 1366; 12-17-2002 by Ord. No. 1423; 2-24-2004 by Ord. No. 1456]~~

Before any fence, retaining wall or freestanding wall can be erected, altered or reconstructed, but excluding the restoration or repair of an existing fence, retaining wall or freestanding wall having the same dimensions and restored or repaired with the same materials, within a front, rear or side yard setback, an application must be made to the Zoning Administrator for a fence **{or retaining wall}** zoning permit, and the application shall include a plot plan showing the location of the fence or wall, a description of the type of fence or wall to be erected and the height of the fence or wall, together with a fee as established in the Uniform Construction Code Ordinance of the Township of Wyckoff as supplemented and amended~~[1]~~ or ~~§ 113-1B(11)~~ of the Code of the Township of Wyckoff. All fences and/or walls in the Township of Wyckoff shall be subject to the rules and regulations as follows:

A. Residential zones.

- (1) Fences and retaining walls shall be permitted in front, side and rear yards. Freestanding walls shall be permitted only in the side and rear yards, except that freestanding walls which do not exceed a height of 24 inches above normal grade shall be permitted in the front yard.
- (2) Minimum setback. The required setback for fences and walls shall be as follows:
 - (a) Fences and freestanding walls may abut property lines without any setback required. Retaining walls may abut the front property line only without any setback required.
 - (b) The exposed face of retaining walls shall be set back from any side or rear lot line a horizontal distance not less than one foot for each foot of the retaining wall.
 - (c) In the case of multiple retaining walls, the exposed face of each wall shall be set back from the exposed face of each other wall a horizontal distance not less than one foot for each foot of height of the higher retaining wall. In the case of walls of varying height, the setback at any point shall be based upon the height of the wall at the same point.
 - (d) For purposes of determining the required minimum setback, the height of any fence or other barrier located at the top of a retaining wall shall be included within the height of the retaining wall unless such fence or other barrier is set

back from the face of the wall a horizontal distance not less than one foot for each foot of height of the barrier or the retaining wall, whichever is greater.

(3) Maximum height. The maximum permitted height of fences, freestanding walls and retaining walls shall be as follows:

(a) The height of fences located in rear or side yards shall not exceed six feet above the normal grade. {Add specific height limitation for retaining walls in the front yard?}

(b) The height of freestanding walls shall not exceed four feet above normal grade.

(c) The height of retaining walls shall not exceed four feet above the normal grade. In the case of multiple retaining walls, the height of any individual wall shall not exceed four feet, and the total height of all walls combined shall not exceed 12 feet within a horizontal distance of 20 feet.

(d) In determining the height of fences, freestanding walls and retaining walls, the following shall apply:

[1] For fences and walls that are not uniform in height along the top of the fence, the height shall be measured to the highest point of the fence, except as provided otherwise herein.

[2] For fences and walls located on sloping ground, the height shall be measured from the grade directly below the point of measurement.

[3] The height of fences and walls shall be measured from normal grade. Normal grade shall be construed to be newly established grade after construction, disregarding any filling, berming, mounding, excavating or curbing which alters the grade at the base of the fence or wall from the grade in the general vicinity of the fence or wall.

[4] In the case of fences, guardrails or other barriers located at the top of retaining walls, the combined height of the barrier and retaining wall shall not exceed the permitted height for either fences or walls, unless the barrier and wall are separated as provided in Subsection A(2)(d) above.

(4) Sight distance {Already addressed in MP ordinance section §34-14.6 – perhaps we just reference the other section instead of duplicating the requirements?}. On a corner lot, no fence or wall may be erected within 25 feet of the point of intersection of the front and corner side lot lines in order to maintain clear visibility for traffic at the corner. In addition, no fence or wall shall be located on any property in any way which interferes with necessary sight distance for either operators of vehicles or pedestrians. When determining whether or not a fence or wall interferes with necessary safe sight distance, the following shall apply:

(a) The Township Engineer shall determine the appropriate site distance in each case and shall take into account the horizontal alignment of traveled ways, topographical conditions, the normal speed of travel, the presence of existing visual obstructions and other such characteristics that they may deem appropriate.

(b) Notwithstanding the permitted height, location and design of fences, freestanding walls and retaining walls set forth in this chapter and in other regulations, the Township Engineer may require more stringent requirements as may be necessary to ensure safe sight distance.

(5) Safety barriers. The reviewing authority may, in appropriate instances, require a guardrail or other restraining device at the top of retaining walls if deemed necessary or advisable to

protect persons, vehicles or equipment from falling off such walls. {Guardrails shall meet the requirements of the International Building Code, current NJ edition.}

(6) Materials and construction. The following standards shall apply to the materials and construction of fences and walls:

- (a) In the event that both sides of a fence or freestanding wall are not identical, the finished or preferred side shall be required to face the street and/or abutting properties, as applicable. The finished or preferred side shall be that side which best conceals the fence posts, rails and other supporting parts and/or which is painted, stained or otherwise treated when only one such side is so treated.
- (b) Walls shall not be faced with poured concrete, concrete block or cinder block unless the same is textured to simulate natural stone or split face block.
- (c) Fences located within the front yard shall not be more than 50% solid and shall not be more than six inches thick. The measurement of solidity shall be made perpendicular to the side of the fence. Split rail fences which include chicken wire and/or mesh-type wire and chain link and/or similar style fences shall not be permitted in the front yard.
- (d) Freestanding walls and/or retaining walls which are greater than two {four} feet in height shall require the design of a professional engineer.
- (e) Fences and walls which present a danger or hazard to the public welfare, including but not limited to fences or walls which are electrified or contain razor wire, barbed wire or other sharp edges, are hereby prohibited.
- (f) No fence shall be installed within the right-of-way granted or obtained by the Township of Wyckoff.

B. Business zones. All rules and regulations within this section of the Code of the Township of Wyckoff which apply to walls and fences in residential zones shall also apply to fences and walls in all business zones, with the exception of the following:

- (1) In all business zones, there shall be no solid fences erected in the front yard unless required by the Planning Board at the time of site plan approval to screen adjoining uses.
- (2) A solid or other type of fence not to exceed six feet in height may be erected to enclose the rear yard of a property, including the area at the sides of the building up to the front yard, except in the case of a corner lot or a lot running through from one street to another, any yard abutting a street shall be subject to the same regulations as a front yard. No such fence shall be allowed if it interferes with the necessary safe sight distance as articulated in Subsection A(4).
- (3) All applications for new fences, with the exception of direct replacement, must be approved by the Planning Board as an amended site plan.

~~{Added 10-16-2007 by Ord. No. 1571}~~

C. Industrial zones. All rules and regulations within this section of the Code of the Township of Wyckoff which apply to walls and fences in residential zones shall also apply to fences and walls in all industrial zones, with the exception of the following:

- (1) In industrial zones, there shall be no solid fences erected in the front yard unless required by the Planning Board at the time of site plan approval to screen adjoining uses. Fences which are not more than 50% solid up to a height of six feet may be erected in the front yard, except that on a corner lot, no fence may be erected within 25 feet of the point of

intersection of the front and corner lot lines in order to maintain clear visibility for the traffic at the corner.

- (2) A solid or other type fence not to exceed eight feet in height may be erected to enclose the rear yard of a property, including the area at the sides of the building up to the front yard except that on a corner lot or a lot running through from one street to another, any yard abutting a street shall be subject to the same regulations as a front yard. No such fence shall be allowed if it interferes with the necessary safe sight distance as articulated in Subsection A(4).
- (3) All applications for new fences with the exception of direct replacement, must be approved by the Planning Board as an amended site plan.

Ideas for additional clarification/requirements from other towns:

Modified from Woodcliff Lake:

The maximum permitted finished grade for an embankment shall be 3:1 (ratio of vertical distance to horizontal distance) unless supported by erosion control ground cover suitable for erosion control.

{Regarding landscape requirements of tiered walls} Plantings shall be required at each tier level (except the top level adjoining a lawn area) to minimize the appearance of the wall's height and enhance its aesthetics.

{Regarding distance from property lines} Retaining walls shall be constructed in such a way so as to enable the property owner to perform periodic maintenance and upkeep to the area between the retaining wall and the property lines.

{Not mentioned in Wyckoff ordinance, but worth including}

Retaining walls shall be designed to provide for proper drainage.

From Norwood:

{Include this section regarding cut/fill slopes}

Cut or fill slopes.

- (b) Cut or fill slopes exceeding a ratio of one foot vertical to two feet horizontal require special methods of embankment stabilization. These include seedbed preparation, adjusted fertilization levels, supplemental irrigation, adapt seedling plants or planting protection until vegetative cover is established. A detailed outline of procedures and specifications shall be submitted by the applicant.
- (c) Except as provided in Subsection A(2)(e) herein, cut slopes shall be no steeper than one vertical to two horizontal. Subsurface drainage shall be provided as necessary for stability.

- (d) Except as provided in Subsection A(2)(e) herein, fill slopes shall be no steeper than one vertical to two horizontal.
- (e) Cut or fill slopes exceeding a ratio of one vertical to two horizontal shall be considered by the approving authority only in special situations. The applicant must establish that a physical hardship condition exists with the land and must also indicate the special methods of embankment stabilization to be utilized. These may include hand-placed rip-rap, existence of exposed bedrock or other approved methods. Any request for approval to construct slopes steeper than 1 to 2 shall be accompanied by appropriate calculations prepared by a licensed professional engineer which shall document the stability of the particular soil when placed at the proposed slope.

{Regarding retaining wall structural design}

Retaining walls.

- (a) Retaining walls shall be designed to be safe and adequate for the purpose intended. The walls shall not detract from the aesthetic beauty of the site when constructed and the approving authority may require such retaining walls to be fenced or landscaped.
- (b) All retaining structures with a total vertical projection in excess of four feet shall be designed as structural members keyed into stable foundations and capable of sustaining the design loads. Structural calculations and details shall be prepared by a licensed professional engineer of the State of New Jersey and submitted for all such retaining structures.
- (c) Whenever two or more retaining walls are proposed where the average slope from the toe of the lowest wall to the top of the highest wall has an average slope equal to or greater than one vertical to two horizontal an engineering analysis of the entire sloped area shall be submitted.

From Ridgewood:

{Regarding an exemption from a zoning permit for a retaining wall not more than two feet.} Permits for retaining walls. Zoning permits issued by the Zoning Officer shall be required prior to the construction, reconstruction or alteration of retaining walls, except that retaining walls having a height of not more than two feet, as measured pursuant to ~~§ 190-124F~~, shall be exempt from this permit requirement. Walls that are exempt from permit requirements shall nonetheless comply with all applicable substantive requirements. Applications for zoning permits for retaining walls shall be referred to the Engineering Department for review. No such permit shall be issued unless construction details and, if deemed necessary by the Village Engineer, structural calculations, soil reports, foundation details, compaction certificates and grading plans, signed and sealed by a professional engineer licensed to practice in the State of New Jersey, are submitted and approved by the Village Engineer demonstrating that such wall(s) is (are) designed to avoid wall failure, protection from falls, drainage or erosion problems, or other hazardous or harmful conditions.

{Regarding height calculations for walls near a property line}

- (b) For walls located five feet or less from the property line, the required setback shall be based upon the height of the retaining wall above the ground level at the property line. For other walls, the required

setback shall be based upon the height of the retaining wall above the finished ground level at the base of the wall.

{Additional detail as to the height of tiered walls}

- (c) In the case of multiple retaining walls, the exposed face of each wall shall be set back from the exposed face of each other wall a horizontal distance not less than one foot for each foot of height of the higher retaining wall. The required distance between walls shall be based upon the vertical difference between the top of the wall above and the top of the wall directly below. In the case of walls of varying height, the setback at any point shall be based upon the height of the wall at the same point.

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