



# Lot Grading Plan Check List and Form

Revised: 7/9/2019

The Lot Grading Check List Form provides all of the information that you will require in one location. Please read the Ordinance carefully. Circle the answers (y, n, na) that apply to your specific project request.

Note: y=yes, n=no, na=not applicable

## ORDINANCE 2019-10

### AN ORDINANCE OF THE TOWNSHIP OF CHATHAM, COUNTY OF MORRIS, CHAPTER XXX, TITLED "LAND DEVELOPMENT", SUBSECTION 30-96.20, TITLED "LOT GRADING PLANS" OF THE REVISED GENERAL ORDINANCES OF THE TOWNSHIP OF CHATHAM.

BE IT ORDAINED, by the Township Committee of the Township of Chatham, County of Morris, State of New Jersey, as follows;

Section 1. Chapter XXX, Article 7, Section 30-96.20 titled "Lot Grading Plans", is hereby repealed

Section 2. Chapter XXX, Article 7, Section 30-96.20 shall be replaced as follows:

#### 30-96.20 Lot Grading Plans.

*a. Applicability.* In order to provide against the adverse consequences of uncontrolled surface water drainage and to prevent soil erosion and control sediment deposition associated with land disturbance including but not limited to construction activities, a lot grading plan shall be submitted and approved prior to the issuance of a construction/zoning permit for the following activities:

- (y, n, na) 1. The erection of any new structure, any addition, repair or renovation to an existing structure involving an extension of the foundation of the existing structure, any of which is not shown upon an approved site plan; or
- (y, n, na) 2. Any of the following activities:
  - (y, n, na) (a) Land disturbance, except for the purposes of sod replacement, greater than one thousand (1,000) square feet; or
  - (y, n, na) (b) Land disturbance of less than one thousand (1,000) square feet if the project affects any critical areas; or
  - (y, n, na) (c) Land disturbance within five (5) feet of the property line that impacts drainage.
- (y, n, na) 3. The demolition of a structure if the land disturbance beyond the footprint of the structure exceeds 1,000 square feet (excluding the square feet of the structure).

*b. Waiver.*

(y, n, na)

1. The Township Construction Official may grant a waiver from the requirements of this subsection with respect to an addition to a single-family dwelling if the Township Construction Official determines that the addition involves less than one thousand (1,000) square feet of impervious coverage, does not affect any steep slopes or critical areas, and does not require any significant changes in the existing grading of the lot. Any such determination shall be made upon the basis of the construction plans and such further information as may be requested from the owner of the property by the Township Construction Official

*c. Lot Grading Plan Details. A lot grading plan showing the proposed final grading of the lot shall be reviewed and approved by the Township Engineer in accordance with the provisions of this subsection and more specifically as follows:*

(y, n, na)

1. The lot grading plan shall be approved by the Township Engineer prior to the issuance of a construction permit. Initially, said approval shall constitute authorization only to construct the foundation of the building. The lot grading plan shall be accompanied by architectural plans showing the height of the building in order to allow determination of compliance with the height limit established by this chapter, in accordance with the procedure set forth in this subsection. The first floor elevation of the building shown on the lot grading plan shall be within eighteen (18) inches of the first floor elevation shown on any grading plan, which was part of an approved subdivision plan

(y, n, na)

2. Drywells, if required, shall be installed at the same time as the building foundation is being constructed. Upon construction of the foundation and drywells, and prior to framing or other further construction, the applicant shall submit an "as-built" foundation survey confirming that the first floor elevation of the building is within the eighteen (18) inches of the first floor elevation as shown on said approved subdivision plat. If the property is not the subject of a grading plan on an approved subdivision plat, the "as-built" foundation survey shall confirm that the first floor elevation is located within eighteen (18) inches of the elevation as shown on the lot grading plan. The foundation survey shall also illustrate the "as-built" location of the drywells. An Engineer's certification that the drywell has been installed in accordance with NJDEP BMP manual must be provided with the foundation survey. Any exceptions shall be noted in the Engineer's certification. No further construction shall be authorized unless the "as-built" elevation drawings indicate that the height of the building satisfies the height limit established by this chapter and that the drywells will function properly.

- (y, n, na) 2. Drywells, if required, shall be installed at the same time as the building foundation is being constructed. Upon construction of the foundation and drywells, and prior to framing or other further construction, the applicant shall submit an "as-built" foundation survey confirming that the first floor elevation of the building is within the eighteen (18) inches of the first floor elevation as shown on said approved subdivision plat. If the property is not the subject of a grading plan on an approved subdivision plat, the "as-built" foundation survey shall confirm that the first floor elevation is located within eighteen (18) inches of the elevation as shown on the lot grading plan. The foundation survey shall also illustrate the "as-built" location of the drywells. An Engineer's certification that the drywell has been installed in accordance with NJDEP BMP manual must be provided with the foundation survey. Any exceptions shall be noted in the Engineer's certification. No further construction shall be authorized unless the "as-built" elevation drawings indicate that the height of the building satisfies the height limit established by this chapter and that the drywells will function properly.
- (y, n, na) 3. Following approval by the Township Engineer of the "as-built" foundation survey, and upon framing to the ridge of the roof, but prior to any sheathing or other construction, "as-built" elevation drawings of the building shall be submitted. No further construction shall be authorized unless the "as-built" elevation drawings indicate that the height of the building satisfies the height limit established by this chapter.
- (y, n, na) 4. The plan shall be prepared by a professional engineer licensed in New Jersey and shall be drawn to a scale of not less than one (1) inch equals thirty (30) feet, but may be supplemented by a key map of smaller scale, and shall be prepared in sufficient detail to show the following:
- (y, n, na) (a) The existing surface drainage pattern as it affects the subject property and all abutting land; Existing drainage areas of stormwater runoff onto the subject lot shall be fully illustrated on the Lot Grading Plan.
- (y, n, na) (b) The existing surface drainage pattern as it affects the subject property and all abutting land; Existing drainage areas of stormwater runoff onto the subject lot shall be fully illustrated on the Lot Grading Plan.
- (y, n, na) (c) The location of any existing streams, wetlands, wetland buffers, watercourses, riparian buffers ponds, storm sewers or drainage facilities which relate to drainage of surface waters from or to the subject property;
- (y, n, na) (d) The location of any existing streams, wetlands, wetland buffers, watercourses, riparian buffers ponds, storm sewers or drainage facilities which relate to drainage of surface waters from or to the subject property;
- (y, n, na) (e) The proposed location of all surface and subsurface structures for which a construction permit is being sought;
- (y, n, na) (f) The elevation of the finished garage floor, top of foundation, first floor of the structure, and top of finished roof ridge proposed for the subject property, and the proposed lowest elevation within fifteen (15) feet of the proposed structure;

- (y, n, na) (g) The proposed location of all roof leader drains, driveways, dry wells, underdrains, utility lines below ground and any individual sewage disposal system; All underground structures and piping either proposed or existing shall be illustrated on the lot grading plan.
- (y, n, na) (h) The outer limits of all areas in which any grading or filling is proposed on the subject property;
- (y, n, na) (i) Any proposed changes in the existing surface drainage pattern which will result from the construction proposed for the subject property including any proposed changes on abutting lands;
- (y, n, na) (j) All existing trees with trunks exceeding five (5) inches in diameter measured at a point four (4) feet above the existing ground level, which trees are located within the outer limits of the areas mentioned in paragraph (h) above as well as within ten (10) feet of the outer limits of any such areas.
- (y, n, na) (k) Topography reflecting contours at two (2) foot intervals and identifying slopes in the following ranges: Less than 15%, 15% to 20%, 20% to 25%, and 25% and greater. Land disturbances shall conform to the requirements of the steep slopes (subsection 30-96.24) of this chapter.
- (y, n, na) (l) Top of wall and toe of wall elevations of all proposed retaining walls shall be clearly delineated at regular intervals on the plan. Retaining walls shall conform to the requirements of the walls and fences (subsection 30-96.15) of this chapter.
- (y, n, na) (m) A letter of Interpretation (LOI) from the New Jersey Department of Environmental Protection (NJDEP) shall be obtained if wetlands or wetlands buffer are present on the subject property
- (y, n, na) (n) Appropriate storm drainage facilities shall be provided for protection of downstream properties.
- (y, n, na) (o) Any proposed building or structure or attendant protective measures will not impede the flow of surface water through any watercourse. Only a nominal increase in water surface elevation and velocities will be allowed due to construction.
- (y, n, na) (p) Any proposed vehicular facilities including roads, drives or parking areas, shall be so designed that any land disturbances shall not cause erosion. Both the vertical and horizontal alignment of vehicular facilities shall be so designed that hazardous circulation conditions will not be created
- (y, n, na) (q) Any fill placed on the lot shall be properly stabilized and, when found necessary depending upon existing slopes and soil types, supported by retaining walls or other appropriate structures as approved by the Township Engineer.
- (y, n, na) (r) All cuts shall be supported by retaining walls or other appropriate retaining structures when, depending upon the nature of the soil characteristics, such structures are found necessary in order to prevent erosion.
- (y, n, na) (s) Upon installation of roofing material on a structure, temporary gutters and downspouts should be immediately installed and connected to the drywells.

(y, n, na) (t) For all lots with proposed disturbance of a steep slope area greater than one thousand (1,000) square feet. The lot grading plan shall also include, but not be limited to, mapping/quantification of steep slope areas and mapping/quantification of steep slope disturbance. The design standards for disturbance of steep slopes shall be pursuant to the following standards

(y, n, na) (1) Proposed disturbance of soil shall be executed in a manner that will not cause soil erosion.

(y, n, na) (2) Provision shall be made for any structure or protective measures that proposed slopes may require for the protection of the public safety, including but not limited to retaining walls, guide rails, headwalls and fences.

(y, n, na) (3) Sequencing of construction so that the total area of steep slopes disturbed at one time is one thousand (1,000) square feet or, if approved by the Township, minimized to the maximum extent possible. Detailed plans must be submitted to illustrate compliance with this requirement.

(y, n, na) (4) Installation of secondary soil erosion and sediment control (SESC) measures as necessary to act as additional protection of downstream properties in the case of possible breach or failure of primary SESC measures.

(y, n, na) (5) Where practical, temporary sedimentation basins should be constructed.

(y, n, na) (6) Snow fencing should be installed at the proposed limit of disturbance to prevent further disturbance.

(y, n, na) (7) All silt fence shall be "super" silt fence as defined in standards for SESC in New Jersey as promulgated by the NJDA State Soil Conservation Committee.

(y, n, na) d. *Fees* . Four (4) copies of each required lot grading plan shall be filed with the Township Construction Official, together with an application fee as determined below:

(y, n, na) 1. One thousand (\$1,000.00) dollars for a lot grading plan that involves a new or substantially improved principal structure.

(y, n, na) 2. Four hundred (\$400.00) dollars for an addition to an existing structure, accessory structure or land disturbance of over one thousand (1,000) square feet.

(y, n, na) 3. An additional application fee, in an equal amount to the original must be submitted

(y, n, na) 4. In addition to standard lot grading fees, all applications proposing to disturb steep slopes shall also pay an inspection fee for Township officials to monitor construction activities. The initial inspection fee shall be twenty-five (\$0.25) cents per square foot of steep slope disturbance. Any violations of the approved lot grading plan may result in additional inspection fees being imposed.

(y, n, na) 5. *Additional Inspections* . In the event that more than one (1) inspection of a property are required to be made by the Township Engineer either by reason of a provision for temporary measures to prevent adverse effects upon abutting lands or by reason of a failure to comply with an approved lot grading plan, then the owner of the property shall pay to the Township an inspection fee for each additional inspection. Inspection fee shall be calculated in accordance with contractual prevailing rates with the Township's professionals. All fees for any such additional inspections shall be paid to the Township prior to the issuance of a certificate of occupancy for the new structure or within 30 days upon the Township's receipt of the costs incurred.

(y, n, na) 6. Engineering and legal costs incurred by the Township in addressing or resolving violations of this chapter shall be paid to the Township by the applicant in accordance with contractual prevailing rates with the Township. Payment of costs shall be made within 30 days upon the Township's receipt of the costs incurred

(y, n, na) e. *Review by Township Engineer*. The lot grading plan shall be filed with the Construction Official and shall be reviewed by the Zoning Officer for zoning compliance. Upon the filing of a lot grading plan, the receipt of the required fee, and completion of Zoning Officer review, the Township Construction Official shall submit three (3) copies of the plan to the Township Engineer

(y, n, na) f. *Subsurface Sewage Disposal System*. In the event that the property subject of the lot grading plan will be served by an individual subsurface sewage disposal system, then a complete plan for the system as approved by the Township Board of Health shall be submitted to the Township Engineer along with the proposed lot grading plan. In reviewing the proposed lot grading plan, the Township Engineer shall consider not only the impacts which the lot grading plan may have upon the proper functioning of the individual subsurface sewage disposal system but also any surface drainage impacts which the system, especially a system with a mound disposal field, may have upon surface drainage on the subject property and abutting lands.

g. *Standards for Approval*. The Township Engineer shall not approve a lot grading plan or revised plan unless the Township Engineer determines that the plan is designed to control surface waters in a manner that will minimize the adverse effects of such waters upon the subject property and abutting lands. In addition, a lot grading plan shall not be approved unless the following conditions are met:

(y, n, na) 1. Driveway grades shall not exceed fifteen (15%) percent, except that under unusual conditions and for short distances the Township Engineer may approve grades not exceeding eighteen (18%) percent, provided the average centerline grade of the driveway does not exceed fifteen (15%) percent.

(y, n, na) 2. There shall be no change in existing grade that raises the elevation of the lot within five (5) feet of a property line. Furthermore, there shall be no change in existing grade, which raises any portion of the lot within fifteen (15) feet of a property line to an elevation that is more than four (4) feet above the existing ground level at the property line. Any new grade shall be at an even slope with the toe of the slope at the ground level which exists at five (5) feet inside the property line, provided, however, that, when necessary, swales shall be created in order to control surface waters in a manner that will protect abutting lands. Retaining walls shall not exceed six (6) feet in height provided that for each six (6) inches in height above the pre- or post- construction grade at the toe of the wall, a retaining wall shall be set back one (1) foot from the property line to which it is adjacent. Distances from property lines shall be measured at right angles to straight portions and radial to curved portions.

(y, n, na) 3. Grades steeper than 1 (vertical) to 3 (horizontal) should be avoided. In cases where these grades are unavoidable, provisions for soil stabilization, access and maintenance of those areas must be provided to the Township Engineer for approval.

(y, n, na) 4. An area of at least ten (10) feet in width around the foundation of any building shall be graded downward, away from the foundation, in accordance with the requirements of the New Jersey Uniform Construction Code.

(y/n/na) 5. The lot grading plan complies with the terms and conditions of any Development Permit issued with respect to the lot pursuant to the provisions of Article 10 (Section 30-113, et seq.).

(y/n/na) 6. Roof runoff from any roofed area shall be in accordance with the New Jersey Uniform Construction Code.

7. On-Site Storm Water Management. The applicant shall establish adequate measures for on-site storm water management, including BMPs, meeting the following requirements:

(y, n, na) (a) The peak rate of the runoff from the site following completion of the development shall be reduced to fifty (50%) percent and seventy-five (75%) percent of the predevelopment rates for the 2-year and 10-year storms, respectively. The post-development peak rate of runoff for the 100-year storm shall not exceed that which existed prior to development. Every practicable effort shall be made to minimize any increase in volume and to maintain and/or improve the quality of runoff which existed prior to development. Stormwater runoff rates and volumes are to be computed in accordance with Chapter 5 of New Jersey Department of Environmental Protection's Stormwater Best Management Practices Manual.

(y, n, na) (b) Maximum use shall be made of presently existing stormwater runoff control devices, mechanisms or areas such as existing berms, terraces, grass waterways, favorable hydrologic soils, swamps, swales, watercourses, woodlands, floodplains, as well as any proposed retention structures.

- (y, n, na) (c) The plans shall avoid the concentration of flow and shall provide for dissipation of velocities at all concentrated discharge points.
- (y, n, na) (d) For calculating runoff and controls, the applicant may use the Soil Conservation Service Method or the Rational Method depending upon which is more appropriate in the particular instance. Computations shall cover the 2-, 10-, and 100-year storm frequencies.
- (y, n, na) (e) All outfalls are to be designed in a manner to retard velocities at the outfall and provide stream channel protection.
- (y, n, na) (f) Due consideration shall be given to the relationship of the subject property to the natural or established drainage pattern of the watershed(s) of which it is a part. Surface water runoff shall not be transferred from one watershed to another.
- (y, n, na) (g) The use of conservation restrictions is encouraged.
- (y, n, na) (h) All water carrying structures and/or retention areas shall be completed and stabilized prior to diversion of water to them.
- (y, n, na) (i) Innovative stormwater runoff control and recharge devices, such as rooftop storage, drywells, cisterns, roof drain infiltration trenches, and rain gardens are encouraged provided they are accompanied by detailed engineering plans and performance capabilities.
- (y, n, na) (j) Design and construction of drywells shall comply with New Jersey Department of Environmental Protection's Stormwater Best Management Practices Manual.
- (y, n, na) (k) Nonstructural stormwater management strategies as are set forth in N.J.A.C. 7:8-1 et seq. shall be incorporated into the stormwater management plan whenever possible.
- (y, n, na) (l) Chatham Township's Standard soil erosion and sediment control notes shall be included in text form on the plan.
- (y, n, na) 8. The lot grading plan shall comply with New Jersey's soil erosion and sediment control standards.
- (y, n, na) 9. If the lot grading plan contains a structural retaining wall, a copy of the structural calculations, signed and sealed by an engineer or architect licensed in the State of New Jersey shall accompany the plans. All structural retaining walls must conform to the requirements of subsection 30-96.15
- (y, n, na) 10. For increases of impervious cover greater than 1,000 s.f. the minimum design and performance standards for groundwater recharge shall be as follows:
- (y, n, na) [a] Demonstrate through hydrologic and hydraulic analysis that the site and its stormwater management measures maintain one hundred (100%) percent of the average annual preconstruction groundwater recharge volume for the site; or

(y, n, na) [b] Demonstrate through hydrologic and hydraulic analysis that the increase of stormwater runoff volume from preconstruction to post-construction for the 2-year storm is infiltrated.

(y, n, na) 11. The lot grading plan shall fully comply with the Township of Chatham's present ordinance Chapter XXII - Tree Management. If applicable, a tree permit must be obtained.

(y, n, na) 12. The lot grading plan shall fully comply with the Township of Chatham's present ordinance Chapter XIX Streets and Sidewalks. As applicable, a road opening permit must be obtained for work within the municipal right-of-way.

h. *Completion of Review.* The Township Engineer shall approve or disapprove a lot grading plan or revised plan forwarded by the Construction Official within twenty (20) business days after the plan or revised plan is submitted to him. If additional information is needed to completely evaluate the impact of the application, the Township Engineer shall notify the applicant. From the date the Township Engineer sends such notification until the date of response from the applicant, the time for completion of review of the application is tolled. The Township Engineer shall furnish a written statement of the reasons for disapproval. If the Township Engineer's written statement does not, in the opinion of the applicant, address their concerns, a review by the Township Administrator will be conducted to resolve any remaining issues concerning the application.

j. *Temporary Measures.* Whenever the Township Engineer considers it necessary or appropriate, he may require that a lot grading plan include temporary measures to be taken during the performance of any construction work to prevent adverse effects upon abutting lands.

k. *Violations.* The failure of an owner of property to comply with an approved lot grading plan for such property, including any temporary measures to be taken during the performance of construction work, shall constitute a use of the subject property in violation of this chapter. If a notice of violation is issued the applicant shall submit an amended lot grading plan within ten (10) days of the notice. Failure to resubmit an amended lot grading plan within the specified timeframe shall result in an immediate stop work order and void the lot grading plan approval. The amended plan shall identify the cause of the violation and revise the lot grading plan accordingly to prevent a reoccurrence of the violation. The amended plan shall be resubmitted regardless of the extent of the change required. The issuance of an amended plan shall void prior approvals.

l. *"As-built" Certification.* A Certification by the applicant's engineer, based on field inspections, and as necessary, laboratory tests, that the site is in full compliance with the approved Lot Grading Plan and that permanent soil stabilization, including soil preparation, acceptable top soil and proper vegetative cover including compaction of fill meeting New Jersey Soil Erosion and Sediment Control Standards must be provided prior to final grading inspection. Any exceptions to the requirements of the approved lot grading plan shall be included in the certification.

m. *Adverse Conditions.* In the event that the Township Engineer determines that current conditions do not permit the completion of work to effectuate full compliance with a lot grading plan, The Township Engineer shall so state in the engineer's report and shall also set forth the following:

- (y/n/na) 1. All work remaining to be performed in order to effectuate full compliance with the lot grading plan;
- (y/n/na) 2. The estimated cost of each phase of the work to be performed, and;
- (y/n/na) 3. The date by which all remaining work shall be completed.

n. *Performance Bond.* Notwithstanding any other provision of this chapter, the Zoning Officer may issue an occupancy/zoning permit prior to full compliance with a lot grading plan if the Zoning Officer received written evidence of the existence of a cash performance bond in the amount of the estimated cost effecting full compliance with the plan as determined by the Township Engineer, and if the Zoning Officer receives a written statement from any contract purchaser requesting the issuance of a certificate of occupancy pursuant to the provisions of this section.

If a certificate of occupancy is issued for a property prior to full compliance with a lot grading plan and full compliance is not affected by the date set forth in the report of the Township Engineer, then continued occupancy of such property after such date shall constitute a use of such property in violation of this chapter.

o. *Notice to Proceed.* All SESC measures (silt fence, tracking pad, and all other approved measures.) shall be installed prior to the start of any land disturbance. SESC measures must be inspected by a Township Representative and a Notice to Proceed issued before the next phase of construction may commence.

p. *Inspections.* Neither an occupancy/zoning permit nor a certificate of occupancy shall be issued for any property which is the subject of a lot grading plan until the applicant's engineer certifies in writing that the property conforms to the lot grading plan. The Township Engineer shall make an inspection and issue a report within five (5) days after notification from the Construction Official of an application for a certificate of occupancy.

q. *Penalties for Violations .* Any person who shall violate any provision of this section shall, upon conviction, be liable to the penalty stated in Chapter I, Section 1-5. Each day that a violation is permitted to exist or continue to occur shall constitute a separate offense.

Section 3. If any section, paragraph, subdivision, clause or provision of this Ordinance shall be adjudged invalid, such adjudication shall apply only to the section, paragraph, subdivision, clause or provision so adjudged and the remainder of the Ordinance shall be deemed valid and effective.

Section 4. All ordinances or parts of ordinances inconsistent with or in conflict with this Ordinance are hereby repealed to the extent of such inconsistency.

Introduced: 5/23/2019

Adopted: 6/27/2019

---

Applicant Date

Reviewed By: \_\_\_\_\_

Approved: \_\_\_\_\_ Date

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_