



## TOWN OF NEW CANAAN

TOWN HALL, 77 MAIN STREET  
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Adopted: 7/22/99

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**Effective: 07/01/24**

### **Drainage Certification Policy of the Town of New Canaan** **Prior to Approval of Permit (Pre-Development)**

1. Prior to obtaining permits for the development of any lot or any construction which increases the impervious surfaces, including gravel, by 500 square feet or more in the 1/2 Acre Zone or smaller or by 1,000 square feet or more in the One Acre Zone or larger, **any new construction** (*regardless of zone or change in impervious area*), any excavation or other activity that could affect drainage, as determined by the reviewing department, the applicant is required to submit the following:
  - A. Complete drainage information and/or calculations for pre-activity (pre-development) and post-activity (post-development) stormwater runoff from a site, **as prepared by a registered professional engineer licensed in the State of Connecticut.**
  - B. Documentation that the drainage design will result in a zero increase in the rate or volume of runoff in the post-activity condition, **as determined by a registered professional engineer licensed in the State of Connecticut. Zero increase in peak rate of runoff and zero increase in runoff volume are required to be demonstrated up to and including the 100-year storm event.**
  - C. Provide tabulated Directly Connected Impervious Area (DCIA) under pre-development and post-development conditions.
  - D. Include the use of Low Impact Development (LID) techniques, addressing at minimum the water quality design storm (90<sup>th</sup> percentile 24-hr rainfall).
  - E. Illustrate proposed grading, if any, and clearly demonstrate that any proposed change in the direction of surface water flow shall not adversely affect any down-gradient or nearby property(s).
2. **Methodology:**  
Peak flow rates and runoff volumes shall be determined by using the Rational Method, the Time of Concentration Method, the Tabular Method or the Unit Hydrograph Method. Consistent with the Connecticut Department of Energy and Environmental Protection (CTDEEP) Stormwater Quality Manual, 24-hour rainfall depth shall be defined by NOAA Atlas 14 ([https://hdsc.nws.noaa.gov/pfds/pfds\\_map\\_cont.html?bkmrk=ct](https://hdsc.nws.noaa.gov/pfds/pfds_map_cont.html?bkmrk=ct)) and updated water quality design storm modeled.

3. Drainage Analysis Report Requirements:

The requested information shall be in a form and contain content acceptable to the Town Engineer for the specific application in question, and shall include the following:

- a) Pre-Development Conditions Drainage Map (*Topography, DP(s), Tc, CN, USDA Soils*)
  - b) Post-Development Conditions Drainage Map (*Topography, DP(s), Tc, CN, USDA Soils*); include catchment areas to each proposed stormwater management measure
  - c) Existing Flooding Concerns, if any, at property, adjacent off-site properties or off-site drainage infrastructure
  - d) Pre-Development & Post-Development Drainage Summary Tables (*by Subwatershed*)
  - e) Water Quality Analysis (*WQV, WQF, GRV*)
  - f) Water Quantity Analysis (*Peak Flow Control*)
  - g) Stormwater Management Operation & Maintenance Plan
4. All site work must also comply with the standards contained in Sections 6.4, 6.5.B, 6.6 and 6.7 of the New Canaan Zoning Regulations, the CTDEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, as amended, the CTDEEP Stormwater Quality Manual, as amended, and the Connecticut Department of Transportation (CTDOT) Drainage Manual, as amended.

It is to be noted and understood that the Town's review and approval of this submittal is expressly limited to determining compliance and conformance of the completed project as a functioning whole. **The Town Engineer reserves the right to review multiple permit applications for a parcel within a five-year time period to evaluate the cumulative effects to stormwater on and off-site.** Approval does not relieve the applicant or contributing professionals of their responsibility for all matters relating to design, construction, code compliance, safety aspects of performing the work and for general coordination of the work.

## **Prior to CO of Final Sign-Off (Post-Development)**

1. Prior to final signoff for any subdivision, or final signoff for a certificate of occupancy of any lot or lots or any construction or development which increases the impervious surface by 500 square feet or more in the 1/2 Acre Zone or smaller or by 1,000 square feet or more in the One Acre Zone or larger, excavation or other activity as determined by the reviewing department, the applicant may be required to submit the following:
  - A. Certification/confirmation from **a registered professional engineer, licensed in the State of Connecticut**, that there is a zero increase in the rate or volume of runoff in the post-activity condition.
  - B. Certification/confirmation from **a registered professional engineer, licensed in the State of Connecticut**, that any proposed change in the direction of surface water flow shall not adversely affect any down-gradient or nearby property(s).
  - C. Certification/confirmation **from a registered professional engineer, licensed in the State of Connecticut**, that the final grading is consistent with the approved Site Plan and in conformance with Section 6.4.I.7 and 8 of the New Canaan Zoning Regulations.
  - D. Certification/confirmation from a Connecticut licensed Land Surveyor that any retaining walls constructed as part of site development do not exceed the standards outlined in Section 6.5.B of the New Canaan Zoning Regulations.
  - E. The requested information shall be in a form and contain content acceptable to the Town Engineer for the specific application in question.
2. Prior to final signoff for a certificate of occupancy or confirmation of completion that is required, all site work and grading indicated on the approved site plan shall be complete. There shall be no exposed surfaces. All driveway locations shall be improved with asphalt or other approved medium, proposed hardscapes such as patios shall be complete and lawn and landscaped areas must have established root systems to the satisfaction to the Zoning Inspector. In addition, all sloped areas shall also be stabilized to the satisfaction to the Zoning Inspector. Should the weather at a particular time of year, such as winter or summer heat prevent the establishment of lawns or other plantings required for final sign-off, the applicant can either seek a temporary Certificate of Occupancy (CO) from the Building Department or post a bond in accordance with Section 8.1.K of the zoning regulations.
3. At the discretion of the Zoning Inspector, Chief Sanitarian or Town Engineer, the certification itself may be required to be placed on an “as-built” plan of the site, parcel or lot showing all development, septic system, grading, wetlands and drainage features, and is to be an original signature and live seal.

It is to be noted and understood that the Town’s review and approval of this submittal is expressly limited to determining compliance and conformance of the completed project as a functioning whole. Approval does not relieve the applicant or contributing professionals of their responsibility for all matters relating to design, construction, code-compliance, safety aspects of performing the work and for general coordination of the work.

Any questions regarding this policy should be referred to the Zoning Inspector and/or Town Engineer. It should be noted that while certification might not be required at the beginning of a project or activity, it might well be required prior to final signoff as a result of activity or experience during the construction process.