

2006-04

AN ORDINANCE TO AMEND CHAPTER 105 ENTITLED 'DRIVEWAYS', CHAPTER 153 ENTITLED 'OFF-TRACT IMPROVEMENTS'; CHAPTER 203 ENTITLED 'STREETS AND SIDEWALKS' AND CHAPTER 243 ENTITLED 'ZONING AND LAND USE' OF THE CODE OF THE TOWNSHIP OF LOPATCONG, COUNTY OF WARREN, STATE OF NEW JERSEY AMEND AND/OR ADD REGULATIONS THAT WILL IMPLEMENT THE PROVISIONS FOR STORMWATER MANAGEMENT CONTAINED IN THE LOPATCONG TOWNSHIP MUNICIPAL STORMWATER MANAGEMENT PLAN

WHEREAS, Lopatcong Township recognizes the importance of developing strategies to address stormwater-related impacts caused by development; and

WHEREAS, the Planning Board adopted the Lopatcong Township Municipal Stormwater Management Plan on February 23, 2005; and

WHEREAS, a function of preparation of the Municipal Stormwater Management Plan was for the Planning Board to review the Township Code and recommend amendments as necessary to implement the strategies for stormwater management set forth in the Municipal Stormwater Management Plan; and

WHEREAS, the Township concurs with the recommendations of the Planning Board for Code amendments as set forth in the Municipal Stormwater Management Plan.

NOW THEREFORE, BE IT ORDAINED by the Township Council of Lopatcong Township, County of Warren, and State of New Jersey that Chapters 105, 153, 203 and 243 of the Code for Lopatcong Township are hereby amended as follows:

SECTION ONE. Chapter 105, "Driveways", §105-4, "Minimum requirements" is hereby amended to add language that requires compliance with municipal stormwater management regulations.

§105-4. Minimum requirements.

- C. Drainage facilities. Each driveway shall be constructed with suitable and adequately designed drainage facilities. Wherever possible, driveway drainage shall be directed into natural channels. Driveway drainage may be connected with existing drainage facilities within the municipal roadway, provided that said connection does not interfere with existing drainage or cause erosion or deposits of sediment in the municipal drainage system. Driveway drainage shall not discharge onto adjoining properties causing erosion or sediment damage or flooding and shall discharge onto the paved or traveled portion of any public right-of-way. Drainage procedures and facilities shall comply with Chapter 199, Stormwater Management of the Code of Lopatcong Township.

SECTION TWO. Chapter 105, "Driveways", §105-12, "Construction materials" is hereby amended to provide for alternative building materials.

§105-12. Construction materials.

All driveways within the municipality right-of-way or within twenty-five (25') feet of the center line of road, whichever is greater, shall be constructed as follows:

- D. Driveways may be constructed of pervious pavement or concrete paver blocks upon approval by the Township Engineer.

SECTION THREE. Chapter 153, "Off-Tract Improvements", §153-3, "Contributions required" is hereby amended to add language for compliance with the Township stormwater management regulations.

§153-3. Contributions required.

- D. Storm drainage.

- (3) Off-site and off-tract stormwater management and drainage improvements may be subject to the Design and Performance Standards set forth in Chapter 199, Stormwater Management of the Code of Lopatcong Township. Chapter 199 should be reviewed to determine the applicability of these regulations.

SECTION FOUR. Chapter 203, "Streets and Sidewalks", Part 2, "Specifications, Excavations and Construction", Article II, "Street Specifications", §203-7, "Curb specifications" is hereby amended to allow for alternative design and construction methods.

§203-7. Curb specifications.

Curbing shall be constructed on all roads and shall be either concrete or granite block at the discretion of the Board. Concrete curbs shall be constructed in conformance with the New Jersey Department of Transportation construction details, shall be of grey concrete and shall have an exposed face of seven (7") inches, unless otherwise provided herein. The materials and methods of construction shall be as described in the New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, 1983, and all amendments and revisions thereto. Curb cuts or flush curbs may be used in conjunction with vegetated swales for discharge of stormwater runoff when approved by the Township Engineer.

SECTION FIVE. Chapter 203, "Streets and Sidewalks", Part 2, "Specifications, Excavations and Construction", Article II, "Street Specifications", §203-8, "Conformance with standards; approval of final design" is hereby amended to require compliance with the New Jersey Residential Site Improvement Standards (N.J.A.C. 5:21).

§203-8. Conformance with standards; approval of final design.

All roads and streets for public use in the Township of Lopatcong and the improvements required thereon shall be in conformance with the requirements of the Zoning and Land Use Regulations of the Township of Lopatcong, as amended. All streets, curbs and sidewalks in residential developments shall be constructed in accordance with the New Jersey Residential Site Improvement Standards, N.J.A.C. 5:21-1 et seq., as amended. The final design of the roads to be constructed in the township shall be approved by the Township Engineer and shall be subject to approval by the Township Council before acceptance by said Council.

SECTION SIX. Chapter 243, "Zoning and Land Use", §243-40, "Preliminary plat data" is hereby amended to require additional information regarding existing and proposed site conditions.

§243-40. Preliminary plat data.

The preliminary plat shall contain the following additional data:

B. Existing site conditions to be indicated.

Soils and soil boundaries, as shown on the Warren County Soil Survey or as revealed by an on-site investigation.

Groundwater recharge zones as shown on maps produced by the New Jersey Geologic Survey (NJGS) and areas of the site that have the greatest potential for recharge and stormwater runoff storage as per NJGS data.

Proposed site conditions to be indicated.

(3) Preliminary stormwater drainage system in plan and profile.

(d) The design of stormwater drainage facilities and calculations of stormwater runoff and groundwater recharge shall be in accordance with all applicable Design and Performance Standards contained in Chapter 199, Stormwater Management of the Code of Lopatcong Township.

SECTION SEVEN. Chapter 243, "Zoning and Land Use", §243-45, "Subdivision design requirements" is hereby amended to require compliance with the Residential Site Improvement Standards, reduce impervious surfaces, and provide for the protection of forests.

§243-45. Subdivision design requirements.

C. Street and highway standards.

All streets, curbs and sidewalks in residential developments shall be designed and constructed in accordance with the New Jersey Residential Site Improvement Standards, N.J.A.C. 5:21-1 et seq., as amended.

(6) Culs-de-sac

(5) Minimum radius for the right-of-way at the turnaround shall be fifty (50') features be protected by placing them within a conservation easement or by a deed restriction.

E. Additional standards.

(5) Developers should refer to Chapter 199, Stormwater Management to determine if the design and performance standards contained in that Chapter are applicable to the proposed development.

- (6) Proposed landscaping including revegetation of disturbed areas shall consist of native plants to the maximum extent feasible. At a minimum, eighty (80%) percent of all proposed trees, shrubs, grasses and other ground covers shall be native varieties.

SECTION EIGHT. Chapter 243, "Zoning and Land Use", §243-46, "Improvement design standards" is hereby amended to require compliance with the Residential Site Improvement Standards and to require the use of native plants.

§243-45. Improvement design standards.

- B. Street design standards. The following minimum standards shall be required for all streets other than county or state roads and highways constructed in Lopatcong Township. All streets, curbs and sidewalks in residential developments shall be designed and constructed in accordance with the New Jersey Residential Site Improvement Standards, N.J.A.C. 5:21-1 et seq., as amended.
- C. General street improvements.
- (8) Plants used for street trees, planting strips and shade trees shall be native varieties that are appropriate for the given soil conditions, hydrology and geology unless it can be demonstrated that non-native plants would be more appropriate. The foregoing notwithstanding, native plants shall comprise a minimum of eighty (80%) percent of all plants used to landscape streets, lots and planting strips.
- E. Drainage system design standards.

Drainage systems in residential developments shall be designed and constructed in accordance with the New Jersey Residential Site Improvement Standards, N.J.A.C. 5:21-1 et seq., as amended.

SECTION NINE. Chapter 243, "Zoning and Land Use", §243-47, "General design considerations" is hereby amended to add references to the Stormwater Management Ordinance and Residential Site Improvement Standards.

§243-47. General design considerations.

- D. Surface water drainage. Special attention shall be given to proper sites for stormwater detention and surface drainage so that surface water will not adversely affect neighboring properties or existing public and private drainage systems. The rate and velocity of runoff from the site following the completion of development and detention facilities or other stormwater management facilities that may be required to control the rate and velocity of runoff from a development shall be in accordance with Chapter 199, Stormwater Management of the Code of Lopatcong Township. Drainage systems in residential developments shall be designed and constructed in accordance with the New Jersey Residential Site Improvement Standards, N.J.A.C. 5:21-1 et seq., as amended.

SECTION TEN. Chapter 243, "Zoning and Land Use", §243-48, "Minimum design standards" is hereby amended to provide for the use of vegetated swales, add reference to Residential Site Improvement Standards, and to require the use of native plants.

§243-48. Minimum design standards.

The following minimum design standards shall be required for all site improvements:

B. On-site improvements.

- (2) Storm drainage. All site plans shall incorporate adequate storm drainage facilities. The facilities shall be designed in accordance with the standards established in § 243-46 and other applicable ordinances, except that in addition to the use of standard inlets as prescribed for use in municipal streets, inlet Type B-3 may be used. Developers are encouraged to use natural vegetated swales in lieu of inlets and pipes for storm drainage. Drainage systems in residential developments shall be designed and constructed in accordance with the New Jersey Residential Site Improvement Standards, N.J.A.C. 5:21-1 et seq., as amended.
- (3) Parking lot layout. Parking lots providing in excess of fifty (50) parking spaces shall meet the following requirements:
  - (d) All islands required herein shall be landscaped. Proposed landscaping shall consist of native plants to the maximum extent feasible. At a minimum, eighty (80%) percent of all proposed trees, shrubs, grasses and other ground covers shall be native varieties.
  - (e) In lieu of solid raised curbs along the perimeter of islands required herein, the developer may substitute with flush curbs and wheel stops or raised curbs with curb cuts or bollards to allow for stormwater runoff from the parking area to discharge into vegetated islands as sheet flow.

SECTION ELEVEN. Chapter 243, "Zoning and Land Use", §243-49, "General parking regulations" is hereby amended to reduce the amount of impervious surface area in parking lots, provide for alternative curbing design, require open space in parking areas, and to require the use on native plants.

§243-49. General parking regulations.

E. Size of parking space, aisles and roadways.

- (1) A parking space for one (1) passenger automobile shall accommodate an inscribed rectangle having a minimum length of eighteen (18') feet and a minimum width of nine (9') feet, with the exception that parking lots where shopping carts will be utilized shall have a stall width of ten (10') feet. Aisles for access to parking spaces shall be in accordance with the following:

Parking Angle (degrees)	Aisle Width (feet)	Traffic Flow
90	24	2-way
80	24	2-way
70	19	1-way
60	17	1-way
50	14	1-way
45	14	1-way

G. Site plan. The establishment of any off-street parking area having a capacity of four or more automobiles shall be subject to the requirements of this chapter and provisions of the Streets and Sidewalks Ordinance, whether or not the use to which the parking may be accessory would otherwise require site plan review, except that on a farm, parking area for farm vehicles shall be permitted without regard to said requirements.

- (2) Off-street parking areas which provide parking for ten (10) or more vehicles shall be provided with shade trees of a type approved by the Board. The shade trees shall be located in curbed islands within the parking lot area, in quantity equal to one (1) shade tree for every ten (10) parking spaces, according to an approved landscape plan. Proposed landscaping shall consist of native plants to the maximum extent feasible. At a minimum, eighty (80%) percent of all proposed trees, shrubs, grasses and other ground covers shall be native varieties.
- (4) In lieu of solid raised curbs along the perimeter of islands required herein, the developer may substitute with flush curbs and wheel stops or raised curbs with curb cuts or bollards to allow for stormwater runoff from the parking area to discharge into vegetated islands as sheet flow.
- (5) Open space shall be provided within the parking fields. The minimum area of open space — in square feet — shall be calculated by multiplying the total number of parking spaces by one hundred (100). The required open space shall be distributed within the boundaries of the parking field in landscaped areas that separate parking bays; islands that separate parking stalls from access drives; and islands used to separate parking rows.

SECTION TWELVE. Chapter 243, "Zoning and Land Use", §243-61, "Preservation of natural features" is hereby amended to broaden the meaning of natural features.

§243-61. Preservation of natural features.

- A. Existing or natural features, such as trees, brooks, drainage channels, forested areas, areas that contribute to high rates of ground water recharge, highly permeable soils and views, shall be retained. Whenever such features interfere with the proposed use of such property, retention of the maximum amount of such features consistent with the use of the property shall be required.

SECTION THIRTEEN. Chapter 243, "Zoning and Land Use", §243-62, "Buffer strips, screening and planting" is hereby amended to revise regulated activities in buffer strips, and to require the use of native plants.

§243-62. Buffer strips, screening and planting.

A. Buffer strips. Wherever a buffer strip has been specified by this chapter or as may be required by the Board, such buffer strip shall be of the width so specified or required and shall:

(2) Not contain parking areas or driveways, unless specifically permitted elsewhere in this chapter, or other accessory structures or other uses except for stormwater management or passive recreational purposes.

C. Landscaping.

(1) All areas of any lot not occupied by buildings, pavement or other surfacing or otherwise improved or used in accordance with an approved site plan or subdivision shall be landscaped by the planting of grass and/or ground cover, shrubs and trees. As a minimum, one (1) tree shall be provided or remain existing for each five thousand (5,000) square feet of area or fraction thereof to which this requirement applies. The placement of the plant material shall be appropriate to enhancement of the property. Continuous maintenance shall be practiced on all such areas.

(2) Plants used for landscaping buffer strips, screening and other landscaping required by this section shall be native varieties that are appropriate for the given soil conditions, hydrology and geology unless it can be demonstrated that non-native plants would be more appropriate. The foregoing notwithstanding, native plants shall comprise a minimum of eighty (80%) percent of all plants used to landscape these areas.

SECTION FOURTEEN. Chapter 243, "Zoning and Land Use", §243-78.1, "Environmental constraints", subsection D, "Tree protection" is hereby amended to add lot clearing limits, lot revegetation standards, and to define the meaning of vegetation.

§243-78.1. Environmental constraints.

D. Tree protection. The purpose of this subsection is to regulate and control indiscriminate and excessive cutting of trees in conjunction with an application for site plan or subdivision approval, to protect older specimen trees and to encourage careful site design and grading to promote the preservation of existing trees.

(7) Lot clearing limit ratio. This subsection prescribes the portion of a lot from which vegetation may be removed. These regulations recognize that the preservation of mature trees and forested areas is a key strategy in the management of environmental resources, particularly watershed management, air quality, and ambient heating and

cooling. The measures comply with minimizing land disturbance, which is a nonstructural stormwater management strategy.

- (a) Lot clearing limit ratios shall be applied only to residential zones on tracts located outside of the Highlands Preservation Area, and in proportion to the minimum lot size and lot coverage requirements of the district, with an exemption for farms as follows:

Zone	Lot Clearing Limit Ratio/Exemption
R-10/2	Fifty (50%) percent for each individual clustered lot and/or ten (10%) percent of tract area, whichever is less.
R-5/2	Fifty (50%) percent for each individual clustered lot and/or twenty (20%) percent of tract area, whichever is less.
R-3/2	Fifty (50%) percent for each individual clustered lot and/or thirty-three (33%) of the tract area, whichever is less; eighty-five (85%) percent other permitted uses.
R-2	Fifty (50%) percent for each individual lot and fifty (50%) percent for the tract area, whichever is less.
R-150	Fifty (50%) percent for each individual lot and fifty (50%) percent for the tract area, whichever is less; eighty-five (85%) percent other permitted uses.
R-120A	Fifty (50%) percent for each individual lot and fifty (50%) percent for the tract area, whichever is less w/o public sewer; eighty-five (85%) percent for each individual lot and fifty (50%) percent for the tract area, whichever is less w/public sewer; eighty-five (85%) percent other permitted uses.
R-120	Eighty-five (85%) percent single-family residential; eighty-five (85%) percent other permitted uses; cluster and small lot residential individual lots are exempt.
R-100	Eighty-five (85%) percent senior citizen tract area; eighty-five (85%) percent other permitted uses; single-family residential exempt.
R-75	Eighty-five (85%) percent other permitted uses; single-family residential exempt.
R-MF	Eighty-five (85%) percent of tract area.

- (b) Lots located in the Highlands Preservation Area shall be subject to clearing limit regulations for major Highland's development contained in the Highlands Water Protection and Planning Act or as may be issued by NJDEP or the Highlands Commission.

- (c) Lots located in the Highlands Planning Area that contain upland forested areas shall be subject to the following clearing limit regulations:

[1] Trees having a DPM of six (6") inches or greater for deciduous trees or ten (10") inches or greater for evergreen trees shall

not be cleared more than twenty (20') feet directly adjacent to a structure and no more than ten (10') feet on each side of a driveway that is necessary to access a building or a non-forested area of the lot.

[2] Other vegetation associated with the forested area and non-forested areas of the lot are subject to the clearing limits specified in subsection [1] above.

(d) On farmland or other previously disturbed and/or cleared sites a portion of an individual lot and/or the tract shall be revegetated according to the following schedule:

Zone	Minimum Lot Revegetation/Exemption
R-10/2	Fifty (50%) percent for each individual clustered lot and/or ninety (90%) percent of tract area, whichever is greater.
R-5/2	Fifty (50%) percent for each individual clustered lot and/or eighty (80%) percent of tract area, whichever is greater.
R-3/2	Fifty (50%) percent for each individual clustered lot and/or sixty-seven (67%) percent of the tract area, whichever is greater; fifteen (15%) percent other permitted uses.
R-2	Fifty (50%) percent for each individual lot and fifty (50%) percent for the tract area, whichever is greater.
R-150	Fifty (50%) percent for each individual lot and fifty (50%) percent for the tract area, whichever is greater; fifteen (15%) percent other permitted uses.
R-120A	Fifty (50%) percent for each individual lot and fifty (50%) percent for the tract area, whichever is greater w/o public sewer; fifteen (15%) percent for each individual lot and fifty (50%) percent for the tract area, whichever is greater w/public sewer; fifteen (15%) percent other permitted uses.
R-120	Fifteen (15%) percent single-family residential; fifteen (15%) percent other permitted uses; cluster and small lot residential individual lots, are exempt.
R-100	Fifteen (15%) percent senior citizen tract area; fifteen (15%) percent other permitted uses; single-family residential exempt.
R-75	Fifteen (15%) percent other permitted uses; single-family residential exempt.
R-MF	Fifteen (15%) percent of tract area.

(e) Vegetation used to restore previously disturbed/cleared areas shall be native plants suitable for the environmental conditions present on the lot or tract. All of the revegetated area shall be protected from future disturbance with a conservation easement or deed restriction acceptable to the Board Attorney.

- (f) All remaining undisturbed areas of a lot or tract shall be protected from future disturbance with a conservation easement or deed restriction acceptable to the Board Attorney.
- (g) Vegetation, as used in this section, shall include grasses and other ground covers, shrubs, trees, and other plants consisting of native and non-native varieties of both upland and wetland communities except as otherwise exempted. Farm crops grown for consumption or for commercial purposes shall be exempt from this definition of vegetation.

SECTION FIFTEEN. Chapter 243, "Zoning and Land Use", Attachment 2, "Schedule of Area, Lot and Bulk Regulations", Part 2 is hereby amended to add a note referencing Chapter 199, Stormwater Management.

Maximum Coverage	
Building (percent)	Lot <sup>3</sup> (percent)

NOTES:

- 3. Increases of lot coverage may require conformance with the Design and Performance Standards for stormwater management. Applicants for development should review Chapter 199, Stormwater Management for applicability.

SECTION FIFTEEN. All ordinances or part of ordinances inconsistent with this ordinance are hereby repealed to the extent of inconsistency.

SECTION SIXTEEN. If any section, paragraph, subdivision, clause or provision of this ordinance shall be adjudged invalid, such adjudication shall apply only to the section, paragraph, subsection, clause or provision and the remainder of this ordinance shall be deemed valid and effective.

NOTICE

NOTICE is hereby given that the foregoing Ordinance was introduced for first reading at the regular meeting of the Council of the Township of Lopatcong held on Wednesday, February 1, 2006 and will be considered for adoption upon second and final reading at a regular meeting to be held on Wednesday, March 1, 2006.

Margaret B. Dilts, CMC