SUBDIVISION REGULATIONS for the TOWN OF ELLINGTON, CONNECTICUT

FIRST ADOPTED DECEMBER, 1954

AMENDED THROUGH MARCH 15, 2013

ELLINGTON SUDIVISION REGULATIONS

LIST OF AMENDMENTS

Appendix A, Section A.07 - Digital Submission Requirements Section removed pursuant to Declaratory Ruling dated March 1, 2010 Amended 6-28-2010, Effective 7-15-2010

Section 4.17: Open Space – Reduced open space exaction from minimum 20% to 10% in exchange for the new density-based residential zoning regulations

Amended 6-27-2011, Effective 7-15-2011

Section 4.11: Water – Removed requirement of public water supply on lots less than 40,000 square feet in order to remove obstacle to new density-based residential zoning regulations and add easement ability to the non-contamination radius in Private Wells.

Amended 6-27-2011, Effective 7-15-2011

Section 2.04: Application Requirements – Removed Fee Language and brought Wetlands Clearance in line with State Statute

Amended 6-27-2011, Effective 7-15-2011

Section 1.02: Definitions – Repeal "bond" definition and replace with definition in Section 3.01 to formalize post approval process currently administered "in house" and address changes to State Statute necessary to comply with Public Act 11-79.

Amended 1-30-2012, Effective 2-15-2012

Section 3.01: Bond; Section: 3.02 Failure to Complete Improvements; Section 3.03: Partial Release; Section 3.04: Final Release and Section 3.05: Maintenance of Improvements – Repealed and replaced with new Sections 3.01 through 3.07 to formalize post approval process currently administered "in house" and address changes to State Statute necessary to comply with Public Act 11-79.

Amended 1-30-2012, Effective 2-15-2012

Section 4.11: Ownership of Detention Facilities and 4.12: Drainage/Detention Design added and existing subsequent section renumerated to detail options for ownership of drainage basins and define maintenance responsibilities.

Amended 1-30-2012, Effective 2-15-2012

Multiple Sections regarding fire hydrants and bonding Section 4.11: Ownership of Detention Facilities – Repealed in its entirety. Amended 2-25-13, Effective 3-15-2013

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<u>I</u> <u>GENERAL PROVISIONS</u>

AUTHORITY - The Planning and Zoning Commission of the Town of Ellington, Connecticut, in exercise of its power as authorized by the Connecticut General Statutes, hereby adopts these Regulations which shall hereafter be known, cited, and referred to as the Subdivision Regulations of the Town of Ellington.

These Regulations supersede Regulations previously in effect.

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1.02 <u>DEFINITIONS</u> - For the purpose of these Regulations, certain numbers, abbreviations, terms, and words used herein shall be used, interpreted, and defined as set forth in this section.

Unless the context clearly indicates to the contrary, words used in the present tense include the future tense; words used in the plural number include the singular; the word "herein" means "in these Regulations"; the word "Regulations" means "these Regulations". A "person" includes a corporation, a partnership, and an incorporated association of persons such as a club; "shall" is always mandatory; a "building" includes a "structure"; a building or "structure" includes any part thereof; "used" or "occupied" as applied to any land or building shall be construed to include the words "intended, arranged, or designed to be used or occupied".

Words and Terms shall be defined as follows:

<u>Administrative Specification</u> - Details as to the form and content of maps, plans, designs, legal instruments, reports, calculations, and other data required to ensure compliance with there Regulations.

<u>Agricultural Purposes</u> - The raising of crops and/or the keeping of livestock and poultry on a farm.

<u>Applicant</u> - The owner of the land proposed to be subdivided, or his representative. Consent shall be required from the legal owner of the premises when the Applicant is other than the owner.

Base Flood - A flood having a frequency of occurring once every 100 years.

<u>Commission</u> - The Planning and Zoning Commission of the Town of Ellington.

<u>Developer</u> - The owner of land proposed to be subdivided, or his representative. Consent shall be required from the legal owner of the premises when the applicant is other than the owner.

<u>Dwelling, Seasonal</u> - A dwelling lived in or used for a period extending from June 1st to November 1st and which may be lived in or used between November 1st and June 1st for a total of not more than thirty (30) days.

Farm - An area devoted to farm uses for gain or expectation of gain, in the raising of agricultural products, livestock, and/or poultry, and/or the production of dairy products.

Lot, Plot, Parcel - A plot or parcel of land occupied or capable of being occupied by one principal building determining the land use form and the accessory buildings, structures, or uses customarily incident to it, including such open spaces as are required by the Zoning Regulations. A piece of land saleable as a unit.

Reserve Strip - A privately owned strip of land which controls access to land dedicated, or to be dedicated, to public use.

<u>Resubdivision</u> - A change in a map of an approved or recorded subdivision or resubdivision if such change

- (a) Affects any street layout shown on such map;
- **(b)** Affects any area reserved thereon for public use; or
- (c) Diminishes the size of any lot shown thereon and creates an additional building lot, if any of the lots thereon have been conveyed after the approval or recording of such map.

<u>Street</u> - Any street, avenue, lane or any right of way dedicated or used for purposes of vehicular traffic.

Subdivision - The division of a tract or parcel of land into three or more parts or lots made subsequent to December 1, 1954, for the purpose, whether immediate or future, of sale or building development expressly excluding development for <u>municipal</u>, <u>conservation</u>, <u>or agricultural</u> purposes, and including resubdivision.

- **1.03 PURPOSES** These Regulations are adopted for the following purposes:
 - i. To protect and provide for the public health, safety, and general welfare of the Town of Ellington.
 - **ii.** To guide the future growth and development of the Town of Ellington in accordance with the **Plan of Development**:
 - **iii.** To provide for light, air, privacy, to secure safety from fire, flood, and other danger; and to prevent overcrowding of the land and undue congestion of population:
 - **iv.** To guide public and private policy and action in order to provide adequate and efficient transportation, water, sanitary facilities, schools, parks, and other public requirements and facilities:
 - v. To provide the most beneficial relationship between the uses of land and buildings and the circulation of traffic throughout the community, so that proposed street shall be in harmony with existing or proposed streets, especially in regard to safe intersections and be so arranged and of such width as to provide an adequate and convenient system for present and prospective traffic needs:
 - vi. To establish reasonable standards of design and procedures for subdivisions and resubdivisions in order to further the orderly layout and use of land: and to ensure proper legal descriptions and monumenting of subdivided land:
 - **vii.** To ensure that public facilities are available and will have a sufficient capacity to serve the proposed subdivision:
 - **viii.** To assure the adequacy of drainage facilities: to safeguard to groundwater quality: and to encourage the wise use and management of natural resources throughout the community in order to preserve the integrity, stability, and beauty of the community and the value of the land.

1.04 JURISDICTION - These Regulations shall apply to the subdivision and resubdivision of land herein defined, located within the corporate limits of the Town of Ellington.

No subdivision or resubdivision of land shall be made by any person, firm or corporation until an application for such subdivision or resubdivision has been submitted to and approved by the Planning and Zoning Commission, and a map thereof has been endorsed by the Commission and filed by the applicant in the Office of the Ellington Town Clerk. Before any construction, grading or other activities for the purpose of Residential, Industrial or Commercial Development begins, there shall be a Plan of Development filed with the Planning and Zoning Commission.

1.05 INTERPRETATION, CONFLICT, AND SEPARABILITY

Interpretation - In their interpretation and application, the provisions of these Regulations shall be held to be the minimum requirements for the promotion of the public health, safety, and general welfare.

Conflict - These Regulations are not intended to interfere with, abrogate, or annul any other ordinance, rule or regulation, statute, or provision of law. Where any provisions of these Regulations imposes restrictions different from those imposed by any other provision of law, whichever provisions are more restrictive or impose higher standards shall control.

Separability - If any part or provision of these Regulations or application thereof to any person or circumstance is adjudged invalid by a court of competent jurisdiction, such judgment shall not affect or impair the validity of the remainder of these Regulations or the application thereof to other persons or circumstances.

- **1.06 AMENDMENTS** For the purpose of providing for the public health, safety and general welfare, the Commission may from time to time amend these Regulations in accordance with the provisions of the Connecticut General Statutes.
- 1.07 <u>CONDITIONS</u> Regulation of the subdivision of land and the attachment of reasonable conditions is a valid exercise of police power delegated by the State to the municipality. The developer has the duty to comply with reasonable conditions imposed by the Commission to protect the public health, safety, and welfare.
- **1.08 PENALTIES** Any person, firm, or corporation making any subdivision or resubdivision of land without the approval of the Commission shall be subject to penalties in accordance with the General Statutes of Connecticut.

- **1.09 SELF-IMPOSED RESTRICTIONS** If the owner places restrictions on any of the land contained in the subdivision greater than those required by the Zoning Regulations, or these Regulations, such restrictions or reference thereto shall be indicated on the subdivision map.
- 1.10 PLATS STRADDLING MUNICIPAL BOUNDARIES Whenever access to the subdivision is required across land located in another municipality, the Commission may request assurance that the access is legally established, and that the access road is adequately improved, or that a performance bond has been duly executed and is sufficient in amount to assure the construction of the access road. In general, lot lines should be laid out so as not to cross municipal boundary lines.
- 1.11 <u>CHARACTER OF THE LAND</u> Land which the Commission finds to be unsuitable for subdivision or development, due to flooding, improper drainage, steep slopes, rock formation, adverse earth formations or topography, utility easements, or other features which will reasonably be harmful to the safety, health, and general welfare of the present or future inhabitants of the subdivision and/or its surrounding areas, shall not be subdivided or developed unless adequate methods are formulated by the developer and approved by the Commission to solve the problems created by the unsuitable land conditions.
- **1.12 WAIVER** The requirements of these Regulations may be waived by three-quarters vote of the Commission when it is demonstrated that strict compliance with such regulations will cause an exceptional difficulty or unusual hardship. The Commission shall not grant a waiver unless it finds the following conditions are met:
 - i. The property for which the waiver is sought is uniquely affected by these Regulations:
 - ii. Physical features of the property or its location cause exceptional difficulty or unusual hardship in meeting the requirements of these Regulations:
 - **iii.** The granting of a waiver will not have a significantly adverse effect upon adjacent property or the public health and safety:
 - iv. The granting of a waiver will not be in conflict with the Plan of Development:
 - **v.** Where it is proposed to vary any engineering standard contained in these Regulations, a favorable report from the Town Engineer has been received.

Waiver Request - A request for waiver shall be submitted in writing by the applicant at the time application for subdivision approval is made. The request shall detail the extent of the waiver requested and contain sufficient data for the Commission to make the finding required above. Late filing may be permitted at the discretion of the Commission.

- **1.13** ADMINISTRATION AND ENFORCEMENT The Office of the Zoning Enforcement Officer shall be responsible for the administration of these Regulations. Enforcement of these regulations shall be by the Commission or its duly authorized representative.
- **1.14 EFFECTIVE DATE** The effective date of these Regulations shall be October 17, 1986.

APPLICATION REQUIREMENTS AND PROCEDURE

2.01 <u>INFORMAL CONSIDERATION</u> - Prior to submission of a formal application for approval of a subdivision or resubdivision, the applicant may prepare an informal plan of the subdivision or resubdivision for informal review by the Commission. If the plan is presented in preliminary rather than final form, any alterations or changes recommended by the Commission may be made more readily and economically by the applicant. Neither the informal plan nor the informal review by the Commission, however, shall be deemed to constitute any portion of the official and formal procedure of applying for and approving subdivisions or resubdivisions under the provisions of Chapter 126 of the General Statutes of Connecticut.

Informal Plan - The informal plan should show sufficient information to allow the Commission to make a general planning review under the standards of these Regulations. It is recommended that the informal plan meet the standards for a Site Development Plan.

Review - When an informal plan is submitted, the Commission may hold a discussion with the applicant and may recommend any changes or improvements in the plan in order to guide the applicant in preparing maps and plans for formal application.

- **2.02 PUBLIC HEARINGS** Public hearings shall be held on all subdivision and resubdivision applications.
- **2.03 SUBMISSION** All applications, maps, plans, documents, and data required by these Regulations shall be submitted to the Planning Department in writing, and when requested by the Commission or the Planning Department in electronic format. The date of receipt of such applications shall be determined in accordance with the General Statues of Connecticut. (*Updated, March 15, 2013*)
- **2.04 APPLICATION REQUIREMENTS** In order to make formal application for approval of a subdivision or resubdivision, the application shall submit the following:

Application - Application for approval of a subdivision or resubdivision shall be made in writing on forms prescribed by the Commission. The application shall be signed by the applicant or his lawful agent; and, if the subdivision or resubdivision is proposed by a person, firm or corporation other than the owner of the land to be subdivided or resubdivided, the application shall also be signed by the owner of the land or his lawful agent. Fees shall be as prescribed in this section. Applications shall be submitted not less than 15 days prior to the next scheduled meeting. (Amended: 14 April 1997)

Wetlands Clearance – All applications for Subdivisions shall be submitted with documentation that demonstrates that either, the site is completely free of all wetlands subsequent to an Inland Wetlands Referral, or that an application has already been made to the Ellington Inland Wetlands Agency for the proposed subdivision and any improvements associated with the proposed subdivision. No subdivision application will be complete without application or referral to the Ellington Inland Wetlands Agency.

Record Subdivision Map - A record subdivision or resubdivision map shall be submitted with the application and shall conform to all of the appropriate requirements of the administrative specifications appended to and made part of these Regulations.

Sanitation Report - Every application for approval of a subdivision must include satisfactory evidence that the site has suitable physical characteristics to adequately satisfy all the current requirements of both the Town, the Connecticut State Department of Health, Department of Environmental Protection, North Central District Health Department or other regulatory agency for subsurface sewage disposal, or that the proposed lots can be connected to an operational public sanitary sewer. The sanitary report for on site systems shall be prepared by a professional engineer and meet the requirements of the administrative specifications. When it is proposed to connect to public sanitary sewers, a sewer feasibility study, as required by the Town Engineer, shall accompany the subdivision application and the approval of the Water Pollution Control Authority is required before the Public Hearing on the Application.

Additional Data - The following data shall be provided as appropriate, and when, in the judgment of the Commission, the scale, scope of work and complexity of the subdivision warrant.

- 1. Construction Plans Plan and profile drawings and typical cross sections, including the design of sanitary sewers, catch basins, manholes, ditches, watercourses, headwalls, sidewalks, gutters, curbs, bridges, culverts, and other structures and improvements required by these Regulations.
- **2. Site Development Plan** A site development plan shall conform to all the requirements of the administrative specifications.
- **3. Grading Plan** A grading plan showing existing and proposed grades and other data as required by the administrative specifications.

- 4. **Hydrological Report** Design of the storm drainage system to include special structures, shall be supported by a hydrological report prepared by a civil engineer licensed as a P.E. in the State of Connecticut. This report shall, at the minimum, include a copy of the base map used to determine watershed and drainage patterns, and the methodology used to compute runoff and pipe sizes.
- **5. Easements and Deeds** Copies of all easements and deeds necessary to carry the subdivision plan into effect, including instruments proposed to be executed or delivered after approval of the application.
- **6. Cost Estimate** An engineer's estimate of the cost of construction of public improvements.
- 7. **Permits and Agreements** Copies of State and Federal permits, if issued, and copies of proposed agreements with utility companies.
- **8. Supplemental Data** Other data and information may be required from the applicant in order to establish that the proposed subdivision complies with the requirements of these Regulations.
- 9. Names and addresses of property owners within 500 feet of each property line as well as the footprint locations of existing structures on land adjacent to the proposed development. (*Updated, March 15, 2013*)
- **2.05 CONSIDERATION OF PROPOSED SUBDIVISION** After the above application requirements have been met to the satisfaction of the Commission, the Commission shall consider the application in accordance with the following procedures:

Hearing - Public hearings shall be held as required by **Section 2.02** of these Regulations. Notice of any public hearing shall be given as required by Connecticut General Statutes. Notice shall also be given, in writing, to owners of property adjoining and to owners of property directly across any street from the proposed subdivision.

Decision - The Commission shall approve, approve with modifications, or disapprove, any subdivision application and maps and plans submitted therewith within sixty-five (65) days after the date of completion of the public hearing thereon. An extension of time not to exceed a further period of sixty-five (65) days may be had with the consent of the applicant.

Approval - The Commission shall give approval to the subdivision if it finds that the subdivision map and plans and accompanying certificates, documents, and data conform to the requirements and are consistent with the purposes of these Regulations.

In granting approval, the Commission may attach such conditions that it deems necessary to modify the subdivision map, plans, or documents, and to preserve the purpose and intent of these Regulations.

2.06 FILING AND RECORDING - Any plan for subdivision shall upon approval, or when taken as approved by reason of the failure of the Commission to act, be filed or recorded by the applicant in the Office of the Town Clerk within ninety (90) days of the date such plan is delivered to the applicant and any plan not so filed or recorded within the prescribed time shall become null and void, except that the Commission may extend the time for such filing for two additional periods of ninety (90) days upon the written request of the applicant and the plan shall remain valid until the expiration of such extended time. All such plans shall be delivered to the applicant for filing or recording promptly after the time for taking an appeal from the action of the Commission has elapsed and in the event of an appeal, promptly upon the termination of such appeal by dismissal, withdrawal, or judgement in favor the applicant. No such plan shall be recorded or filed by the Town Clerk until its approval has been endorsed thereon by the Chairman or Secretary of the Commission, and the filing or recording of a subdivision plan without such approval shall be void. (Updated, January 29, 2001)

Certificate/Bonding - Prior to filing and recording the map, a Certificate of Completion for all required subdivision improvements shall be submitted, together with a statement from the Town Engineer reflecting that the public improvements called for in the subdivision plan have been completed. In lieu of the completion of such work and installation previous to the filing of the subdivision map, the First Selectman may, on behalf of the Commission, accept a bond in accordance with the provisions of Section 3.01.

Conditional Approval - In lieu of either the completion of the work or the furnishing of a bond as previously provided for, the Commission may authorize the filing of a plan with a conditional approval endorsed thereon. Such approval shall be conditioned on

- (1) The actual construction, maintenance and installation of any improvements or utilities prescribed by the Commission; or
- (2) The provision of a bond.

Upon the occurrence of either such events, the Commission shall cause a final approval to be endorsed thereon in a manner provided for by these Regulations. Prior to such final approval, no lot may be offered for sale, nor shall any building permits be applied for or issued for lots granted conditional approval. A note to this effect shall be placed on the subdivision map. Any such conditional approval shall lapse on the date specified by the Commission, which period shall not exceed five (5) years from the date such approval is granted. The applicant may apply for and the Commission may, in its discretion, grant a renewal of such conditional approval for an additional period of up to five (5) years. Any person, firm or corporation who, prior to such final approval, sells any lot subdivided pursuant to a conditional approval shall be fined in accordance with the provisions of State Statute.

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ASSURANCE FOR COMPLETION AND MAINTENANCE OF IMPROVEMENTS

- **3.01 BONDS and SECURITY.** (Effective 2/15/2012, 3.01 through 3.05 repealed and replaced)
 - 3.01.1 **Definition Bond**. A contractual agreement by the Developer or Permittee agreeing to construct all public improvements within the time provided in these regulations and as authorized by the Commission or upon failure to do so to provide a stated amount to be paid to the Town sufficient for the Town to accomplish the construction. The Bond shall be duly executed on forms provided or approved by the Town, with proper references to all maps and plans showing the streets, drainage and other improvements covered by the bond in a penal amount established pursuant to Sec. 3.02.
 - 3.01.2 **Definition Security**. A financial guarantee from a source recognized by the Town to have available cash equal to the penal sum of the bond it secures.

For the purposes of this section, security shall mean one of the following:

- 3.01.2.1 A Surety Bond from a company licensed to do business in the State of Connecticut accompanied by a power of attorney of the person executing the Bond for the company;
- 3.01.2.2 A Pledge of a passbook, statement savings account or Certificate of Deposit acknowledged by the bank that the account has been pledged to the Town until such time that the Town provides the financial institution with written authorization releasing a portion or all of said funds;
- 3.01.2.3 An irrevocable letter of credit provided by a bank or other similar reputable financial institution with an office in Connecticut either without an end date or automatically renewed without action by the Town for the duration of the bond;
- 3.01.2.4 Any other form of security satisfactory to the Finance Officer and the Town Attorney; or
- 3.01.2.5 Cash deposited with the Town.
- 3.01.2.6 All such security shall be subject to the approval as to form and content by the Finance Officer and the Town Attorney.

- **3.02 BOND CALCULATION AND APPROVAL.** The developer or permittee may prepare a detailed breakdown of major public improvements to be bonded and shall submit the breakdown to the Town Engineer for review and approval. The amount of the bond shall be recommended by the Town Engineer using prices that would be the cost to the Town to complete the improvements plus a contingency amount not to exceed ten percent of such costs considering that the Town will not perform the work until the applicant has been given ample time to complete the work. Upon consideration of the recommendation, the Commission shall set the bond amount. (*Updated, March 15, 2013*)
- 3.03 FAILURE TO COMPLETE IMPROVEMENTS. Where a Bond has been posted and required improvements have not been installed within the provisions of these regulations and as may have been extended by the PZC, the PZC may declare the Bond to be in default, demand the entire amount of the bond be deposited with the Finance Officer and cause all the improvements to be installed through contractors engaged by the Director of Public Works and paid from the bond deposit. Upon completion of the installation of all improvements required by the approved plans, any excess in the bond deposit shall be returned to the surety.
- 3.04 PARTIAL RELEASE REDUCTION OF BONDS. The Developer may file a written request for reduction of the bond with the Town Planner that states the work that has been completed justifying the reduction. The Town Planner shall immediately refer the request to the Town Engineer who shall inspect the work and file a report with the PZC so that the PZC can act upon the request within 65 days of the request. The PZC may reduce the security in such amount as it determines appropriate or deny any reduction. Any such action will be delivered by the Town Planner to the Finance Officer on the 7th business day following PZC action to reduce a bond and the FO shall record the reduction on his records and advise the Developer and surety of the reduction.

Should the Town Engineer find that additional work is necessary to complete the work described in the request, he will describe such additional requirements in his report and adjust any recommended reduction accordingly. A copy of the report will be provided to the applicant within that 65 day time frame and an additional request for reduction/release will be required. Under the MF, ARCHZ or WCHZ regulations no more than 85% of the total project bond shall be released prior to issuance of a certificate of zoning compliance for the last unit.

- **3.05 FINAL RELEASE OF PERFORMANCE BOND.** Bond will not be released until the following conditions have been met:
 - 3.05.1 The applicant's engineer or surveyor has provided detailed "as-built plans" certified as accurate with a separate or special certification that the layout of the line and grade of all public improvements and as-built topography of all drainage basins is in accordance with construction plans for the subdivision;

- 3.05.2 The applicant's surveyor has certified in writing that all pins and monuments required by the approved plan are installed;
- 3.05.3 The Town Engineer has submitted a certificate stating that he has reviewed the applicant's engineer's certifications and finds them satisfactory;
- 3.05.4 All documents required by the "Acquisition Agreement for a Public Right-of-Way" (aka "Deed") have been presented and all conditions and requirements of the Commission's approval of the subdivision application have been satisfied;
- 3.05.5 All public improvements, including roads, called for in the final plan have been accepted by the Town;
- 3.05.6 The applicant has paid the Town for cost of inspections, snow removal on streets and sidewalks, if required;
- 3.05.7 If fee-in-lieu of open space (FILO) has been agreed upon, a FILO Lien shall be recorded on the land records for all unpaid fees.
- **3.06 MAINTENANCE OF IMPROVEMENTS**. The applicant shall be required to maintain all improvements until acceptance of said improvements by the Town as set forth in Sec. 3.05 Final Release.
 - 3.06.1 Upon issuance of a CO for any residence in a subdivision accessible by a subdivision road not yet accepted by the Town, and in order to provide necessary access to that residence for emergency vehicles and to provide the residents winter access, the Town through its Public Works Department will provide snow plowing and winter road maintenance for so much of the newly constructed road as required to provide access to occupied homes at the Developer's expense. The Developer will be notified prior to December 1 of each year of the charges that will be made and will receive a bill for actual service on or about April 30 of each year payable when received which amount the Developer agrees to pay by accepting the subdivision approval and CO for any residence accessible only by a subdivision road not yet accepted.
- 3.07 MAINTENANCE BOND. The applicant shall be required to file a Maintenance Bond, also known as a warranty of public improvements, and financial guarantee as provided for in Section 3.01.2 with the Town prior to acceptance, in order to assure the satisfactory condition of the required improvements, for a period of one (1) year after the date of their acceptance by the Town. The guarantee shall be no less than equal to 15% of the original cost of improvements. (Added, March 15, 2013)

<u>IV</u> DESIGN STANDARDS

4.01 GENERAL IMPROVEMENTS - Subdivisions and resubdivisions, including related streets, drainage, and other improvements required by these Regulations, shall be planned, designed, and constructed in accordance with the standards hereinafter specified.

Plan of Development - Subdivisions shall be planned and designed in general conformity with the Plan of Development, adopted by the Commission for the Town under Chapter 126 of the Connecticut General Statutes, particularly with regard to:

- **i.** Location and classification of streets.
- ii. Sanitary sewer, water supply, and drainage system service area.
- **iii.** Reservation of land for parks, recreation, and open space.

Subdivision Name - The proposed name of the subdivision shall not duplicate, or too closely approximate phonetically, the name of any other subdivision in the Town.

Open Spaces – Open space is land set aside within or in conjunction with a subdivision or other development to preserve the open and natural character of the land, to be developed as a park or a playground pursuant to CGS, Section 8.2, or other similar public use. Open space land is not to be developed for residential or business purposes or part of the infrastructure of the town unless the public use intended compliments specifically the use of the open space land.

Monuments - Permanent reference monuments shall be placed within the subdivision as follows:

i. Town road right-of-way merestones, perimeter boundary and lot corners shall conform to Class A-2 of Code of Recommended Practice for Standards of Accuracy of Maps, as amended. A land surveyor registered in the State of Connecticut shall certify as to the correctness of the placement of such monuments.

- ii. Highway lines shall be monumented at all angle points, PC's, PT's, and PRC's. The maximum distance between highway merestones will be 500 feet on tangent or curved sections of the highway line. Highway merestones will be set to the accuracy of Class A-2 of the Connecticut Technical Council, Inc. The proposed highway line will be tied into existing highway lines by distance and bearing. Additional highway merestones may be required at locations on the highway line as required by the Town Engineer.
- iii. All lot boundaries shall be permanently located by iron or steel stakes at least 3/4 inch in diameter and thirty (30) inches in length. Pins shall be placed at each corner and/or at each change of bearing. Each lot number shall be identified by a legible durable sign until a house number is assumed.

4.02 LOT IMPROVEMENTS AND ACCESS

Lot Arrangement - The lot arrangement shall be such that there will be no foreseeable difficulties, for reasons of topography or other conditions, in securing building permits to build on all lots in compliance with the Zoning Regulations and Health Codes and in providing driveway access to buildings on such lots from an approved street.

Double Frontage - Double frontage and reversed frontage lots may be required where necessary to provide separation of residential development from traffic arterials or to overcome specific disadvantages of topography and orientation.

Lot Access - Where driveway access from a major or secondary arterial street may be necessary for several adjoining lots, the Commission may require that such lots be served by a combined access drive in order limit possible traffic hazard on such street.

Rear Lots - In general, rear lots shall be avoided. However, where topography or unusual shape of a parcel dictates, in the opinion of the Commission, that the best use of the land would be as a rear lot, said lots may be permitted.

Lot Arrangements on Existing Streets - Lots proposed for existing streets shall, in addition to meeting other applicable standards of these Regulations, be arranged to confirm with following:

- i. Where no street lines have been established on an existing street, front property lines for subdivision lots shall not be closer than 25 feet from the center of the road or 50 feet from and parallel to an established street line on the opposite side of the street. The title to all land between the center of the road and the front property lines of the subdivision lots shall be dedicated to the Town in accordance with the legal requirements for such a procedure.
- **ii.** Where the grade of the existing street will be materially higher or lower than the proposed lots fronting on it, the Commission may, for reason of providing adequate sight distance on driveways, alleviating excessive or hazardous slope, or excessive runoff, require any lot or any part of such lot to be regraded as necessary.
- **iii.** Where the finished grading of a lot fronting on an existing street will cause drainage problems in that street, the developer shall, at his expense, install drains in the street or make such other provisions as may be necessary to correct the condition.
- iv. Surface of existing public streets shall be capable of providing safe access to proposed lots. The Commission may require repairs by Developer, if necessary. Amended 2-19-88
- **4.03 LOT DIMENSIONS** Lot dimensions shall comply with the minimum standards of the Zoning Regulations. In general, side lot lines shall be at right angles to street lines (or radial to curving street lines) unless a variation from this rule will give a better street or lot plan.

Lots shall be laid out so as to provide positive drainage away from all buildings and individual lot drainage shall be coordinated with the general storm drainage pattern for the area. Drainage shall be designed so as to avoid concentration of storm drainage water from each lot to adjacent lots.

Water Bodies and Watercourses - If a tract being subdivided contains a water body, or portion thereof, lot lines shall be so drawn that responsibility for safe maintenance of the water body is assured.

SOLAR ACCESS - The applicant shall demonstrate to the Commission that the subdivision planning process has considered site design techniques that promote solar energy use. The site design techniques shall include, but not be limited to, house orientation, street and lot layout, use of landscaping and natural vegetation, natural and manmade topographic features, and protection of solar access within the development.

Lots shall be arranged, where possible, to provide for orientation of buildings to the south in order to encourage solar energy use.

Streets should have an East-West orientation to the greatest extent possible to permit orientation of buildings to the south and thereby encourage solar energy use.

4.05 STREET - GENERAL - No subdivision shall be approved unless the area to be subdivided shall have access from a public street which is suitably improved and paved.

Unless approved by the Commission as private streets in accordance with Section 416 of these regulations, all proposed new streets within a subdivision shall become public streets and shall be deeded to, and accepted by the Town upon certification by the Town Engineer that they have been properly constructed. (*Updated July, 20 1999*)

It shall be adequate if the point of access is a road shown on an improved Subdivision Plan which is still under construction provided such approved road is subject to a performance bond to guarantee completion and such work is not in default.

Proposed subdivision abutting on an existing town street or state highway shall provide for proper widening of the right of way of such street or highway by the Commission. The applicant shall be responsible for improving the roadway to the point where the existing public road meets or exceeds then current standards of the Ellington Department of Public Works as adopted by the Board of Selectmen.

Plans shall be prepared showing the extent of the improvements and include a survey definition to Class A-2 as defined in the Code of Practice for Standards of Accuracy of Surveys and Maps adopted December 10, 1975 as amended by the Connecticut Association of Land Surveyors, Inc. Where the locations of such roadlines is in dispute with abutting property owners, boundary line agreements and/or deeds of conveyance to the town shall be obtained to fix such line according to the survey.

Plans showing required road improvements shall be prepared by the applicant and submitted to the Town Engineer for review prior to a Public Hearing being scheduled. An applicant may choose to seek either conditional or final subdivision approval in accordance with **Section 2.06** of these regulations. Bonding shall be required to insure the completion of all required road improvements in accordance with **Section 3.01** of these regulations. Amended 2-19-88

Street Grading and Improvement - Streets shall be graded and improved and conform to Town construction standards and specifications and shall be approved as to design and specifications by the Town Engineer. Streets shall be related appropriately to the topography. Local streets shall be curved wherever possible to avoid conformity of lot appearance. All streets shall be arranged so as to obtain as many as possible of the building site at, or above, the grades of the streets. Grades of streets shall conform as closely as possible to the original topography. A combination of steep grades and curves shall be avoided.

Traffic Circulation Plan - All streets shall be properly integrated with the existing and proposed system of streets and dedicated rights-of-way as established in the Circulation Plan of the Plan of Development. Additionally, all streets shall be properly related to specific traffic generators such as industries, business districts, schools, churches, and shopping centers; to population densities; and to the pattern of existing and proposed land uses.

Street Extensions - Where required by the Commission, rights-of-way shall be provided for extending streets to adjoining unsubdivided property. Land in such rights-of-way shall be deeded to the Town.

Where a proposed subdivision abuts an approved subdivision containing a future street rights-of-way, the developer of the proposed subdivision shall construct the street and all required improvements from the proposed subdivision to the approved street in the existing subdivision.

New streets shall be extended to the boundaries of the subdivision to provide access to adjoining property, and shall intersect with other streets where designated by the Commission or as shown in the Plan of Development.

Temporary Dead End Streets - Where a temporary turnaround is provided on a street that is to be extended in the future, the 50 foot street right-of-way to the subdivision boundary shall be deeded to the Town, and the segments of the turnaround outside the 50 foot street shall be deeded to the abutting lot owners subject to an easement to the Town for street purposes. When such street is extended beyond the turnaround, the subdivider constructing the extended street shall remove the road construction in the segments of the temporary turnaround, fill with earth and loam and seed in an appropriate manner.

Street Names - All street names shall be shown on subdivision plans and shall be approved by the Commission. Proposed street names shall be substantially different from any present names to avoid confusion in sound or spelling. Streets that become extensions of existing streets shall generally bear the same name.

Street Lighting Facilities - The applicant shall be required to install one lighting pole at each intersection, together with any additional lighting poles as the Commission may require, to prevent hazard. The location of such poles shall be shown on the Construction Plans under **Section 2**. The cost of all lighting fixtures, poles, and installation shall be the responsibility of the developer. The developer shall bond such lighting facilities with all other public improvements.

Street Name Signs - The developer shall be responsible for the cost and installation of street name signs. Such signs shall be placed at each intersection with existing streets as well as at each intersection within the development. The developer shall bond such street name signs with all other public improvements.

Traffic Control Devices - The developer shall be responsible for the cost and installation of any traffic control devices deemed necessary by the Traffic Authority. The developer shall bond such traffic control devices with other public improvements. Necessary state permits for work related to state highways shall be the responsibility of the developer and shall be coordinated through the office of the Local Traffic Authority.

Reserve Strips - The creation of reserve strips shall not be permitted adjacent to a proposed street in such a manner as to deny access from adjacent property to such street.

4.06 <u>CUL-DE-SAC OR DEAD END</u> - A temporary turnaround shall be provided on all temporary cul-de-sac streets, with the notation on the subdivision map that land outside the normal street right-of-way shall revert to abutters whenever the street is continued.

Permanent Cul-de-sac - Permanent cul-de-sac may be permitted providing such a design will not

- (i) Impede the circulation requirements of the Plan of Development;
- (ii) Cause undue concentrations of traffic:
- (iii) Be prejudicial to the needs of public health and safety by unduly delaying or inhibiting access to lots. A permanent dead end street shall not exceed 1000'.
- **4.07 DESIGN STANDARDS** In order to provide for streets of suitable location, width, and improvement to accommodate prospective traffic and afford satisfactory access to police, fire fighting, snow removal, sanitation, and road maintenance equipment, and to coordinate streets so as to compose a convenient system and avoid undue hardships to adjoining properties, the following design standards for streets shall be adhered to:

TABLE 1

Street Class	R-O-W Width	Pavement Width	Maximum Grade	Minimum Grade	Speed	Design Cross Slope
Collector	50 ft.	32 ft.	8%	1%	35 MPH	1/4"/ft.
Local	50 ft.	26 ft.	8%	1%	30 MPH	1/4"/ft.

Street classification may be indicated on the Plan of Development; otherwise it shall be determined by the Commission. Streets of a higher classification, i.e. primary and secondary arterial shall, at the minimum, meet collector street standards.

Local streets are defined as those streets intended to provide access to other roads from individual residential properties.

Grade - The maximum grade shown in **Table 1** may be increased to 10% for collector, 12% for local street, and 14% for limited local, upon recommendation of Town Engineer.

Curbs - Curbs shall be required on all new streets and shall conform to construction and design standards of the Town. Note that on curves of less than 100' radius, concrete curbs are required.

Guide Rails - Guide rails shall be provided where the side slope on fill is steeper than one vertical to four horizontal. Such rails shall conform to the standards and specifications adopted by the Town.

Street Pavement - All street pavement, shoulders, drainage improvements and structures, curbs, turnarounds, and sidewalks shall conform to all construction standards and specifications adopted by the Town.

Right-of-Way - The full width of the street right-of-way shall be graded in accordance with the highway specifications of the Town. This requirement may be modified where, in the opinion of the Commission and upon recommendation of the Town Engineer, the existing character of the land creates unusual difficulty or will require removal of desirable natural growth, and where the location and type of street appears not to require sidewalks in the future.

4.08 <u>INTERSECTIONS</u> - Streets shall be laid out so as to intersect as nearly as possible as possible at right angles. A proposed intersection of two (2) new streets at an angle of less than eighty (80) degrees or more than one hundred (100) degrees shall not be acceptable. An oblique street should be curved approaching an intersection and should be approximately at right angles for at least one hundred (100) feet there from. Not more than two (2) streets shall intersect at any one point unless specifically approved by the Commission.

Proposed New Intersections - Proposed new intersection along one side of an existing street shall, wherever practicable, coincide with any existing intersections on the opposite side of such street. Street jogs with center line offsets of less than 150 feet shall not be permitted. Where streets intersect major streets (collector class and higher), their alignment shall be continuous.

Curb Radius - Minimum curb radius at the intersection of two (2) local streets shall be at least twenty-five (25) feet; and minimum curb radius at an intersection involving a collector street shall be at least thirty (30) feet.

Cross Section - At street intersections, the normal cross section of the main street shall be maintained. The center line grade of the secondary street shall begin at the curb line of the main street and have a maximum grade of 2% for at least fifty (50) feet from said curb line. Maximum may be increased to 4% at the discretion of the Commission, when the proposed street is a permanent cul-de-sac less than 400 feet in length.

Street Intersections - Where any street intersection will involve earth banks or existing vegetation inside any lot corner that would create a traffic hazard by limiting visibility, the developer shall cut such ground and/or vegetation (including trees) in connection with the grading of the public right-of-way to the extent required by the Commission to provide adequate sight distance. A sight line easement shall be shown on the subdivision map limiting future plantings within this area to ensure the continuance of adequate sight lines.

4.09 <u>DRAINAGE AND STORM SEWERS</u> - The developer shall be fully responsible for constructing adequate facilities for the control, collection, conveyance and acceptable disposal of storm water, other surface water and subsurface water, whether originating within the subdivision area or in a tributary drainage area. All drainage facilities shall be designed by a professional engineer registered in the State of Connecticut. The storm water drainage system shall be separate and independent of any sanitary sewer system. Storm sewers, where required, shall be designed by methods as approved by the Town Engineer.

Location of Storm Water Facilities - Drainage facilities shall be located in the street right-of-way where feasible, or in perpetual unobstructed easements, where necessary. Such easements shall be at least twenty (20) feet in width.

When a proposed drainage system will carry water across private land outside the subdivision, appropriate drainage rights must be secured and indicated on the map.

The applicant may be required to dedicate, either in fee or by drainage or conservation easement, land on both sides of existing watercourses to a distance to be determined by the Commission and the Town Engineer.

Flood Plains - Low-lying lands along watercourses subject to flooding or overflowing during storm periods shall be preserved and retained in their natural state as drainage ways. No use shall be permitted in a flood plain except by special permit.

Drainage Discharge - The discharge of all storm water from a subdivision shall be into suitable streams or other acceptable and suitable storm water drainage facilities having adequate capacity to carry the additional water. Where the discharge will be into private property, proper easements and discharge rights shall be secured for the Town by the applicant from all affected property owners. Such easements must be acceptably executed before acceptance of drainage plan and recording of the subdivision map.

Where a new street intercepts an existing street which has no underground drainage system or has a drainage system of insufficient capacity to carry the additional flow, appropriate facilities shall be installed by the developer to intercept and dispose of any drainage from the new street which would otherwise be discharged onto the surface of the existing street or into its drainage system.

Subdivision Standard for the Flood Plain District - All subdivision proposals and other proposed new development shall be reviewed to determine whether such proposals will be reasonably safe from flooding. If any part of a subdivision proposal or other new development is located within the Flood Plain District established under the Regulations it shall be reviewed to assure that:

- i. The proposal is designed consistent with the need to minimize flood damage, and
- ii. All public utilities and facilities, such as sewer, gas, electrical, and water systems shall be located and constructed to minimize or eliminate flood damage, and

- **iii.** Adequate drainage systems shall be provided to reduce exposure to flood hazards, and
- **iv.** Base flood elevation (the level of the 100-year flood) data shall be provided for proposals greater than 50 lots or 5 acres, whichever is the lesser, for that portion within the Flood Plain District.
- **4.10 DRAINAGE DESIGN** All designs shall be based on the maximum ultimate development of the entire watershed as permitted by the Zoning Regulations at the time of the application. All bridges and culverts shall be designed such that the required head and backwater produced by the structure shall not cause flooding of abutting property.

On watersheds one square mile or over, the design of culverts, bridges and through watercourses shall be based upon not less than a 100-year storm. On watersheds of less than one square mile, the design for the through drainage system shall be for not less than a 50-year storm.

The drainage system for roads, including catch basins, inlets, pipes, underdrains, and gutters within or abutting the subdivision shall be designed for not less than a 10-year storm.

Adequate underdrains shall be constructed whenever, in the opinion of the Town Engineer, drainage conditions require it. They may be required even though not shown on the approved construction plans. Design shall be as approved by the Town Engineer.

Drainage ditches will, in general, not be permitted where it is feasible to install underground pipe. Lead-off culverts shall be extended to grade.

Culverts under streets shall be extended at least to the edge of the right-of-way of the street. Headwalls, paving, flared ends, and/or riprap, adequate to prevent erosion, shall be provided at the ends of all culverts, as approved by the Town Engineer.

Detention basins shall be generally avoided unless other design approaches are approved by the Town Engineer, zero increase in rate of storm water runoff shall be the criteria utilized in the design of the drainage system for the proposed subdivision. For the purposes of this section, zero increase shall mean that the rate of storm water discharge at a given discharge point for the 50 year storm after development shall be equal to or less than the rate of storm water discharge prior to development.

4.11 DRAINAGE/DETENTION DESIGN (Effective 2/15/2012)

Regardless of the ultimate ownership or maintenance responsibility of any drainage/detention basin, each shall be designed by a professional engineer, who shall also supervise and inspect the construction and shall file a report on said inspections upon completion of the project and prior to acceptance of said improvements. The report shall include results of compaction tests; analysis of materials used in the embankment, shall demonstrate compliance with the approved plans and shall certify to the Town that the basin and all of its components has been constructed in accordance with the approved plans.

4.12 WATER - A potable, adequate, and dependable water supply shall be provided for every lot or dwelling unit. Such supply must be constructed and installed in accordance with applicable state and local requirements.

Public Water Supply - Public water supply shall be required to serve all of the following:

i. Any subdivision within the required distance of an existing public water service, which has a supply adequate to serve such subdivision as determined by the following formula: Ultimate number of lots times 100 feet equals distance of extension.

Fire Hydrants - Where a public water main is extended, fire hydrants shall be installed at no expense to the Town, at specific locations and with properly sized mains and laterals as required by the Fire Marshal using national standards or State of Connecticut Department of Public Health standards as guides. The Fire Marshal may also require a report from the applicant that demonstrates adequate volumes and pressures. (*Updated*, *March 15*, 2013)

Private Wells - In a subdivision which is located where a public water service is not required, a private well shall be permitted for each lot provided that:

- (1) Topographic and geological conditions are satisfactory;
- (2) Each well can be designed, located and constructed in accordance with the standards and requirements of the Connecticut Department of Health;
- (3) Each well shall have the approval of the Health Director.

- (4) Any proposed well for potable water consumption shall be so situated as to have a minimum seventy-five (75) foot non-contamination radius located entirely in the lot it is servicing or has the benefit of an easement over the adjacent property to be encumbered by said easement. (Effective date: 9/15/2008)
- 4.13 <u>SEWAGE DISPOSAL FACILITIES</u> Every application for approval of a subdivision must include satisfactory evidence that the site has suitable physical characteristics to adequately satisfy the current requirements of the Health Code, Department of Environmental Protection, North Central District Health Department, or other regulatory agency for subsurface Connecticut Public sewage disposal or that the proposed lots can be connected to an operational public sanitary sewer. The extension of any public sewer shall be in accord with plans as adopted by the Water Pollution Control Authority.

Sanitary Sewage Systems shall be constructed as follows:

Where a public sanitary sewage system is reasonably accessible, the applicant shall connect with same and provide sewers accessible to each lot in the subdivision.

Where sanitary sewer systems are not reasonably accessible, individual disposal systems may be utilized. Such systems must be approved, constructed and installed in accordance with the current local and state regulations and requirements.

- **4.14 SIDEWALKS** Sidewalks shall conform to the design requirements of the Town. Except as otherwise provided in Section 4.16, (*Updated, July 30, 1999*) Sidewalks shall be required on one side of the street. The opposite side of the street shall be graded to accommodate, if necessary sidewalks at a future date.
- 4.15 SOIL EROSION AND SEDIMENT CONTROL PLAN Where the cumulative area of disturbance will exceed 1/2 acre, a plan meeting the standards contained in "Connecticut Guidelines for Soil Erosion and Sediment Control" (1965) shall be submitted and followed in the development of the subdivision, as the same may be amended from time to time.
- **4.16** <u>UTILITIES</u> All utility lines shall be located underground except that the Commission may approve overhead electrical and telephone lines in subdivisions not involving new streets, or where physical conditions make underground installations impractical.

Underground locations shall generally comply with the following:

- i. Sanitary sewers Center line of street.
- ii. Storm sewers Edge of street opposite water line.

- **Water line** Within right-of-way above and at least 10 feet from sanitary sewer line or sewage disposal system.
- iv. Electric, telephone, and cable TV Within right-of-way opposite the water line.
- **4.17 PRIVATE STREETS** (*Effective July 30, 1999*)- Not withstanding any provision of Section 4.05 above to the contrary, and applicant may propose to construct a private street, or to utilize an existing private street, to serve two or more lots and the Commission may approve such subdivision provided the street complies with the terms hereof.

The Commission shall not approve the establishment of a private street when such street is proposed to connect with two or more public streets or when the Commission requires such street to be extended off site either in the present or future and such adjoining land is not under the control of the applicant at the time of the application.

When a private street is propose to serve five (5) lots or less, provisions for the ownership and maintenance of such street(s) may be provided by agreement between all homeowners or by the establishment of a homeowner's association under terms of the Connecticut Common Interest Ownership Act. The Commission shall approve the entity which owns such street(s). When a private street is proposed to serve more than five (5) lots, the ownership and maintenance of such street(s) shall be by the establishment of a homeowner's association under the terms of the Connecticut Common Interest Ownership Act.

Number of Lots	R-O-W Width	Pavement Width	Turnaround / Culdesac
1 to 3 50 feet		18 feet	None Required
4 to 5	50 feet	20 feet	None Required
6 to 20 50 feet		22 feet	Yes
21 or more	50 feet	26 feet	Yes

The following design standards shall apply to private streets, based upon the number of lots being served by the private street, and these standards shall control in the event of any inconsistencies with standards found elsewhere in these Regulations.

The subdivider of an approved subdivision containing a private street shall provide a bond to guarantee the completion of all common drainage and private streets, in

conformance with Section 111, of the Regulations. A maintenance bond will not be required.

Sidewalks, curbing, drainage, grade slope, and other design standards shall be as required by the Town Engineer.

4.18 OPEN SPACE (Effective date: 2/15/08)

The commission has found that development of land for residential or business use will cause an increase in the population, the intensity of land use, and the need for open space, parks, or playgrounds to serve the residents of the town. To meet this need, it is the policy of the Town of Ellington to preserve open space in accordance with the requirements set forth herein.

These open space and recreation requirements have been prepared from a regional perspective in an effort to preserve wildlife habitat, flora and fauna, while preserving for the citizens of the region an area in which to enjoy nature, with an opportunity to walk, jog, cross country ski, bicycle, picnic, fish, wade, sit, or otherwise spend time in a natural setting. In addition to these passive activities, these requirements recognize the importance of areas which may be used for active recreational activities which include competitive sports. In addition, these requirements recognize the importance of the Town's agricultural areas, which the town strives to preserve in an effort to provide locally grown fruits and vegetables, dairy products, trees, shrubbery, and similar products.

The open space and recreation requirements outlined herein are based on the Town Plan of Conservation and Development and the Plan of Conservation (aka Open Space Plan). In determining the appropriateness of an open space and/or recreation area disposition, the Commission shall consider initiatives of the aforementioned plans, the advisory opinion of the Ellington Conservation Commission, and the characteristics of the subject site with respect to the following objectives: The conservation and protection of wildlife and natural or scenic resources including lakes, ponds, rivers, streams, streambelts, inland wetlands, riparian buffer zones, aquifers, significant woodlands, ridges, ravines, ledge outcroppings and other unusual physical features; the protection of historic or archeological sites; the expansion of existing open space, and recreational areas and the meeting of neighborhood and/or community-wide recreational needs. In determining the location of open space, the Commission may consider potential for combination with existing or proposed open space on adjoining properties owned by any public or private institution.

4.18.1 FLEXIBILITY OF APPROACH

- 1. In accordance with Section 8-25 of the Connecticut General Statutes (CGS), such preservation may be accomplished through the dedication of one or more parcels of open space land in the subdivision or through the provision of a fee-in-lieu-of dedication of land or both.
- 2. The Commission is aware that it is not desirable in all situations to require the dedication of open space land in all subdivisions, particularly those which are small, and because there is a need to treat all subdividers equally, the Commission may, at its discretion, accept a fee-in-lieu-of land dedication from the subdivider for all or any part of the open space, in accordance with the provisions of section 8-25 of the CGS.

4.18.2 DECLARATION AND CONSIDERATION

- 1. At the time of filing the formal application to the Commission for subdivision approval, the subdivider shall indicate on the application and final plans whether ten (10%) of the land will be dedicated to open space purposes or a fee-in-lieu-of the land for open space will be paid to the town or a combination of land dedication and fee is proposed as advised by the Ellington Conservation Commission.
- 2. The Commission shall consider the proposal and make the final determination after discussing with the subdivider as to whether land shall be dedicated, or fee levied, or any combination thereof.

4.18.3 DEDICATION REQUIREMENTS

- 1. Where the open space requirement will be met through the dedication of land, the total area reserved for open space shall equal or exceed ten percent (10%) of the total land area of the subdivision.
- 2. The location of open space parcels shall be designed in accordance with one or more of the following factors appropriate to the site (some do conflict with others):
 - a. Where new roads are proposed, open space is located so as to create a buffer between existing Town/State road(s) and the proposed lots.
 - b. The open space is designed as a buffer between the proposed and existing abutting properties.

- c. The open space is located to preserve such natural features as scenic vistas, ridge tops, significant tree groves, waterfalls, and environmentally scenic areas.
- d. The open space is located in areas to preserve significant man made features such as stone walls, canals, or historic structures.
- e. The open space is located so as to preserve primary and secondary agricultural lands.
- f. The open space is located in areas which connect existing open space or areas with the greatest potential for future open space and facilitates recreational and green space corridor and/or trails.
- g. The open space is suitable for public active recreational use.
- 3. The open space land shall be of a similar ratio of buildable land to unbuildable land as the entire subdivision or shall, in the opinion of the Commission, preserve environmentally sensitive areas such as river corridors, wildlife sanctuaries, or other natural features.
- 4. All open space shall abut or have direct access to a street through a right-of-way dedicated to public use. The right-of-way shall not be included in the required open space area, shall be at least fifty (50) feet wide and shall be suitable for foot traffic. In acceptable circumstances the Commission may reduce or waive this requirement.
- 5. An attempt shall be made to preserve a location for the parking of vehicles within areas that can provide public access to existing and proposed open space, particularly those areas which provide access to new and existing trails and recreational areas.
- 6. The Commission may permit a reduction in the ten percent (10%) requirement, and thereby permit an equal increase in density, where the application proposes to construct public facilities, such as ball fields, and other recreational facilities provided the value of the construction is equivalent to the value of the land and the additional lots obtained as a result of open space reduction.
- 7. To satisfy all or a portion of the open space requirements of a subdivision, the Commission may consider lands located elsewhere in Ellington.
- 8. When a subdivision is a portion of a larger parcel of land, the Commission may consider dedication of an area of land in the undeveloped part of the parcel but outside of the proposed area of the subdivision.

- 9. The ultimate ownership of dedicated open spaces, parks, and playgrounds, be it the Town of Ellington, a land trust, homeowner's association, or a recognized conservation organization, should be determined by the Commission on a case by case basis at the time of subdivision approval.
 - a. In the event that the Board of Selectmen declines to accept the offered open space land as part of the town property, then the developer must return to the Commission and implement another alternative as described above.
- 10. The Commission reserves the right to make the final decision on the suitability of open space land and the means of preservation.
- 11. Monuments are required at all corners and angles of town open space and must be easily identified, except where land characteristics cannot accept the monuments.

4.18.4 DEDICATION FOR OTHER MUNICIPAL PURPOSES

 In the event the subdivider desires to transfer to the Town land for other municipal purposes such as future schools, fire houses, etc., the dedication provisions of this regulation shall be complied with. The Commission may consider such a municipal dedication as a credit toward any open space and/or recreational area disposition requirements.

4.18.5 DEED RESTRICTIONS

- 1. Any land dedicated for open space purposes shall contain appropriate covenants and deed restrictions (approved by the Town Attorney for Town-dedicated property) ensuring that:
 - a. The open space area will not be further subdivided in the future.
 - b. The use of the open space will continue in perpetuity for the purpose specified.
 - c. Appropriate provisions will be made for the maintenance of the open space, if necessary.
 - d. The open space shall not be converted into a commercial for-profit enterprise.
 - e. The rights of public access are provided when appropriate.

4.18.6 FEE-IN-LIEU-OF REQUIREMENTS

- 1. In lieu of providing all or part of the open space land as required above, an applicant may, with the Commission's approval, pay a fee. This fee shall not exceed 10% of the fair market value of the land to be subdivided prior to the approval of the subdivision.
- 2. The fair market value shall be determined by an appraiser jointly selected by the Commission and the applicant, with the cost to be borne by the applicant. The Planning Department maintains a Commission-approved list of appraisers.
- 3. A fraction of such payment the numerator of which is one and the denominator of which is the number of approved parcels in the subdivision shall be made at the time of sale of each approved parcel of land in the subdivision and placed in a fund which shall be used for the purpose of preserving open space or acquiring additional land for open space or for recreational or agricultural purposes.
- 4. The Commission encourages the applicant to consider paying the entire fee prior to the filing of the subdivision map on the land records.

4.18.7 EXEMPTIONS

- 1. The open space requirements of this section shall not apply if the transfer of all land in a subdivision of less than five (5) parcels is to a parent, child, brother, sister, grandparent, grandchild, aunt, uncle, or first cousin for no consideration provided that this exemption be noted on the subdivision map to be filed on the land records along with a notice stating that any lot subject to the exemption shall be liable for its proportional share of the 10% pre-subdivision fair market appraisal at the time of subsequent sale or transfer to a person not exempt under this subsection if such a sale or transfer occurs within five years of the original subdivision approval.
- 2. The open space requirements of this section shall not apply if:
 - a. A subdivision meets the requirements for an affordable housing development under Section 8-30g of the Connecticut General Statutes.
 - b. The Commission elects to exempt the proposed subdivision since it will contain affordable housing equal to twenty percent (20%) or more of the total housing to be constructed in such subdivision.

4.19 LANDSCAPING STANDARDS (Effective, November 15, 2007)

Landscaping shall be provided as part of subdivision design along streets and at subdivision entrances.

Where plant material is to be removed, or where it does not exist, such as in flat open land or in gravel pits or other similar conditions, the applicant shall provide a replanting program to protect public health and to enhance and preserve the environment.

In all cases, planting of invasive, or non-native species, shall be avoided. The identification and removal of existing invasive species is encouraged.

A. Landscape Plan

1. Requirements.

A landscape plan shall be submitted with each subdivision application which contains five (5) or more lots and/or new road(s). The plan shall identify the existing tree line plus existing mature trees, and proposed trees, shrubs and ground covers; natural features such as rock outcroppings; and other landscaping elements. The plan shall show the location, or proposed location, of these attributes and planting and/or construction details.

B. Street Trees

1. Requirements.

At a minimum, each lot shall have one tree for every 50 lineal feet of frontage or fraction thereof. Shade trees of varieties acceptable to the Commission shall be provided along existing and proposed streets by planting new trees or preserving existing trees. Such trees shall be located between the building line and ten (10) feet inside the lot line. New trees shall be not less than two and one-half (2 1/2) inches in caliper (DBH) and shall be guaranteed for one season's growth by the developer. All new street trees shall be located a minimum of twenty-five (25) feet from any existing or proposed septic system or septic reserve area. In addition, consideration should be given to future possible locations of driveways, sidewalks, sight lines, and utility connections. The location of existing trees and new trees shall be shown on the plot plan submitted for zoning permit approval.

2. Street trees waiver.

The Applicant may request a waiver where topography or site conditions are not suitable for street trees. Such waiver request must be in written form and submitted with the subdivision application. The Commission reserves the right to grant or deny any such waiver.

C. Site Protection and Planting Requirements

1. Removal of debris.

All stumps and other tree parts, litter, brush, weeds, excess or scrap building materials or other debris shall be removed from the site and disposed of in accordance with the law. No tree stumps, or portions of tree trunks or limbs shall be buried anywhere in the development without prior approval from the Town Engineer and Wetlands Enforcement Officer; and in no instance shall they be buried in regulated wetlands, conservation easements, and/or areas of high groundwater.

2. Protection of existing plantings.

Maximum effort should be made to save existing vegetation. No material or temporary soil deposits shall be placed within four (4) feet of shrubs or within the drip line of trees designated on the landscape plan to be retained. Proposed limits of clearing shall be clearly marked onsite and verified by a surveyor to be consistent with the approved subdivision plan upon submission of each plot plan for a zoning permit. Any deviations from the approved subdivision plan may be approved by the Ellington Planning Department in the event conditions warrant. Removal of any amount of vegetation, whether approved or not, may require an equivalent amount of plantings in an additional area of each plot plan.

3. Additional screening.

In residential subdivisions, besides the street trees required, additional plantings or landscaping elements may be required throughout the subdivision where necessary for privacy or other reasons in accordance with the landscape plan approved by the Commission and taking into consideration cost constraints. For example, where lots have back yards fronting on a street, the Commission may require screening between the street and the back yard, or along the front lot line in the case of a rear lot abutting a frontage lot.

4. Planting specifications.

Deciduous trees shall have at least a 2-1/2 inch caliper (DBH) at planting. Size of evergreens and shrubs shall be allowed to vary depending on setting and type of tree/shrub. All plant materials shall be of nursery stock quality; and all trees, shrubs, and ground covers shall be planted according to accepted horticultural standards. Dead and dying plants shall be replaced by the developer during the following planting season. The plant species selected should be hardy for this area, and appropriate in terms of function and size.

D. Bonding

In the event that the required street trees and/or additional plantings or screening cannot be completed due to seasonal weather constraints, bonding may be secured in the form and amount that is acceptable to the Town Engineer and/or the Zoning Enforcement Officer (ZEO). Any such bonding is required prior to the issuance of the Certificate of Zoning Compliance (CZC) issued by the ZEO.

E. Sight Lines

In all instances, sufficient sight line requirements shall be maintained in accordance with the Ellington Zoning Regulations, as amended

APPENDIX A

ADMINISTRATIVE SPECIFICATIONS

STANDARDS FOR MAPS AND PLANS

- A.01 <u>GENERAL REQUIREMENTS</u> The maps and plans required by these Regulations shall show the information and be prepared in accordance with the standards hereinafter specified. All such maps and plans shall be prepared by, and shall bear the name and seal of, a land surveyor and/or engineer licensed as such by the State Board of Registration for Professional Engineers and Land Surveyors of the State of Connecticut. Pertinent survey data and computations shall be presented by the applicant to the Town Engineer for review if requested by him.
- A.02 <u>SITE DEVELOPMENT PLAN</u> The Site Development Plan shall be drawn to a scale of not less than 1"=100' on a sheet size of 24" x 36". The plan shall show existing conditions and the proposed layout of lots, streets and improvements for the proposed subdivision and all contiguous land of the applicant that may be subdivided in the future, in order to allow the Commission to complete a general planning review of the proposed subdivision including its relationship to the future subdivision of contiguous land of the applicant. Eight (8) blue or black line prints shall be submitted. The plan shall show at least the following information:
 - **i. Title of the subdivision**, which shall not duplicate the title of any previous subdivision in the Town.
 - ii. Name of the owner of the land to be subdivided.
 - iii. Date, scale, north point, key map at 1'' = 1000'.
 - iv. Existing and proposed property and street lines; indication of adjoining property lines and street lines for a distance of 200 feet; and the names of all adjacent subdivision or property owners.
 - **v. Existing contours** at an interval not exceeding two (2) feet based on field or aerial survey and using official Town, State or U.S. bench marks, which shall be noted on the plan.
 - **vii. Proposed lots and lot numbers**, existing and proposed open spaces for parks, playgrounds, stream protection and other open spaces. Lots shall be numbered using the existing or proposed Assessor Parcel Numbers and the existing or proposed street numbers. (*Updated January 29, 2001*)

- viii. Existing permanent buildings and structures.
- ix. Principal wooded areas.
- **x. Ledge outcrops** and existing stone walls and fences within the subdivisions.
- xi. Approximate dimensions on all proposed property and street lines; approximate lot area and the total acreage of land included in the subdivision. Total wetlands and wetlands area of influence in accordance with the appropriate section of the Ellington Inland Wetlands Regulations for each lot in the subdivision. (*Updated January 29, 2001*)
- **xii. Proposed width of all streets**, rights-of-way and easements; the proposed width of all pavement; and proposed street names.
- xiii. Existing and proposed monuments; any municipal

boundary line and zoning districts.

- **xiv.** Existing and proposed storm drains, catch basins, manholes, ditches, watercourses, headwalls, sidewalks, gutters, curbs and other structures; and existing and proposed water mains, sanitary sewers, and related facilities.
- **xv. Spot elevations** on both existing and proposed roads to indicate tentative grading.
- xvi. The approximate location of any test holes, test pits and borings.
- xvii. The limits of any areas proposed for regrading

by excavation or filling; and the limits of areas proposed to be reserved and protected from excavation or filling.

- A.03 CONSTRUCTION PLANS Twelve (12) sets (*Updated January 29, 2001*) of blue or black line print plan and profile drawings of all proposed streets, storm drains, sanitary sewers, catch basins, manholes, ditches, watercourses, headwalls, sidewalks, gutters, curbs and other structures shall be submitted on a sheet size of 24" x 36" and drawn to a horizontal scale of 1" = 40' and a vertical scale of 1" = 4'. Profile drawings and elevations shall be based on Town, State or U.S. bench marks or other permanent bench marks approved by the Town Engineer; the bench marks used shall be noted on the plan. All construction plans, plans for streets, storm drainage, water supply, and other utilities and structures shall be designed by, and bear the seal of, a professional engineer licensed to practice in the State of Connecticut. Plan-profile drawings shall show at least the following information in accordance with good engineering practice and as appropriate for the particular subdivision or resubdivision.
 - i. **Title of subdivision** or subdivision, date, scale, Town and State.
 - **ii. For streets, the existing grades** at the center lines and both street lines and the proposed grade at the center line and both street lines; width of pavement, and typical cross section of roads with specifications.
 - **Depth, invert, slope and size of all pipes**, ditches, culverts, manhole, catch basins, headwalls, and watercourses; typical ditch and watercourse cross sections.
 - iv. Approximate location of lot lines intersecting the street line; lot numbers and street names.
 - v. Sidewalks, curbs, gutters, and special structures to include street lights.
 - vi. **Detail drawings of any bridges**, box culverts, deep manholes, and other special structures.
 - vii. Notation and details on erosion and sedimentation control methods to be employed.
- **A.04 GRADING PLAN** The area shown on the grading plan may be limited to the portion of the subdivision or resubdivision affected by the proposed major regrading, cuts, fills, or soil or rock removal. Four (4) blue or black line prints of the grading plan shall be submitted. The grading plan shall be drawn on a sheet size of 24" x 36" and to the scale of 1" = 40' or larger, and shall bear the seal of an engineer licensed to practice in the State of Connecticut. Contours and elevations shall be based on the same bench marks as provided in **Paragraph A.03**. The grading plan shall show at least the following information:

- i. Title of the subdivision or resubdivision.
- ii. Name of the owner of the land to be subdivided.
- iii. Date, scale, north point, Town and State.
- iv. Layout of existing and proposed lot lines and streets lines.
- **v. Existing and proposed contours** at an interval not exceeding two (2) feet based on field and aerial survey.
- vi. Existing and proposed drainage and watercourses.
- vii. Existing permanent buildings and structures, including well and septic locations.
- viii. Locations of all test holes, test pits, or borings.
- ix. Cross section drawings covering proposed excavation areas.
- x. Notations and details on erosion and sedimentation control methods to be employed.
- **A.05 RECORD SUBDIVISION MAP** The subdivision map shall be prepared with an accuracy meeting, or exceeding, standards for a "Class A-2 Transit Survey" as defined by the Connecticut Technical Council, Inc. The map shall be clearly and legibly drawn on a sheet size of "24 x 36" and submitted in eight (8) copies of blue or black line prints. The map shall be drawn to a scale of 1" = 40'. The maps shall show the following:
 - **i. Title of the subdivision**, which shall not duplicate the title of any previous subdivision in the Town.
 - ii. Name of the owner of the land to be subdivided.
 - iii. Date, scale, north point, Town and State.
 - **iv.** Existing and proposed property and street lines; indication of adjoining property lines and street lines for a distance of 200 feet; and the names of all adjacent subdivisions or property owners.

- v. Existing and proposed watercourses and ponds, conservation areas, easements and rights-of-way; the location and limits of all easements or reservation areas for the protection of swamps, floodplains, or other land subject to potential flooding.
- vi. Proposed lots and lot numbers; existing and proposed open spaces for parks, stream protection, and other open spaces; the square footage or acreage of all lots and open spaces, and the total acreage of land included in the subdivision.
- vii. Existing permanent buildings and structures.
- **viii. Dimensions of all lines** to the hundredth of a foot; all bearings or deflection angles on all straight lines, and the central angle, tangent distance and radius of all arcs.
- ix. The width of all streets, rights-of-way and easements; street names.
- **x.** Existing and proposed monuments; any municipal boundary line.
- **xi.** A location map showing the location of the subdivision in relation to existing streets in the Town at a scale of 1'' = 1000'.
- **xii. An index map**, if the proposed subdivision if divided into sections or is of such that more than one sheet is required, showing the entire subdivision with lots, lot numbers, streets, street names and delineation of areas covered by the section or sheet.
- xiii. The survey relationship of proposed streets to nearby monumented Town streets or state highways where practical.
- **xiv.** The error of closure, which shall not exceed 1 in 5000.
- **xv. Approved street address numbers** for each lot as assigned by the Zoning Enforcement Officer.

	xvi.	The following signature block: (Amended: January 29, 2001)			
		a)	Approved by the Town Planning and Zoning Commission of the Town of Ellington on this day of 20 If accordance with Section 8-26c of the Connecticut General Statut all work in connection with subdivision must be completed by 20	n	
			Secretary Chairman		
A. 06	APPROVED as follows:	MAPS	- Upon approval of the subdivision, final plans shall be submitted	l	
	i.	Reco	d Subdivision Map - 2 sets drawn on mylar drafting film.		

ii.

Construction and Grading Plan - 4 blue or black line paper sets.

APPENDIX B

ADMINISTRATIVE SPECIFICATIONS

SANITARY REPORT FOR ON SITE SEWAGE DISPOSAL SYSTEMS

- **B.01 GENERAL REQUIREMENTS** Where individual on site sewage disposal systems are proposed, the subdivision plan shall be accompanied by four (4) copies of a Sanitary Report prepared by a professional engineer. The report shall demonstrate the feasibility for subsurface disposal of septic tank waste. The report should deal with the entire tract discussing the following points:
 - i. General nature and development of surrounding areas shown on map with explanation text.
 - ii. Topography and natural drainage pattern.
 - **Subsurface conditions** as shown by subsurface investigation, including soil absorption characteristics, groundwater level conditions, ledge rock, and general nature of soil.
 - **iv. General description of type of development** contemplated, noting type of dwelling units and structures, number of families per structure, and number of bedrooms per dwelling unit.
 - v. Detailed description of proposed sewage disposal facilities, indicated sizes for various ground conditions, materials to be used, and general layout pattern to be used.
 - **vi. Special precautions** that may be necessary to provide proper functioning of the proposed disposal systems.
 - vii. Flood heights of any nearby streams, brooks, or rivers.
- **TEST RESULTS AND ENGINEERING EVALUATION** The report shall contain test results and engineering evaluation of test results based on an extensive subsurface investigation. Investigation shall be made as to whether the soil is suitable for the absorption of septic tank effluent and, if so, how much area is required. The soil must have an acceptable percolation rate, without interference from groundwater or impervious strata below the level of the absorption system.

Subsurface Explorations are necessary to determine subsurface formulations in the area. The minimum number of tests acceptable for subsurface investigation for a subdivision will be:

- i. Percolation Tests 1 per acre or 1 per lot, whichever is the smaller
- ii. Observation Holes1 per two acres
- iii. Observation Pits 1 per ten acres
- iv. Probes for Rock 1 per acre, unless rock is encountered, in which case a sufficient number to locate and plot the general ledge profile will be required

Testing procedures shall be as follows:

- i. Percolation tests must be taken at or below the probable level of the proposed disposal systems. A minimum depth of thirty-six inches will be required for the percolation test holes.
- ii. All other tests must be made to a depth of at least three feet below the probable elevation of the disposal facilities. The same care taken in selecting the location of the percolation test holes should be employed in the location of the other tests. A minimum depth of six feet will be required for these other tests.

Engineer's Statement - The report shall contain a statement by the engineer that, in his professional opinion, the area is suitable for the installation of individual sanitary sewage disposal systems of the general type and size described in his report. Any reservations or special conditions considered necessary by the engineer shall be repeated in this portion of his report.

Other Data - The sanitary report shall be a well written, comprehensive and documented study, meeting all of the above requirements. If, in the opinion of the Health Director, the sanitary report is incomplete as to the required information, he will require additional documentation sufficient to correct the report's deficiencies.

APPENDIX C

TOWN OF ELLINGTON HIGHWAY SPECIFICATIONS

These specifications are promulgated by the Ellington Town Engineer. They are an appendix to the subdivision regulations as a convenience to the public.

C.1 GENERAL REQUIREMENTS:

- 1.1 The Standard Specifications for Roads, Bridges and Incidental Construction of the State Highway Department together with all amendments thereto now adopted or which may hereafter be adopted are hereby adopted as the official specification for construction in the Town of Ellington, and all materials and construction methods shall conform to these specifications, except as amended hereunder.
- 1.2 The Developer shall be responsible for notification to the indemnity company underwriting the performance bond as required herein, and for furnishing copies to said company, of any changes in the Plan and Profile on file as above stated or changes in specifications required in this agreement.
- 1.3 In all matters pertaining to roadway construction and design, the Town or its duly authorized representative, shall be the final judge as to proper practice.
- 1.4 The Developer shall be responsible for necessary laboratory tests and blueprints necessary or required for construction.

C.2 <u>MATERIALS:</u>

- **2.1 Bank Run Gravel Subbase:** This material shall consist of bank gravel conforming to D.O.T. Form 814A, Article M.02.02.
- **2.2 Crushed Gravel Subbase:** This material shall consist of crushed gravel conforming to D.O.T. Form 814A, Article M.02.02.

2.3 Processed Aggregate Base:

Pavement Section Type A: This material shall conform to DOT 814A, Article M.05.01, Coarse aggregate shall be CRUSHED TRAP ROCK, 6 inches thick.

Pavement Section Type B: This material shall conform to DOT 814A, Article M.05.01, Coarse aggregate shall be either broken stone or reclaimed miscellaneous aggregate containing no more than 15% by weight of recycled bituminous concrete, 6 inches thick. (*Amended July 28, 2008*)

- **2.5 Compacted Gravel Fill:** This material shall consist of bank or crushed gravel conforming to D.O.T. Form 814A, Article M.02.02
- **2.6 Bituminous Concrete Binder Course:** The materials for the bituminous concrete mixture, sources of supply, formula for the mix, mix tolerances, and the control of the mixture shall conform to the requirements of D.O.T. Form 814A, Article M.04.01, Class 1.

Pavement Section Type A 2"

Pavement Section Type B 3"

(Effective August 19, 2008)

- **2.7 Bituminous Concrete Surface Course:** The materials for the bituminous concrete mixture, sources of supply, formula for the mix, mix tolerances, and the control of the mixture shall conform to D.O.T. Form 814A, Article M.04.01, Class 2. The thickness for pavement sections Type A and Type B shall be 1-1/2". (Effective August 19, 2008)
- **2.8 Bituminous Concrete Lip Curbing:** Materials for this work shall conform to the requirements of D.O.T. Form 814A, Article M.04.01, Class 3.
- **2.9 Portland Cement Concrete:** Materials for this work shall conform to the requirements of D.O.T. Form 814A, Article M.03.01, Class C.

C.3 <u>CONSTRUCTION:</u>

3.1 Construction Survey:

- (a) The centerline of the road shall be located in the center of the right-of-way and shall be run in the field with suitable construction ties established to all control points. Stations shall be established at least at 50 foot intervals and at all P.C.'s and P.T.'s.
- (b) Construction offset stakes shall be placed at each station, clear of all construction. The construction stakes shall be marked with the station offset to centerline and the cut or fill to profile grade.

(c) Reference Bench Marks shall be established throughout the length of the project at a minimum of 1,000 foot intervals. This information shall be noted on the construction plans. The datum for Bench Marks shall be U.S.G.S. Any existing Town Bench Marks shall be identified on the plans.

3.2 Excavation:

- (a) All excavation shall be made in conformity with the requirements of the plans, cross sections, or as directed by the Town Engineer.
- (b) When tying into existing roads, the "Call Before You Dig" service shall be notified such that existing utilities locations can be marked.
- (c) Wherever ledge rock is encountered, it shall be removed to a depth that is at least 12 inches below the subgrade.
- (d) Blasting: If blasting is required in rock excavation, all necessary State and Town permits shall be secured. OSHA regulations shall be complied with. Copies of Certificates of insurance shall be provided, upon request of the Town Engineer, in order to demonstrate adequate coverage. Sufficient warning shall be given to all persons in the vicinity of the work before blasting. Blasting shall not be done between the hours of 6:00 P.M. and 7:00 A.M.
- (e) **Topsoil:** When encountered, topsoil shall be excavated within the pavement limits. Topsoil shall be stockpiled for finish grading on road side on side areas and lots.

3.3 Embankments and Slopes:

- (a) Embankments shall be constructed of earth, rock, or a mixture of earth and rock. Stumps, trees, sod, or other organic matter shall not be incorporated in embankments.
- **(b)** The depth of each layer of fill shall not exceed 12 inches before compaction.
- (c) Frozen material shall not be used. No embankment layer shall be deposited on surfaces of snow or ice, nor shall it be placed on frozen or unstable surfaces.

- (d) No stone over 5 inches in its greatest dimension shall be placed within a minimum of 12 inches below the elevation of the subgrade.
- (e) When embankments are to be constructed on slopes steeper than 1 vertical to 3 horizontal, the slope on which the embankment is to be placed shall be plowed deeply or cut into steps before the filling is begun.
- (f) The embankment shall be crowned or pitched to provide drainage at the close of each day's operation. Erosion and Sedimentation control measures shall be utilized.
- (g) Embankments to an elevation 3 feet above the free water surface at the time of filling, shall be constructed of rock or free draining material, or a mixture of both. Free-draining material shall conform to the requirements of D.O.T. Form 814A, Article M.02.07.
- (h) When the excavated material consists predominantly of rock fragments of such size that materials cannot be placed in horizontal layers of the thickness specified above, such material may be placed in the embankment in horizontal layers not exceeding 3 feet in thickness. Large stones shall not be placed in nests, but shall be distributed over the area; and the interstices shall be filled with spalls, finer fragments, or earth to form a solid, compact mass. No rock fill shall be placed above an elevation which is 2 feet below the top of the embankment.
- (i) The entire area of each layer shall be compacted with rollers or compactors, exerting a pressure of not less than 300 pounds per lineal inch of bearing tread on the compression wheel of roller width.
- (j) The dry density after compaction shall not be less than 95% of the dry density for that soil when tested in accordance with AASHO T180, Method D, except that the mold used in the test shall be 6.11 inches high.
- (k) Slopes shall have a uniform surface as shown on the plans. All slopes, except those in rock or ledge formations, shall be topsoiled and seeded in accordance with these Specifications. This work shall be done as soon as practicable in order to prevent erosion.

3.4 Placement of Gravel Fill:

- (a) **Description:** This material shall be used to replace unstable material on slopes, in shoulders and elsewhere as ordered by the Town Engineer. It shall consist of gravel conforming to the requirements of **Paragraph C.2.4** of these standards.
- **(b) Construction Methods:** When gravel fill is used to replaced unstable material, it shall be deposited in layers not over 6 inches in depth, with each layer thoroughly compacted before the addition of other layers.

3.5 Subgrade:

- (a) **Description:** The area of the roadbed upon which the pavement structure is placed shall be known as the subgrade. After all grading for the roadbed has been substantially completed and all drains and other underground utilities laid, the subgrade shall be brought to the lines, grades, and cross-section shown on the plans.
- (b) Unsuitable Material Replacement: All soft and yielding material which will not compact readily when rolled, vibrated or tamped shall be removed, and all loose rock and boulders over 6 inches in size shall be removed to a depth of not less than 1 foot below subgrade. Removed material shall be replaced with compacted gravel fill conforming to requirements of Paragraph C.2.85 of these Standards.
- (c) Construction Methods: Grading and compaction of the subgrade shall be in accordance with D.O.T. Form 814A, Article 2.09.03.
- (d) **Stabilization Fabric:** Synthetic filter material may be utilized to stabilize the subgrade provided that a detailed design is submitted to and approved by the Town Engineer.

3.6 Subbase:

(a) **Description:** The subbase shall consist of bank run gravel or crushed gravel, placed in accordance with the typical section for designation of the street being constructed. Materials shall conform to the requirements of **Paragraphs C.2.1 or C.2.2** of these standards.

(b) Construction Methods: Preparation of the foundation for the subbase, placing the subbase, and compaction of the subbase shall be in accordance with D.O.T. Form 814A, Article 2.13.03. The use of vibratory rollers or compactor is encouraged for compaction.

3.7 Processed Aggregate Base:

- (a) **Description:** The base shall consist of one or more courses of processed aggregate constructed on the prepared subbase, placed in accordance with the typical section for the designation of the street being constructed. Materials shall conform to the requirements of **Paragraph C.2.3** of these Standards.
- **Construction Methods:** Preparation of the foundation for the base, placing the base, and compaction of the base shall be in general accordance with D.O.T. Form 814A, Article 3.04.03. The use of vibratory rollers or compactors is required.

3.8 Two-Course Bituminous Concrete Pavement:

- (a) **Description:** The paved surface shall be constructed of two courses of bituminous concrete. The first course of paving, which shall be placed directly on the processed aggregate base, is hereafter referred to as the "Binder Course". The second course of paving which shall be placed on the Binder Course, is hereafter referred to as the "Surface Course".
- (b) All bituminous concrete shall be placed in compliance with D.O.T. Form 814A, Article 4.06. All joints in the surface course shall be offset at least 12 inches from joints in the binder course.
- (c) Thickness: The depth of the Courses shall be as shown on the Street Cross Section. Attention is called to the Recommended Minimum Placement Temperatures shown in the Appendix of these Standards.
- (d) Where new pavement joins existing pavements, the existing pavement shall be cleanly cut and the new pavement shall be joined to create a smooth transition.
- (e) The contact surfaces of existing pavements, catch basins, and other structures in the pavement shall be painted thoroughly with a thin uniform coating of bitumen, specification RC-70 or RS-1 just before the new paving mixture is placed against them.

(f) The edges of paving placed around catch basins or other structures, if necessary, shall be hand tamped before compacting by rolling.

3.9 Other Pavement Design:

All requirements of these Standards are minimum requirements. Engineering design of subbase, base, and surface shall be prepared using current accepted practices when field conditions warrant.

3.10 Bituminous Concrete Lib Curbing:

- (a) **Description:** Bituminous Concrete Lip Curbing shall consist of machine laid bituminous concrete, constructed on the pavement to the dimensions and details shown on the plans. Materials shall conform to the requirements of **Paragraph C.2.9** of these Standards.
- **(b) Construction Methods:** Construction shall conform to D.O.T. Form 814A, Section 8.15.03.

3.11 Concrete Curbing:

- (a) **Description:** Concrete curbing shall consist of precast or cast in place, curbing constructed according to the details of the Ellington Highway Standards. Material shall conform to **Section C.2.10** of these Standards.
- (b) Construction methods shall conform to D.O.T. Form 814A, Section 8.11.

3.12 Cut-Off Date for Paving:

No paving shall be permitted after October 15th or before March 15th of any year or whenever the mean temperature on the day of paving is below 50 degrees F.

3.13 Drainage:

(a) Size of pipe shall be adequate to carry the flow. Minimum pipe size for storm drains shall be 15 inches. Within the highway right-of-way line, reinforced concrete pipe shall be used. All pipe shall conform to specifications acceptable to the State Highway Department. Laying length shall be not less than 4 feet.

- (b) Minimum gradient of storm water pipe shall be 1% wherever possible. Minimum cover shall be 3 feet. Pipes shall be laid on one side of the street wherever possible.
- (c) Catch basins or manholes shall be located at changes in grade or alignment of the storm water drain. Maximum distance between catch basins and manholes shall be 400 feet. The face of the curb on catch basin tops shall be set on the road curb line.
- (d) Underdrains shall be constructed wherever, in the opinion of the Town Engineer, drainage conditions require it. They may be required even though not shown on the approved construction plans. They shall be of perforated plain concrete pipe, perforated plastic pipe or perforated asphalt-coated corrugated metal pipe. Minimum diameter shall be 6 inches with perforations on the bottom. Where drainage conditions are poor, trenches for storm water drains shall be back-filled with concrete sand, broken stone or screened gravel, and wrapped in filter fabric. Pipe shall be laid with open joints.
- **Drainage ditches** will in general not be permitted where it is feasible to install underground pipe.
- **Headwalls or flared pipe end sections** shall be installed at open ends of storm water drains.
- **Bituminous concrete curbing** shall be provided to protect adjoining properties from storm water wash. Storm water shall not be permitted to run on the street for a distance of more than 400 feet without providing for its removal by a catch basin or approved lead-off. Where radius is 100 feet in diameter or less, lip curbing shall be Portland Cement concrete.
- (h) Drainage easements and flowage rights shall be furnished by the Developer in the name of the Town of Ellington where they may be required to install or maintain drainage installations outside roadway limits. Such easements shall be a minimum of 20 feet in width. The Developer shall be fully responsible for obtaining permits to connect any and all roads of the subdivision to State Highways and for meeting such requirements as the State Department of Transportation and or the State Traffic Commission may impose as a condition thereto.

3.14 Utilities:

- (a) All utilities are to be placed underground, unless the Commission approves overhead installation due to unique conditions of the area. All utilities shall be installed together with service extensions to the street right-of-way line for each lot within the proposed development area. Underground utilities shall be installed prior to the placement of the base course. Positions of utilities shall be in accordance with the typical placement section.
- (b) All utilities are to be shown on the plans and profiles to preclude any potential conflicts during the construction stage.
- (c) If directed by the Commission, street lights shall be installed at street intersections. Pole types and luminaries shall be approved by the Commission. Locations shall be shown on the plans.
- (d) Hydrant locations, as approved by the Fire Marshal, shall be shown where a public water system exists. The Fire Marshal may also require a report which demonstrates adequate volumes and pressures. Dry hydrants may also be required by the Fire Marshal. (*Updated, March 15, 2013*)