

# Subdivision Regulation Revised 2021

## **SECTION 1: TITLE, PURPOSE, AND AUTHORITY**

**1.1. Title.** This document contains regulations covering the subdivision of land in the Town of Preston, Connecticut, which shall be known as the “Subdivision Regulations, Town of Preston, Connecticut,” and which are referred to herein as “these Regulations.”

**1.2 Purpose.** The purpose of these Regulations is to promote and to ensure the orderly development of land within the Town so that the land to be subdivided shall be of such character that it can be used for building purposes without danger to health and safety; so that proper provisions shall be made for water supply, surface drainage, and sewage disposal; so that proposed streets shall be in harmony with existing or officially proposed major town roads and so arranged and constructed so as to provide an adequate and convenient system for the present and prospective traffic needs; so that open spaces for parks and playgrounds shall be provided in locations deemed proper by the Commission; and so that to encourage energy- efficient patterns of development and land use, the use of solar and other renewable forms of energy, and energy conservation, and, in general,

to protect the health, safety, convenience and welfare of the inhabitants of the Town of Preston.

**1.3 Application of Regulations and Authority.** These Regulations shall apply to any owner or agent of the owner of any land within the Town of Preston who subsequent to the effective date of these Regulations proposes to affect a subdivision or resubdivision of land, as herein defined. These Regulations are adopted by the Planning and Zoning Commission of the Town of Preston pursuant to the authority conferred by Chapter 126, Connecticut General Statutes.

## **SECTION 2: DEFINITIONS**

This section defines a number of important words and terms used in these Regulations. Any term defined in the Preston Zoning Regulations and used in these Regulations shall have the same definition. The singular number shall include the plural. Undefined words shall have commonly accepted meanings.

**AASHTO.** American Association of State Highway and Transportation Officials

**Applicant.** The owner(s) of the land to be subdivided or an agent, who acts for the owner, provided written evidence of such fact is submitted to the Commission.

**Boundary Survey.** A map showing the legal property lines of a lot, parcel or tract based on the State Plane Coordinate System, where available, and prepared to A-2 standards and certified by a land surveyor registered in the State of Connecticut.

**Subdivision.** The division of a tract or parcel of land into three (3) or more parts or lots made subsequent to the adoption of subdivision regulations by the Commission, for the purpose, whether immediate or future, of sale or building development, expressly excluding development for municipal, conservation or agricultural purposes, and includes resubdivision. In order for a parcel to be exempt from subdivision, due to its designation as “conservation or agriculture”, the designation shall be based on the filing in the Preston Land Records of an easement that restricts the use of the site respectively.

**Commission.** The Planning and Zoning Commission of the Town of Preston, Connecticut.

**Cul-de-sac.** A residential street that terminates in a circular turn-around as noted in the Standard Detail Drawings.

**Disturbed Area.** An area where the ground cover is destroyed or removed, leaving the land subject to accelerated erosion.

**Easement.** The authorization by a property owner or his authorized agent (grantor) granting the use of (a strip) of land to a grantee for limited and specific purposes.

**Enforcement Officer or ZEO.** For the purposes of these Regulations shall be the Zoning Enforcement Officer.

**Erosion.** The detachment and movement of soil or rock fragments by water, wind, ice or gravity.

**Financial Guarantee.** A performance bond that financially insures the completion of improvements required by the Commission as part of the approved subdivision.

**First Split.** A division of a **parcel** which is exempt from the subdivision review process according to state law. A property is entitled to a First Split if the property has never been subdivided or **split for building purposes, whether immediate or future**, since the adoption of the Town's Subdivision Regulations in May 1962.

**Flood Hazard Areas or Special Flood Hazard Areas.** The land area covered by the floodwaters of the base flood is the Special Flood Hazard Area (SFHA) on NFIP maps. The SFHA is the area where the National Flood Insurance Program's (NFIP's) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies. The SFHA includes Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1-30, VE, and V.

**Grading.** The excavating, grubbing, filling (including hydraulic filling) or stockpiling of earth materials or any combination thereof, including the land in its excavated or filled condition.

**Improvements.** Grading, roads, bridges, curbs, gutters, sewers, culverts, manholes, appurtenances, monuments, and other similar buildings or structures as required by these Regulations.

**Intermittent Watercourse.** Intermittent watercourses shall be delineated by a defined permanent channel and bank and the occurrence of two or more of the following characteristics:

- a) Evidence of scour or deposits of recent alluvium or detritus,
- b) The presence of standing or flowing water for a duration longer than a particular storm incident, and
- c) The presence of hydrophytic vegetation or as defined in Section 22a-38 (16) of the Connecticut General Statutes, as amended.

**Lot.** A plot or parcel of land occupied or capable of being occupied by one principal building and the accessory buildings customarily incidental to it.

**Low Impact Development (LID).** A site design strategy that maintains, mimics, or replicates predeveloped hydrology through the use of numerous site design principles and small-scale treatment practices distributed throughout a site to manage runoff volume and water quality at the source.

**Map, location.** A map showing the existing and proposed zoning districts and streets within a one-half (½) mile of the proposed subdivision.

**Owner.** The owner of record of a parcel of land as filed in the office of the Town Clerk.

**Plan of Conservation and Development.** The adopted plan of conservation and development for the Town of Preston and all accompanying charts and descriptive matter.

**Plan, Final.** A complete and exact subdivision plan including all the required documents prepared for approval and endorsement by the Commission and for official recording with the Town Clerk.

**Plan, Grading.** A map showing the existing and proposed elevations and contours of the land and specified improvements.

**Plan, Plot.** A map showing the overall street and lot layout of a subdivision.

**Plan, Topographic and Development.** A map showing existing man-made and natural features and contours of a lot, tract or parcel.

**Property Line Adjustment.** A change in the location of an existing property line in a manner that does not create any of the following:

- (a) an additional building lot;
- (b) a condition that violates any of the dimensional requirements outlines in Section 15 of the Preston Zoning Regulations;
- (c) increase any existing nonconformities of the dimensional requirements outlined in Section 15 of the Preston Zoning Regulations;
- (d) change or reduce land dedicated as approved open space.

**Resubdivision.** 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 and open space, or (c) diminishes the size of any lot shown thereon and creates an additional building lot, if any of the lots shown thereon have been conveyed after the approval or recording of such map.

**Revision to a Subdivision.** A minor change in size of lot or property lines inside a subdivision previously approved by the Commission provided:

- a) no street or area reserved for public use is affected or does not create an additional building lot;
- b) does not create a condition that violates any of the dimensional requirements outlined in Section 15 of the Preston Zoning Regulations;
- c) does not increase any existing nonconformities of the dimensional requirements outlined in Section 15 of the Preston Zoning Regulations;
- d) does not change or reduce land dedicated for open space.

**Right-of-way.** The lines defining the limits of land dedicated, secured, or reserved for public use.

**Roadway.** That portion of a right-of-way included within the construction limits of the improvements, including the travel path plus the shoulders, curbs and gutters.

**Sediment.** The solid material, either mineral or organic material that in suspension is transported, or has been moved from its site or any origin.

**Soil.** Any unconsolidated material or organic material of any origin.

**Soil erosion and sediment control plan.** A scheme that minimizes soil erosion and sedimentation resulting from development and includes, but is not limited to, a map and narrative.

**Standard Detail Drawings.** Various figures provided in Appendix A illustrating standard details for drainage, road construction, fencing, etc.

**Standard Specification.** State of Connecticut, Department of Transportation's Standard Specifications for Roads, Bridges, Facilities and Incidental Constriction.

**Steep Sloping Topography.** A slope of fifteen percent (15%) or more in any direction on the lot.

**Street (and road are interchangeable).** Any improved right-of-way:

- a) Dedicated for public roadway use, accepted for public roadway use by Town Meeting, and maintained by the Town of Preston for automobile travel;
- b) Any street shown on the subdivision plan approved by the Commission constructed in accordance with these regulations and accepted by the Board of Selectmen/women;
- c) State of Connecticut Routes 2, 2A, 12, 117, 164, 165 and 605 (Old Shetucket Turnpike).

Streets are further classified when proposed in part of a subdivision as one of the five categories – “*Minor, Local, Sub/Collector Business/Industrial and Expandable*”, and have the following functions:

- a) ***Minor streets.*** These streets are relatively short, service less than fifteen (15) home sites, and are dead end cul-de-sacs.
- b) ***Local streets.*** These streets generally have more activity than minor streets, and have between sixteen (16) lots and twenty-five (25) lots.
- c) ***Sub/Collector streets.*** These streets receive all the traffic from the residential neighborhoods and convey it to the major street system (State of Connecticut highway system). The following are sub/collector streets: Old Jewett City Road, Krug Road, Ross Road, Miller Road, Brickyard Road, Schoolhouse Road, Middle Road, Northwest Corner Road and Watson Road.
- d) ***Business/Industrial (or arterial) streets.*** These streets have or can accommodate heavy commercial and industrial traffic and are designed to handle the weight and size of commercial or industrial vehicles. The following streets are arterial streets: Route 2, Route 2A, Route 12, Route 165, Route 165A (aka Route 605) and Route 164
- e) ***Expandable subdivision streets.*** The expandable street is not an actual classification of street but a situation which arises often as subdivisions are developed throughout the Town. If the probability exists that a dead-end street will be opened to future development, then it should be designed to accommodate the future traffic. For example, if a minor street has twenty (20) lots but another one hundred (100) units are planned in future phases or the potential exists for future development; then the street, should be designed for future development, as appropriate.

**Subdivider.** Any person, firm, corporation, partnership, association, or other group, who is the owner or acting agent for the owner in securing the approved subdivision or resubdivision of land. The subdivider shall include any of the above to whom the subdivision is transferred prior to the total completion of subdivision improvements.

**Town of Preston, Connecticut Subdivision Regulations.** The subdivision regulations are the regulations that outline how land can be divided within the Town of Preston. These were adopted May 1962, as amended.

**Travel Path.** That portion of the roadway especially prepared for the use of vehicular traffic, excluding paved shoulders, curbs and gutters.

**Watercourses.** A watercourse as defined in Section 22a-38 (16) of the Connecticut General Statutes, as amended.

**Wetlands.** Wetland is as defined in Section 22a-38 (16) of the CGS, as may be amended from time to time.

**Zoning Regulations.** The adopted zoning regulations of the Town of Preston, as amended.

**SECTION 3: PROCEDURES**

**3.1 Applications for Property Line Adjustment (PLA), First Split or Revision to a Subdivision:** Such PLA, First Split or Revision to a Subdivision do not require approval by the Planning and Zoning Commission, but do require approval by the Zoning Enforcement Officer to determine compliance with the Zoning Regulations and these Regulations. An application for a PLA, First Split, or a Revision to a (Re)Subdivision shall be submitted to the Zoning Enforcement Officer with the following information:

- a) Deed for the existing parcel.
- b) A survey of the parcel and its reconfiguration. The ZEO shall require that the survey be prepared to A-2 standards. For a Revision to a (re)subdivision, reference shall be made on the plan to the (re)subdivision application number and the title and date of the approved (re)subdivision.
- c) Copies of the new deed descriptions.
- d) The ZEO shall forward a copy of the application to the Town Planner, Town Sanitarian (Uncas Health District) and the Wetland Enforcement Officer for review. Comments should be provided to the ZEO within seven (7) days. If the adjustment changes make a parcel unbuildable based on the State of Connecticut Public Health Code or any other regulations, the Zoning Enforcement Officer shall deny the proposed plan.
- e) A copy of the PLA, First Split, or Revision to a Subdivision shall be provided on a mylar and reproduced in accordance to Section 7-31 of the Connecticut General Statutes. If acceptable, the ZEO shall sign the mylar and the plan shall be filed in the office of the Town Clerk. Copies of all approved plans shall be forwarded to the Town Planner.

**3.2 Applications for (Re)Subdivision.** Any person intending to (re)subdivide land in the Town of Preston shall submit an application as prescribed herein to the Planning and Zoning Office at least three (3) weeks prior to a regularly scheduled meeting of the Planning and Zoning Commission at which the application will be considered. The following information shall be submitted with the application:

- a) **Eight (8)** copies of the re/subdivision plan, including anticipated future development of remaining land and details for all public improvements proposed as part of the subdivision.
- b) **(Re)Subdivision Fee.** All applications shall be submitted with the accompanying fees, as applicable, in accordance with the following:
  - i. *Per lot Fee.* \$100 per lot, or two hundred dollars (\$200), whichever is greater.
  - ii. *Engineering and other consultant fees.* This fee shall be based on a cost estimate provided by the town engineer and/or consultant. The applicant shall pay 150% of estimate, which shall include all reviews, site inspections and inspections for bond releases. All unused funds will be returned to the applicant forty-five (45) days after the project is completed as determined by the Commission. *(This fee is different than the public improvement fee which covers the cost of new roads, drainage and all public improvements related to the construction of a new road – outlined under 3.2 b) v.)*
  - iii. *State fee.* The state fee shall be paid in accordance with Section 22a-27j of the CGS.

- iv. *Legal notice reimbursement fee.* This fee will be paid after the commission takes action on the application and is to cover the cost of the legal notices posted in the newspaper.
- v. *Public Improvements fee, for new roads.* An additional fee shall be paid to the town for subdivision containing public improvements prior to the endorsement of the plan and its filing with the town clerk's office. This fee shall be equal to six percent (6%) of the estimated cost of public improvements. The cost estimate shall be prepared by the applicant's engineer and approved by the town engineer. Construction cost estimates are based on the unit prices the Town would have pay to complete the improvements in the event the applicant defaults on the project and includes, but is not limited to the construction of new roads, storm drainage, water, sewer and other utility lines, planting of trees or other landscaping, the installation of retaining walls or other structures and erosion and sediment controls. After completion and approval by the Commission of all improvements, any balance remaining of this fee will be returned to the applicant within forty-five (45) days. This fee is to cover the cost of professional services, such as the town engineer, for the continued technical review of the plans and inspection of public improvements.
- c) Letter from the Department of Transportation, if applicable.
- d) IWWC approval letter or proof that an application has been submitted to the IWWC.
- e) Other miscellaneous agency approvals.
- f) Copies of unexecuted deeds or easements.
- g) Three copies of a cost estimate prepared by a Professional Engineer, as applicable.
- h) Three copies of drainage calculations.
- i) Soil test information for each lot (this may be provided on the plan).
- j) List of names and addresses of all abutting property owners.
- k) Copy of current property deed on file in the Town Clerk's Office.
- l) Descriptions for deeds or easements within or proposed within the subdivision.

**3.2.1 Date of Receipt.** The day of receipt of an application shall be the day of the next regularly scheduled meeting of the Commission immediately following the day of submission to the Planning and Zoning Office or thirty-five (35) days after such submission, whichever is sooner.

**3.2.2 Sanitary System and Well.** The applicant is responsible for coordinating sanitary system and private single well water supply with the Uncas Health District.

**3.2.3 Notification of abutters.** For any (re)subdivision, the applicant shall, prior to or at any public hearing on an application, or, if no hearing is held, prior to the Commission's action on an application, provide the Commission with evidence, in the form of mail receipts and a copy of notice, that owners of property abutting and directly across any road from any new building lots in the proposed (re)subdivision have been notified of the applicant's intent to (re)subdivide, as indicated by postal receipts dated at least ten (10) days prior to the scheduled hearing or action by the Commission. (A sample form for the notice is provided in the Appendix to these Regulations.) A map shall be provided showing all the abutters that have been notified.

**3.2.4 Hearing.** The Commission may hold a public hearing regarding any subdivision proposal within sixty-five (65) days after receipt thereof, if in its judgment, the specific

circumstances require such action. The Commission shall conduct a public hearing for any subdivision containing five (5) lots or more, and for all resubdivision applications. Notice of a hearing shall be published in a newspaper of general circulation in the town at least twice at intervals of not less than two (2) days, the first not more than fifteen (15) days, nor less than ten (10) days, and the last not less than two (2) days prior to the date of the hearing. The hearing shall be completed within thirty-five (35) days after it commences. Extensions to hearings may be approved in accordance with the Section 8-7d of the CGS.

**3.2.5 Regional Planning Agency Referral.** Whenever a subdivision of land is planned, the area of which will abut or include land in another municipality, the Commission shall, before approving the plan, submit it to the Southeastern Connecticut Council of Governments, Regional Planning Agency. The Regional Planning Agency shall, within thirty (30) days, report to the Commission and to the applicant its findings on the inter-municipal aspects of the proposed subdivision. If such report is not submitted within thirty (30) days after the referral from the Commission, it shall be presumed that the Agency does not disapprove of the proposed subdivision. The Regional Planning Agency's report shall be purely advisory.

**3.2.6 Wetlands Referral.** If an application involves land regulated as an inland wetland or watercourse under the provisions of Chapter 440 of the Connecticut General Statutes, the applicant shall submit an application to the Preston Inland Wetlands and Watercourses Commission (IWWC) no later than the day the application is filed for the subdivision with the Planning and Zoning Commission. The Commission shall not render a decision until the IWWC has submitted a report with its final decision to the Commission. In making its decision, the Commission shall give due consideration to the report of the IWWC. If the time for a decision by the IWWC is after the date by which the Commission is to make its decision, the time period of the Commission will be extended to thirty-five (35) days after a decision by the IWWC. The provisions of this subsection shall not be construed to apply to any extension consented to by an applicant or petitioner.

**3.2.7 Adjoining Municipality Referral.** The Commission shall notify the clerk of the adjoining municipality of the pendency of any (re)subdivision application on any site when:

- a) any part of the property affected by the Commission's decision is within five hundred feet (500') of the adjoining municipality;
- b) a significant portion of the traffic to the completed project will use streets within the adjoining municipality to enter or exit the site;
- c) a significant portion of the sewer or water drainage from the project on the site will flow through and significantly impact the drainage or sewer system within the adjoining municipality; or
- d) water runoff from the improved site will impact streets or other municipal or private property within the adjoining municipality. Such notice shall be made by registered mail and shall be mailed within seven (7) days of the date of receipt of the application and no hearing shall be held on the application until after the adjoining municipality has received such notice. A representative from the adjoining municipality may appear and be heard at any hearing on any such application of site plan.

**3.2.8 Action by the Commission.** The Commission shall vote to approve, modify and approve, or disapprove any subdivision application or maps and plans submitted therewith within sixty-five (65) days after the close of the public hearing thereon, if no public hearing is held, the decision shall be made within sixty-five (65) days after the receipt of the application thereof. Notice of the decision of the Commission shall be published in a newspaper having a substantial circulation in the town. In addition, a letter notifying the applicant of the Commission's action signed by its chairman, vice chairman, or secretary, under his/her signature, shall be sent within fifteen (15) days after such decision has been rendered. The failure of the Commission to act thereon within the required time periods shall be considered as an approval, and a certificate to that effect shall be issued by the Commission on demand. The applicant may consent to one or more extensions of any period specified in the subsection, provided the total extension of any such period shall not be longer than the original period as specified in this subsection in accordance with Section 8-7d of the CGS. The grounds for the action of the Commission shall be stated in the records of the Commission.

**3.2.9 Financial Guarantee.** Prior to endorsement of the plan, the Commission shall accept from the applicant a financial guarantee in the form of a performance/ maintenance/erosion and sediment control bond, as applicable. This financial guarantee shall be acceptable to the Commission and satisfactory to secure to the Commission and the Town of Preston the actual construction and installation of all improvements as required by these Regulations, including the construction of streets, drainage features, street signs, the installation of monuments and markers, the grading and improvement of recreation facilities, cleanup of the premises and measures to be taken to control soil erosion and sedimentation likely to occur from the proposed subdivision. The amount of the financial guarantee shall be estimated by the applicant's engineer who shall provide the Commission with the basis for the estimate. The Town Engineer shall review the estimate prior to approving the amount of the financial guarantee. The financial guarantee shall be prepared on a form accepted by the Commission and deposited with the Town Treasurer.

To satisfy any financial guarantee requirement in this section, the Commission may accept cash bonds, passbook or statement savings accounts and other financial guarantees including but not limited to, letters of credit, provided such financial guarantee is in a form acceptable to the Commission and the financial institution or other entity issuing any letter of credit is acceptable to the Commission.

3.2.9.1 If the person posting a financial guarantee under this section requests a release of all or a portion of such financial guarantee, the Commission or its agent shall, not later than sixty-five (65) days after receiving such request:

- a) release or authorize the release of any such financial guarantee or portion thereof, provided the Commission is reasonably satisfied that the improvements for which such financial guarantee or portion thereof was posted have been completed, or
- b) provide the person who posted such financial guarantee with a written explanation as to the additional improvements that must be completed before such financial guarantee or portion thereof may be reduced or released.

**3.2.10 Financial Guarantee Reduction or Release.**

- a) A financial guarantee may be reduced by the Commission based on the work completed and provided the town engineer and/or the public works manager/director report that improvements completed are acceptable.

- b) In order for the financial guarantee to be released for the construction of a new street or drainage improvements, the applicant shall provide an acceptable as-built plan.
- c) When the release of the financial guarantee involves the construction of a town road and/or includes drainage easements, the financial guarantee cannot be released until the deed for the road and/or easement is/are accepted by the Board of Selectmen. The Commission shall forward the request release to the Town Engineer and the Public Works Manager/Director for a recommendation.
- d) Before release of the financial guarantee, a maintenance bond shall be submitted which shall be in an amount equal to ten percent (10%) of the performance bond or two thousand five hundred (\$2,500), whichever amount is greater, and which shall be retained by the Town for one year. The purpose of the maintenance bond is to guarantee correction of any construction failures related to the subdivision. The Commission shall release the maintenance bond after the one-year period, provided the Town Engineer and/or the Public Works Manager/Director recommends said release.

**3.2.11 Endorsement of the Plan.** If the Commission votes to approve or modify and approve an application, the final plan shall have a signature block as shown below on each page with the date approved and shall be endorsed and signed by the Chairperson, Vice Chairperson, or Secretary of the Commission. The Mylar copy of the plan shall be prepared in accordance with Section 7-31 of the CGS. In addition, the applicant shall provide five (5) paper copies of the plan.

<b>Town of Preston PZC and IWWC Approval Block</b>	
Subdivision Plan # _____	Number of lots _____
Plan Title _____	
Address: _____	
<b>Approved by IWWW on</b> _____	
Signature: _____	Date _____
<small>Chairperson/Vice Chairperson/Secretary</small>	
<b>Approved by Planning and Zoning Commission on:</b> _____	
Signature: _____	Date _____
<small>Chairperson/Vice Chairperson/Secretary</small>	
Improvements to be completed by: _____	
Filed in the Town Clerk's Office on _____	
Reference # _____	

The plans shall be provided by the applicant to the Town within thirty-five (35) days after the approval date, except that an extension of such time may be approved by vote of the

Commission. The Chairperson, Vice Chairperson or Secretary of the Commission shall, when endorsing the plan, indicate on the plan the date of endorsement and the date by which all improvements shown on the plan shall be completed.

The plan shall be delivered for filing to the applicant promptly, but not until after the fifteen (15) day appeal period, which period commences on the date of publication of the Commission's action to approve the plan.

**3.2.12 Filing the Plan.** The endorsed Mylar copy of the plan shall be filed by the applicant in the office of the Preston Town Clerk and any plan not so filed within ninety (90) days of the date such plan is delivered to the applicant or within ninety (90) days of the date upon which the plan is taken as approved by reason of the failure of the Commission to act, shall become null and void, except that upon request by the applicant, the Commission may extend the time for such filing for as long as two additional periods of ninety (90) days, and the plan shall remain valid until the expiration of such extended time. No such plan shall be filed or recorded by the Town Clerk until its approval has been endorsed in writing on such plan by the Chairperson, Vice Chairperson, or Secretary of the Commission.

**3.2.13 Time Limit on Completion.** Any person, firm or corporation making any subdivision of land shall complete all work in connection with such subdivision within five (5) years after the Commission's vote to approve the plan for such subdivision, which completion date shall be noted on the approved and endorsed plan.

3.2.13.1 Failure to complete all work within such five (5) year period shall result in automatic expiration of the approval of such plan, provided the Commission shall file on the land records of the Town of Preston notice of such expiration and shall slate such expiration on the subdivision plan on file in the office of the Town Clerk, and no additional lots shall be conveyed in the subdivision by the subdivider except with approval by the Commission of a new application for subdivision of the subject land. If lots have been conveyed during such five (5) year period, the Commission shall call the financial guarantee posted for said subdivision to the extent necessary to complete the required improvements to serve those lots. "Work" for purposes of this section means all physical improvements required by the approval of the plan, other than the staking out of lots, and includes but is not limited to the construction of roads, storm drainage facilities and water and sewer lines, the setting aside of open space and recreation areas, installation of telephone and electrical services, planting of trees or other landscaping, and installation of retaining walls or other structures.

**3.2.14 Conditional Approval.** In lieu of furnishing of a financial guarantee as provided in these Regulations, 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, and (2) the posting of a bond to cover the cost of erosion and sediment control (such cost estimate to be approved by the Town Engineer).

Any conditional approval shall lapse five (5) years from the date it is granted. The Commission may allow for conditional approval of less than five (5) years. Any person, firm or corporation who, prior to final approval, sells or offers for sale any lot subdivided pursuant to a conditional

approval shall be fined not more than five hundred dollars (\$500) for each lot sold or offered for sale.

3.2.14.1 If conditional approval is granted, the following signature block shall appear on each sheet of the subdivision plan:

<b>Town of Preston Planning and Zoning Commission Conditional Approval:</b>
<b>This plan represents a conditional approval to allow the applicant to construct the road and other associated improvements in accordance with the subdivision plan without posting a bond. No lots associated with the road shall be sold or offered for sale within the subdivision until all required improvements are completed and approved by the Preston Planning and Zoning Commission and final as-built plans are submitted, approved and filed in the office of the Town Clerk or a bond is posted for all remaining work, and a new plan is filed in the office of the Town Clerk removing the conditional approval.</b>
<b>Approved by the Inland Wetland Watercourses Commission on _____</b> <b>_____ Date _____</b> Chairperson, Vice Chairperson, or Secretary
<b>All improvements must be completed within five (5) years of the conditional approval date of the Commission by _____. If the work is not completed by this date, the conditional approval will expire and the plan will be null and void.</b> <b>Conditional Approval by the Preston Planning and Zoning Commission on _____</b> <b>_____ Date _____</b> Chairperson, Vice Chairperson, or Secretary
<b>Endorsed this _____ day of _____, 20 ____.</b>

Upon the completion and acceptance of all improvements or the posting of a bond for the remaining improvements as provided by these Regulations, the Commission shall cause a final approval to be endorsed on the subdivision plan in the manner provided by these Regulations.

## **SECTION 4: OPTIONAL PRE-APPLICATION SKETCH PLAN**

**4.1 Purpose.** The pre-application sketch plan is a general layout of a proposed subdivision submitted by the applicant for informal consideration by the Commission prior to a formal submission of an application for approval. A pre-application sketch plan shall not be required prior to submission of an application, but applicants are encouraged to use it as a means of ensuring that basic requirements can be met prior to incurring engineering, application, and legal fees involved with submission of the required application and plan. It should be clearly understood that pre-application sketch plan enjoys no official legal status and that consent with regard to feasibility of the pre-application sketch plan on the part of the Commission in no way predicates approval of the required plan. A pre-application sketch plan is encouraged in the interest of improved communication between the applicant and the Commission with regard to intent and general design, but it is at the sole discretion of the applicant.

**4.2 Contents.** The pre-application sketch plan will show sufficient information about the subdivision to present a clear picture of its scope and impact. The pre-application sketch plan may be a *Class D survey, as defined in State of Connecticut Regulation of Department of Consumer Protection Concerning Survey and Map Standards* and/or based on the Preston GIS information and should show:

- a) The subdivision name, boundaries, true north arrow, date, scale.
- b) The names and addresses of the record of owner and the applicant.
- c) Approximate locations of all major site features such as wetlands, existing streams, waterbodies, stone walls, large trees, rock ridges, outcroppings.
- d) The name and approximate location of existing adjacent streets and proposed streets.
- e) The total site area, the total number of proposed lots, and general configuration of the proposed lot boundary lines including measurements, and approximate area of each proposed lot.
- f) Areas dedicated or reserved for purposes other than residential use.
- g) Subsurface soil conditions based on results of random soil pit tests distributed evenly over the proposed subdivision tract.

## **SECTION 5: REQUIRED SUBDIVISION PLAN CONTENTS**

**5.1 General Requirements.** Eight (8) copies of all maps, plans and profiles shall be submitted with the application and fees. The Plan shall conform with Class A-2 standards as defined by the State of Connecticut Regulation of Department of Consumer Protection Concerning Survey and Map Standards, except that boundary of parcels containing more than ten (10) acres within the subdivision which are not intended to be used as building lots and are exempt based on Section 1.3 of these Regulations may be drawn using the Preston GIS maps as a source provided reference is made to such. Plans shall be prepared and sealed by a registered land surveyor and shall be presented on good-quality white paper prints and shall be thirty-six inches (36") by twenty-four inches (24"), twenty-four inches in size. All such prints shall have a one-half inch (½") border on three (3) sides and a two-inch (2") border on the left side. If more than one (1) sheet is submitted, they shall be bound. All such prints shall bear the following information:

- a) The name or title of the subdivision and the words: "Preston, Connecticut."
- b) The name of the applicant and owner of the property.
- c) North Arrow, scale, date of survey, and date of original drawing and revisions.
- d) Where only a part of the subdivision is shown on the sheet, a key map shall show its location in relation to the whole subdivision.
- e) Name, registration number and seal of the land surveyor and/or, when applicable, professional engineer that prepared the drawing.

**5.2 Key Map.** The key map shall be at a scale not smaller than one inch (1") equals two thousand feet (2,000') and shall show the location of the proposed subdivision, zoning districts, and all existing roads and watercourses within two thousand feet (2,000') of it. In the case of a resubdivision, the key map shall show the boundaries of the original subdivision within which the resubdivision is located.

**5.3 Boundary Survey Map.** This map shall show the property to be divided into building lots at a scale of at least one inch (1") equals one hundred feet (100'), one inch (1") equals fifty feet

(50'), or one inch (1") equals forty feet (40') or other acceptable scales. The scale of the map shall be adequate to clearly show all the information required by these Regulations. The boundary survey map shall show the following:

- a) Boundaries, dimensions, and acreage of the property to be subdivided.
- b) Boundaries of properties, approximate locations of structures, driveways, other significant resources, and names of current property owners within one hundred feet (100') of the subdivision.
- c) Locations and designations of all wetlands, watercourses, (mapped out by a soil scientist) and rock outcroppings on the property being subdivided and visible wetlands and watercourses within one hundred feet (100') of the property being subdivided.
- d) Boundaries, dimensions, angles, bearings, area in square feet and lot number of all proposed lots. Lot areas may be shown in tabular form on the same sheet.
- e) All existing buildings, stone walls, trees in excess of two feet (2') in diameter within areas that will be impacted by any future development or are within the road right of way; any trees that will be removed to ensure adequate sight distance or to eliminate a public hazard, and locations of existing utility poles on the property and on both sides of any abutting street or highway.
- f) All existing and proposed monuments, pins and any other physical evidence concerning property boundaries.
- g) Location of any known archaeological sites.
- h) Locations of all existing and proposed easements, right-of-ways, drainage rights and open spaces.
- i) Location of street trees (if required by the Commission). Street trees may be planted on both sides of every new street as determined by the Commission. Trees shall be spaced approximately fifty (50) feet apart, subject to variations made necessary by driveways, street corners, and walks and located five (5) feet beyond the road right-of-way line (on private property).
- j) Contours of the land to be subdivided in sufficient detail to show general topography, watercourses, and the direction of surface water flow. Contours shall be at two-foot contour intervals. These may be based on GIS mapping supplemented by field survey data. Field topographic data must be obtained at a minimum, at all proposed roadway intersections with existing roads and along all proposed storm drainage easements, sanitary sewer easements and road centerlines. The sources of topographic data shall be noted. Accurate contours meeting T-2 standards as defined in State of Connecticut Regulation of Department of Consumer Protection Concerning Survey and Map Standards shall be used for all areas that include regrading.
- k) All subdivisions shall include base flood (100-year storm) elevation data for that portion of the subdivision containing building lots located with A Zones on the Flood Hazard Boundary Map or Flood Insurance Rate map for Preston.
- l) Signature block showing approval by the Inland Wetland Watercourses Commission, if applicable, and the Planning and Zoning Commission in accordance with Section 3.2 of these Regulations.

**5.4 Construction Plan.** A construction plan, drawn at a scale of one-inch (1") equals forty feet (40'), shall be submitted when any type of construction, such as road modifications and improvements, drainage, water supply or sewer systems, retaining walls, etc., is to be carried out in connection with the subdivision. Profiles shall also be submitted for all road construction and drainage ways and shall be at a scale of 1" – 40' (horizontal) and 1" – 4' (vertical). The

construction plan shall be prepared and sealed by a Connecticut registered professional civil engineer. The construction and modification of all streets and drainage shall be in conformance with Section 6 of these Regulations. All other construction shall be in accordance with the current issue of the Connecticut Department of Transportation Bureau of Highways “Standard Specifications for Roads, Bridges and Incidental Construction,” and any supplements and amendments thereof, unless otherwise specifically provided by these Regulations. All plans shall be submitted using non-metric English measurement. The construction plan shall include the following, where applicable:

5.4.1 Plan and profile for all proposed street and/or drainage improvements, showing:

- a) Existing surface elevation along the centerline.
- b) Locations, bearings, curve data, include arc length, radii and center angles, proposed grades, vertical curves with centerline elevations every fifty feet (50’), except that such information shall be provided at ten-foot (10’) intervals within eighty feet (80’) of the centerline cross point of an intersection.
- c) Locations, size, and invert elevations of existing and proposed stormdrains, catch basins, manholes, bridges, culverts, outfalls and other drainage features.
- d) Location, size, and invert elevations of proposed sewers, if any.
- e) Location and size of all water supply and distribution facilities and hydrants.
- f) Cross section at twenty-five-foot (25’) intervals where existing terrain slopes more than ten percent (10%).
- g) Sidewalk location, if any and location of street paving and curbs within the right-of-way.
- h) Locations of street signs, trees, and other special landscape features to be installed or planted by the applicant.
- i) Street names.

5.4.2 Where a drainage system is to be constructed, the construction plan shall be suitably marked to show watershed data used in the design of such system and shall be accompanied by all calculations used in the drainage design.

5.4.3 In the case of retaining walls or other special features, drawing to a scale of one-half inch (½”) equals one foot (1’) of all such details shall be furnished.

**5.5 Erosion and Sediment (E&S) Control Plan.** Whenever plans for a subdivision show construction of improvements or buildings related to the subdivision that will result in the disturbance of more than one-half (½) acre of land, the applicant will submit, as part of the subdivision plan, an E&S control plan that presents, in mapped and narrative form, the measures to be taken to control erosion and sedimentation both during and after construction. The E&S plan shall be based on “Connecticut Guidelines for Soil Erosion and Sediment Control”.

5.5.1 The E&S Control Plan shall include the following:

- a) A description of the project and a schedule of the major activities to be constructed on the land.
- b) Locations of areas to be stripped of vegetation and/or disturbed areas.
- c) Locations of areas to be upgraded and contour data indicating existing and proposed grades.
- d) A schedule of operations, including the sequence of major improvement phases such as clearing, grading, paving, installation of drainage features and the like.

- e) Seeding, sodding, or revegetation plans and specifications for all unprotected or non-vegetated areas.
- f) Location, design and timing of structural control measures, such as diversions, waterways, grade stabilization structures, debris basins, and the like. The narrative shall indicate design criteria used in the design of control measures.
- g) A description of procedures to be followed to maintain sediment control measures.
- h) The plan shall contain the words: “Erosion and Sediment Control certified by vote of the Preston Planning & Zoning Commission on (date). The approval block as provided in Section 3.2 with signatures by the Commission representative is implicit of the Planning and Zoning approval.

5.5.2 After review of the E&S Control Plan by the Commission or its designee, the Commission shall vote to certify that the plan is in compliance with these Regulations. A vote of the Commission to approve a subdivision shall imply approval of the E&S plan.

5.5.3 The Commission through its members, agents, and consultants, shall periodically inspect construction projects for which E&S plans have been certified to verify that erosion and sediment controls are consistent with the certified plan.

5.5.4 The performance bond required for improvements in connection with the proposed subdivision shall be required to be sufficient to cover the costs of accomplishing the E&S control measures.

**5.6 Sewer/Septic and Water Report.** As part of the subdivision plan, when a private well and septic system is to serve any or all subdivision lots, a written report shall be obtained from the Town Sanitarian and shall be submitted to the Commission concerning the adequacy of property for proposed private sewage disposal facilities and water supply. Subsurface sewage disposal shall be based on percolation tests and observation pits on each lot in the proposed subdivision in the probable location of the private sewage disposal facility and carried out in conformity with the standards and requirements of the State of Connecticut Public Health Code. Percolation rates and water table levels shall be shown on the subdivision plan or submitted therewith. The plan also shall indicate the manner in which potable water is expected to be supplied to the lots when they are developed. No lot shall be approved by the Commission unless the lot is approved by the Town Sanitarian.

**5.7 Storm and Surface Drainage.** As part of the Subdivision Plan, the applicant shall also submit to the Commission, the report of a registered professional engineer or a qualified individual approved by the Commission as to soil conditions for storm and surface drainage, which report shall state in detail the tests made and their locations, together with the engineer’s, or qualified individual’s evaluation of the results of such tests.

5.7.1. Use of Low Impact Development (LID). Incorporation of LID measures is required to the maximum extent practicable for new development in order to promote recharge, reduce runoff volumes, and minimize reliance on structural stormwater management measures. Low Impact Development measures are site design techniques and practices that serve to preserve and maintain a site’s pre-development hydrology through implementation of small-scale controls to manage run-off. The Site Design Criteria require that the site planning process shall be documented and shall follow the objectives listed in the Low Impact Development Appendix to the

Connecticut Stormwater Quality Manual, including:

- a) Avoiding installation of roof drains that discharge to impervious surfaces.
- b) Directing flows to vegetated areas.
- c) Directing flows from paved areas to stabilized vegetated areas.
- d) Breaking up flow directions from large paved surfaces.
- e) Encouraging sheet flow through vegetated areas.
- f) Locating impervious areas so that they drain to permeable areas.
- g) Maximizing overland sheet flow.
- h) Lengthening flow paths and increase the number of flow paths.
- i) Maximizing use of open swale systems.
- j) Increasing (or augmenting) the amount of vegetation on the site.
- k) Restricting ground disturbance to the smallest possible area.
- l) Reducing pavement and impervious surface areas.
- m) Avoiding compaction or disturbance of highly permeable soils.
- n) Avoiding removal of existing trees.
- o) Reducing the use of turf and using more natural land cover.
- p) Maintaining existing topography and drainage divides.
- q) Locating structures, roadways on Type C soils where feasible.
- r) Stormwater Practices on Residential Lots. Wherever practicable, the design of individual subdivision lots should incorporate LID stormwater practices to reduce run-off volumes.

**5.8 Other Supporting Documents.** Before approval of any subdivision, the Commission shall require the following:

- a) Evidence of permits for activities that might be controlled or subject to approval by other local or state agencies.
- b) The applicant shall submit to the Commission written copies of all agreements, restrictive covenants, or other documents governing the use, reservation, or maintenance of land.
- c) By showing the locations of the new streets, open spaces, recreation areas, and easements on the subdivision plan, the applicant makes an irrevocable commitment to deed such lands, as applicable, to the Town of Preston. Copies of such unexecuted deeds, easements or such shall be provided as part of the application.
- d) When the subdivision includes any portion of a watercourse that is located within an A Zone on the Flood Hazard Boundary Map or the Flood Insurance Rate Map for Preston, and the subdivision would result in the alteration of that watercourse, the applicant shall submit a hydrological design by a registered professional engineer that indicates that the flood-carrying capacity of the watercourse will not be impaired by any construction or additional runoff resulting from the subdivision.
- e) No subdivision shall be laid out in a manner, which will obstruct or prevent the efficient drainage of the land or surrounding lands or cause flooding in downstream areas. The Commission may require plans showing measures to be taken to avoid excessive storm water runoff from new subdivisions. No drainage

shall flow onto a town or state road or into a town or state drainage way unless approved by the Public Works Manager/Director and the Town Engineer or State of Connecticut, respectively. No concentrated flow shall enter any abutting parcel unless approved by the Public Works Manager/Director and into an approved drainage way.

**5.9 Coastal Area.** Whenever a parcel of land is proposed for subdivision which lies wholly or partially in the Coastal Area of the Town of Preston, the applicant shall present a coastal site plan application along with a coastal site plan as prescribed below. A map showing the Coastal Area is part of these Regulations (see appendix).

#### **5.9.1 Coastal Site Plan and application.**

**A coastal site plan** shall consist of the following information:

- a. Location of the coastal area and including the identification of the coastal resources on the property and within 100 feet of the property. Resources shall be mapped by an environmental professional having expertise in coastal resources.
- b. Spatial relationship of coastal resources on and contiguous to the proposed subdivision.
- c. the design, timing, and methods of construction for all improvements, all proposed and existing develop structures, drainage, driveways, roads, infrastructure, etc.
- d. Location of all resources such as inland wetlands and watercourses, rock outcroppings and any historic or archaeological resources.

**Coastal Site Plan Application (narrative)** shall consist of following information:

- a) Description of the proposed project.
- b) Describe the entire project including types of buildings and structures, uses, methods, and timing of construction, type, and extent of development adjacent to the site.
- c) Identify the coastal resources on and contiguous to the site and describe their condition.
- d) Assess the suitability of the project for the proposed site and the capability of the resources to accommodate the proposed use.
- e) Identify any and all coastal use policies (in Section 22a-92(b)(1) of Chapter 444 of the Connecticut General Statutes) applicable to the proposed project.
- f) Identify any and all coastal resource policies (in Section 22a-92(b)(1) of Chapter 444 of the Connecticut General Statutes) applicable to the proposed project.
- g) Describe how the proposed project is consistent with all the coastal policies. Note: If a project conflicts with any policy, the project shall be modified to reduce or eliminate the conflict.
- h) Evaluation of the Potential Beneficial and Adverse Impacts of the Project and Description of Proposed Methods to Mitigate Adverse Effects.
- i) Identify and describe the potential adverse impacts (as defined in Section 22a-93(15) of Chapter 444 of the Connecticut General Statutes) and potential beneficial impacts of the coastal resources.
- j) Provide any other information needed to ensure the protection of the coastal resources and area.

## **SECTION 6: SUBDIVISION DESIGN CONSIDERATIONS**

**6.1 Lots.** Proposed lots shall be arranged to make the best use of the natural terrain, to preserve

important natural features, and to afford maximum opportunity for the use of solar energy.

- a) Lot sizes shall conform to the requirements of the Preston Zoning Regulations. Except for open space, no parcel shall be approved unless it meets the requirements of the Zoning Regulations.
- b) All lots, except open space parcels, shall have frontage on a town approved street/road as prescribed by the Preston Zoning Regulations.
- a) Where practical, side lot lines shall be at right angles to the street on which the lot fronts, or radial to curved street lines and be generally rectangular in shape.
- b) To the maximum extent possible, lots should be arranged in a manner that provides the best opportunity for the use of solar energy in buildings subsequently built on them. As a general rule, lot arrangements should enable principal buildings to be situated so that their longest axis lies in an east/west direction, so as to expose the front or rear of the building to the south. Attention should be given to ensuring that expected building locations are not shaded by buildings on adjoining properties, particularly on north-facing slopes during the heating season when the sun is low in the southern sky.

**6.2 Rear Lots.** The subdivision of land that would result in a building lot or lots being established that are remote from established streets or streets proposed by the subdivision plan, provided that the Commission determines that the establishment of such rear lot or lots and related driveways will not prevent the orderly development of land located between the rear lot and the street, and provided that the following other conditions are met.

It is the intent of this subsection to permit limited use of backland which would otherwise become unusable as land along the street frontage is subdivided.

- a) Rear lots are permitted only to the rear of lots fronting on streets and not behind other rear lots that front on the same street.
- b) Any such lot shall contain at least three (3) acres (130,680 square feet) and shall be of such shape that it can contain a rectangle with minimum dimensions of three hundred feet (300') by four hundred feet (400'). The principal or accessory buildings need not be located within the required rectangle, but shall comply with all required setbacks noted in Section 15 of the Zoning Regulations. The buildings shall be located behind the front yard setback and where the lot width meets the minimum lot width noted in Section 15 of the Zoning Regulations.
- c) Such a lot shall be accessible to a street by way of a driveway owned as part of the lot and consisting of a strip of land not less than twenty-five feet (25') in width throughout. The strip area serving the driveway shall not be included in the three-acre lot size requirement.
- d) The Commission shall determine that the location of the driveway will not impede future development or use of the land through which it passes and will have the least possible harmful impact on the natural features.
- e) The access driveway cannot be used for access to any other property except for agricultural purposes.
- f) Where the driveway for any rear lots meets the street, it shall not be closer than one hundred feet (100') from more than one (1) other existing or approved driveway on the same side of the street. The plan for any subdivision having one (1) or more rear lots shall show the locations of any existing or approved driveways within one hundred feet (100') in all directions of the proposed driveway or driveways. The Commission shall consider the location of the rear lot driveway as it relates to undeveloped adjacent land to ensure that the undeveloped land may be developed with safe sight distances and in accordance with Section 15 dimensional requirements in the Zoning Regulations.

- g) Any driveway in excess of five hundred (500) feet shall have an emergency pullover that is a minimum width of twelve (12) feet wide and thirty (30) feet long in addition to the driveway travel path of 12'. Such pull over shall be provided every five hundred (500) feet. Such driveway shall have an adequate Four (4) inches packed gravel base to support the weight of an emergency vehicle such as a fire truck or ambulance.

## **6.3 ROAD DESIGN**

### **6.3.1 General**

In addition to any information required to be submitted in the Subdivision Regulations, an application for design approval to construct, reconstruct or complete construction of a road intended to be opened to the public, shall include the supporting information required in this section.

### **6.3.2 Design Standards**

These regulations shall be considered to be the minimum design standards acceptable and the Town shall have the right to vary these requirements as the situation dictates.

These Regulations are intended to provide for the best possible design and construction of public improvements in terms of service, safety, economy, and ease of long-term maintenance. The Regulations take into consideration the typical conditions encountered within the Town. Special designs are expected to be prepared for projects where unusual or extreme conditions are encountered. Alternate designs for proposed improvements may be submitted to the Commission. However, the Commission and Public Works Manager/Director are under no obligation to approve any variations of the design standards as set forth in these Regulations.

### **6.3.3 Maps, Drawings and Plans**

All information pertaining to topographic maps and delineation of street rights-of-way and property boundaries required under this Section shall be shown on plans, maps or drawings which are prepared by and certified by a Connecticut registered land surveyor to the Survey Standards as amended. All information pertaining to design of roads and drainage systems and appurtenant facilities required under this Section shall be shown on plans, maps or drawings which are prepared by and certified by a registered professional engineer licensed in the State of Connecticut. All information shown in construction drawings shall be based on accurate field survey data referenced to U.S.G.S. vertical datum and the Connecticut Coordinate Grid System. Aerial survey data, based on accurate ground control surveys, may be utilized provided it is supplemented by field surveys at locations where elevations and dimensions are critical.

### **6.3.4 General Plan**

The general plan shall be a map or maps shall be on a 24" x 36" size sheet, drawn to a scale of 1"=100' or less to the inch, showing the following:

- a) The proposed roadway layout.

- b) Existing topography, including the identification of slopes greater than fifteen percent (15%).
- c) Ledge outcrops, stonewalls, rare/specimen trees and trees greater than eighteen (18) inches indiameter.
- d) Wetlands, watercourses, coastal resources, and all proposed alterations thereof, flood hazard zones, floodways, stream channel encroachment lines, existing bridges, culverts and storm system, proposed discharges to wetlands, DEEP stream classifications, wetlands, or coastal resources within one hundred (100) feet of areas to be disturbed.
- e) Soil Conservation Service soil types and boundaries.
- f) All existing buildings and structures, sidewalks, properly identified, located upon, and within two hundred (200) feet outside of each boundary line of the land to which the application relates.
- g) Roads approved but not yet constructed, driveways and other vehicular access ways entering upon, or which will enter upon, the road to be laid out and constructed.
- h) All existing parking facilities, playgrounds, recreational facilities, and open space areas, access to which may be obtained from such proposed road, including sidewalks.
- i) The location of all structures and improvements, including subsurface utilities and improvements proposed in connection with the construction of such road.
- j) All areas to be conveyed to the Town for open space, drainage, etc.
- k) Numbered survey control points, wetland flags and test pits.

#### 6.3.5 Plan & Profile Drawings

Plan & Profile drawings shall be prepared on a 24" x 36" sheet size with scales of 1"=40' horizontal and 1"=4' vertical, showing the following:

- a) The location and dimensions of existing and proposed street rights-of-way, edge of pavement, curbs, sidewalks, piping, catch basins, manholes, endwalls, bridges, utilities and utility easements, drainage easements, open channels, monuments, tops and toes of all slopes, all data required for accurate layout of roadway center lines and rights-of-way, including stationing, bearings, tangent lengths, arc lengths, radii and central angles of all curves; location of property lines intersecting the street right-of-way lines and the names of owners of such adjacent property; typical cross-sections of each street, showing proposed dimensions, materials of construction, and location of drainage piping and other underground facilities and utilities; and locations of drainage piping and other underground facilities and utilities; location and description of survey bench mark; and, street signs, street lights, and traffic control signs.
- b) Profiles of existing ground surface on the centerline and at each right-of-way line shall be based on an accurate field survey.
- c) Profile of the proposed centerline, showing proposed grades, vertical curve data and stations at grade changes, intersections, high points and low points.
- d) Profiles of all existing and proposed drainage facilities, bridges and other proposed improvements showing locations, sizes, grades, and invert elevations.

### 6.3.6 Detail Drawings

For proposed improvements that cannot be readily shown on the Plan & Profile drawings, or that are not included in the Standard Detail Drawings in Appendix A, additional drawings shall be submitted showing in further detail all information required for construction. Detail drawings shall be prepared at appropriate scales, and shall substantially conform in both form and manner to the Standard Detail Drawings.

### 6.3.7 Drainage Report

A drainage report, conforming with the design criteria in these Regulations, shall be submitted which includes the basis of design, detailed design computations, and a drainage analysis map for sizing all proposed storm drainage facilities; then analysis of any required existing off-site facilities; and, for any proposed stormwater runoff control measures. Detailed design computation shall include the design criteria, parameters and methods used in selecting the location, configuration, type and size of all proposed drainage facilities. Such computations shall include tabulated summaries of pertinent design computations. Wherever feasible, such tabulations shall follow the most current format utilized by the Connecticut Department of Transportation, the Federal Highway Administration, the U.S. Soil Conservation Service, Connecticut Stormwater Manuals 2004 as revised or such format as may be adopted and amended from time to time by the Town.

### 6.3.8 Soils Report

A soils report shall be submitted showing the type, nature and extent of the various soils existing within the proposed road right-of-way and in the area where the roadway slopes extend beyond the proposed road right-of-way. All soils types shall be identified on the basis of test pits, which shall also indicate seasonal high ground water and bedrock depths. Such report shall also include a description of the means and methods proposed to be utilized to overcome any potential soils problems.

### 6.3.9 Earthwork Analysis

An earthwork analysis shall be submitted which quantifies the volumes of cut and fill required to construct the proposed road and associated public improvements.

### 6.3.10 Soil Erosion and Sediment Control Plan

A detailed plan for soil erosion and sediment control, conforming with the requirements in these Regulations, shall be submitted. The plan shall include all measures to be taken to control erosion and sedimentation resulting from proposed road and drainage facility construction. All such measures shall be consistent with the requirements and standards outlined in the "Connecticut Guidelines for Soil Erosion and Sediment Control". When a project is of a size that requires a "General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities", it shall be the applicant's responsibility to file the required registration form with the Connecticut Department of Energy and Environmental Protection and to provide copies to the Town Planner.

### 6.3.11 Water Distribution System Report

If a public water distribution system is proposed to be extended within a road right-of-way, a water distribution system report, prepared by a registered professional engineer, shall be submitted. The report shall identify the proposed new service area, estimated

average and peak day demands resulting from the full build out of the new service area, elevations, and pressures and supporting analysis demonstrating that the proposed water distribution system extension is sized to meet projected demands. The report shall also identify any improvements to the existing public water distribution system that are necessary to meet projected demands.

#### 6.3.12 Sewage Collection System Report

If a public sewage collection system is proposed to be extended within a road right-of-way, a sewage collection system report, prepared by a registered professional engineer, shall be submitted. The report shall identify the proposed new service area, estimated average and peak day flows resulting from the full build out of the new service area, and supporting analysis demonstrating that the proposed sewage collection system extension is sized to meet projected flows. The reports shall also identify any improvements to the existing public sewage collection system that are necessary to convey projected flows.

#### 6.3.13 Traffic Report

If, in the opinion of the Planning and Zoning Commission, based on comments from the Town Planner and the Public Works Manager/Director, there is concern regarding the ability of the existing roadway network to accommodate prospective traffic in a safe and efficient manner, he/she may require the submission of a traffic report which shall evaluate and identify any required measures to address such concerns. Traffic reports shall be prepared by a Registered Professional Engineer with a specialization in Traffic Engineering.

#### 6.3.14 Connecticut Department of Transportation Approval

Where any road, drainage facility or other associated work is proposed to join with a state highway, or is to be located within a state highway right-of-way, the applicant shall obtain a letter from the Connecticut Department of Transportation which shall approve of such work. Such letter may be conditional upon prior approval of the project by the Commission, and/or submission of a permit application to the Connecticut Department of Transportation.

#### 6.3.15 Supplemental Information

Whenever Commission shall deem it reasonably necessary or appropriate to request additional information for consideration of an application, it may require the applicant to submit, at or prior to the hearing, any other information in such form as it may prescribe. Furthermore, whenever the Commission shall deem required information unnecessary for the consideration of an application, it may, upon request of the applicant, waive in writing the requirement of any information.

#### 6.3.16 Layout

Following the submission of an application and supporting information, the approximate location of all drainage outlets, and the proposed road centerline at maximum intervals of 100 feet, shall be flagged in the field. The requirement for field flagging shall not permit the applicant to initiate any type of site clearing. If such flagging is not completed as requested, the Commission may deem that there is insufficient information on which to make a decision and deny the application.

## **6.4 ROAD AND OTHER PUBLIC IMPROVEMENT CONSTRUCTION INSPECTION PROCESS**

### **6.4.1 General**

Any project for which design approval has been granted by the Commission to construct a road intended to be used for public travel or public use shall require periodic inspections to be conducted by the Town to monitor compliance with the approved drawings and plans, the requirements outlined in these regulations, and good construction practices. However, it is the applicant's sole responsibility to ensure that all construction shall conform to such requirements.

### **6.4.2 Preconstruction Meeting**

At least seven (7) days prior to the start of any construction, the applicant shall schedule a preconstruction meeting with the Town Planner; who shall be responsible for notification of the Public Works Manager/Director, the Town Engineer, and other appropriate Town Staff. The applicant shall be responsible for ensuring that the Contractor and Construction Coordinator are in attendance. The general purpose of the preconstruction meeting is to introduce all parties, identify the person from the Department of Public Works who will be assigned construction inspection responsibilities, exchange telephone numbers, review the construction schedule, and discuss any additional requirements or concerns specific to the proposed project.

### **6.4.3 Construction Coordinator**

In respect of all matters pertaining to inspection hereunder, the applicant shall designate one (1) Construction Coordinator who shall be fully authorized to communicate with the Town. Such designation shall be made in writing which shall state such individual's mailing address, and telephone/cell phone and fax numbers, email address and shall be delivered to the Public Works Manager/Director and the Town Planner prior to commencement of any work. All notices, orders or other communications delivered to or served upon such individual shall be deemed to have been delivered or served upon the applicant. All notices or other communications received from him shall be deemed to have been received from the applicant.

### **6.4.4 Erosion and Sediment Control Bond**

Prior to the start of any activity, the applicant shall post a separate cash bond with the Town for sediment and erosion control and site stabilization measures in accordance with the procedures established in the Subdivision Regulations; this is in addition to a bond for other public improvements.

### **6.4.5 Required Inspections**

Scheduled inspections shall be conducted by the authorized town agent at key construction stages as noted in Section 6.4.7 of these Regulations in order to provide a reasonable level of confidence that a road, which is to be used for public travel, as well as any associated improvements, has been constructed in general conformance with the approved drawings and plans; the requirements outlined in these regulations; and, good construction practice. At the discretion of the Town, the Construction Coordinator may be notified of additional inspections that may be required. It is the Construction Coordinator's sole responsibility to schedule and coordinate all required inspections with the Town's Construction Inspector. The applicant shall provide a minimum advance

notification of twenty-four (24) hours for all inspections, which shall only be made during the Public Works Department normal working hours. Unannounced spot inspections may also be made by the Town at any time.

#### 6.4.6 Right-of-Entry

All relevant town staff, shall have the right to enter upon the premises and to inspect, or cause to be inspected, construction work authorized by Design Approval hereunder at any time with or without notice during, before or after regular business hours.

#### 6.4.7 Scheduled Inspections and Surveys

The following inspections shall be required and no further work shall be performed until each inspection shall have been made and the Construction Coordinator has been notified by the Town's Construction Inspector that further work may proceed:

- a) The approved limits of clearing, conservation easements and inland wetland and watercourses shall be flagged prior to the start of any work.
- b) After cutting of trees and brush, and the installation of sediment and erosion control measures, but prior to any stumping and/or grading.
- c) After stumping and stripping of topsoil and organic material from earth cut and fill areas, but prior to the placement of any fill material.
- d) After rough earth cuts and fills and the formation of the road subgrade. (The Town may require the applicant to perform compaction tests at this time).
- e) After the installation of sewage collection system improvements, but prior to backfilling.
- f) After the installation of water distribution, but prior to backfilling.
- g) After the installation of storm drainage pipe and catch basins, but prior to backfilling.
- h) After the installation of underdrains, but prior to backfilling.
- i) After formation of the finished road subgrade, following the construction of all underground utilities located within the roadway (water distribution, sewage collection, storm drainage, underdrains, gas, etc.) and prior to the placement of any rolled granular base materials.
- j) Provide an interim As-built survey, after formation of finished road subgrade, showing the edges of road, centerline profile and catch basin locations with invert and top of grate elevations.
- k) After the placement of rolled granular base.
- l) After the placement of processed aggregate base.
- n) Prior to the placement of bituminous concrete paving, the applicant shall be responsible for the excavation of shallow test holes for the purpose of confirming that the actual compacted depth of rolled granular base and processed aggregate base materials conform to Town Standards. Test holes will be required at a minimum interval of 100 feet and/or at locations designated by the Town. In addition, proof rolling of the road base must be observed by the Town.
- o) During the placement of bituminous concrete paving, a copy of all weight slips for bituminous concrete material delivered to the site must be provided to the Town.
- p) After placement of bituminous concrete lip curbs, but prior to any backfilling of

- curbs.
- q) After placement of the granular sidewalk base.
  - r) During the placement of Cement Concrete Sidewalks. A copy of all batch plant tickets for Cement Concrete delivered to the site must be provided to the Town.
  - s) After backfilling of curbs and final grading of shoulder areas.
  - t) After restoration of all disturbed areas, placement of road monuments, traffic control/street name signs and street trees.

#### 6.4.8 Construction Materials

The applicant shall be required to submit samples and certified laboratory reports to the Town documenting the conformance of certain construction materials with the specifications included in these regulations. The applicant shall not be permitted to place, or to have delivered to the project site, any materials for which approvals have not been granted by the Town. Any approvals granted by the town on the basis of certified laboratory reports shall be conditional upon the tested sample being representative of all such materials utilized for construction. The Town shall reserve the right at any time during the course of construction, for whatever reason, to have additional materials testing conducted. Should the results of such testing find that the materials do not conform to specifications, then such materials shall be removed and replaced with conforming materials at the applicant's expense. The applicant shall be required to reimburse the Town for the cost of any such testing only if the results prove that the materials tested do not conform to required specifications. Samples and/or certified laboratory reports shall be submitted for the following materials:

- a) Rolled Granular Base – A five (5) gallon sample and sieve analysis for conformance with the State Standard Specifications Section M.02.06 Grading A.
- b) Processed Aggregate Base – A five (5) gallon sample and sieve analysis for conformance with the State Standard Specification Section M.05.01.
- c) Bituminous Concrete – Plant certification by the State of Connecticut Department of Transportation for use of such materials in state highway construction projects.
- d) Roadway Subgrade – In place density tests at approximately one hundred (100) foot intervals and/or at other locations and depths as required by the Public Works Director. Compaction testing shall be performed to the satisfaction of the Public Works Manager/Director by a certified testing lab.
- e) Portland Cement Concrete – Slump tests and air content at frequencies required by the Public Works Manager/Director. Slump testing shall be performed in accordance with AASHTO Method T119, and air content shall be determined to the satisfaction of the Public Works Manager/Director by a certified testing lab.

#### 6.4.9 Failure to Properly Execute Required Improvements

Failure to follow the procedures set forth in these Road Regulations may result in a rejection of that portion of the work completed without required inspections, which may result in delays and added costs to the applicant in demonstrating compliance with applicable regulations and standards. Failure to construct road, drainage, and other publicimprovements in accordance with approved construction plans, Subdivision Regulations and Standards, and good construction practice may result in the Town's refusal to accept any such improvements. If the applicant fails to execute the approved or

required improvements in accordance with these regulations or the terms of the permit or approval, and such failure causes unreasonable sedimentation, erosion, pollution or other nuisance conditions, the town or the Commission may take whatever actions it deems necessary or appropriate to correct and/or abate the nuisance conditions. In such circumstances, the Commission may recommend that the town not accept such improvements, unless and until the applicant reimburses the town for all costs and expenses of such correction and abatement.

#### 6.4.10 Changes During Construction

If at any time during the construction of the required improvements, unforeseen field conditions make it necessary or preferable to modify the location or design of such required improvements, the Construction Coordinator shall notify the Public Works Manager/Director and the Town Planner in writing, who shall determine whether the change is minor in nature or whether the Commission itself must act on the proposed change. If the change is minor, the Public Works Manager/Director shall either approve or disapprove the applicant's request. If it is determined that the change is not minor, the applicant shall submit an application for a modification of the Commission's approval. Such application shall meet all the informational requirements required by the Commission. If during the course of construction of any new road, or any other improvements required by the Commission in connection with the approval of a subdivision, it appears that additional work is required owing to unforeseen conditions such as, but not limited to springs, old drains, wet conditions, side hill drainage from cuts, bedrock, or other conditions which were not apparent at the time of the approval by the Commission, the Public Works Manager/Director may require such additional work to be done.

### **6.5 TOWN ACCEPTANCE OF A COMPLETED ROAD**

#### 6.5.1 General

Whenever a completed road is intended to be offered for acceptance by the Town, a written request for acceptance, including supporting and supplemental information required in this section, shall be submitted to the Town Planner. The Town Planner shall notify the person(s) making the request of any comments requiring revision to the supporting and supplement information and any outstanding maintenance bills due to the Town. Upon receipt and confirmation that all required revisions have been made, and outstanding bills paid, the Town Planner shall forward the written request and supporting and supplemental information, along with recommendations to the Planning & Zoning Commission. The Planning & Zoning Commission, after review of all information, shall make a recommendation to the Board of Selectmen regarding the request for acceptance as a town road. The procedure for formal acceptance shall be as required by state law and the Town Ordinance.

#### 6.5.2 Who May Request Acceptance

A written request for acceptance of a completed road may be made by any person who is:

- a) The owner, or all the joint owners, of the land underlying the proposed road.
- b) The purchaser, or all the purchasers, under a written contract to purchase the land underlying the proposed road, provided that written consent of the owner, or all joint owners, of the land accompanies the written request.

### 6.5.3 Supporting and Supplemental Information

A written request for Town acceptance of a completed road shall include six (6) copies of all required supporting information and supplemental information as may be requested.

### 6.5.4 Supporting Information

Supporting information shall include the following items:

- a) A written description by metes and bounds or courses and distances, of all land and additional easements as necessary to be conveyed to the Town or State.
- b) Fixed line mylars or Record Plan-Profile Drawings, prepared at the scale and, showing the information specified in Section 6.3.4 of these Regulations on an “As-Built” basis. All record drawings shall be prepared by a Land Surveyor licensed in the State of Connecticut.
- c) Fixed line mylars of Record Detail Drawings, where any previously approved details have been modified, showing all information on as “As-Built” basis.
- d) A copy of a completed Town of Preston Work Permit or letter, issued by the State of Connecticut Department of Transportation, confirming the satisfactory completion of all work conducted within a State Highway Right-of-Way.
- e) Completed copies of all conveyances or other legal instruments, properly executed in form and manner suitable for recording in the Town Land Records, effectively transferring or creating the rights.
- f) A Warranty Deed properly executed by the owner or owners of the land to which the written request relates, in form and manner suitable for recording, effectively conveying good and marketable title to said land to the Town, together with a Certificate of Title from an attorney admitted to practice in Connecticut certifying that said owner or owners hold good and marketable title to said land at the date of such written request free and clear of all title defects and encumbrances. By delivery of such deed, said owner or owners shall be deemed to authorize delivery to and recording thereof by the Town upon acceptance of such road by the Town.
- g) A Certificate of Accurate Monument Location prepared by a Land Surveyor licensed in the State of Connecticut.
- h) Digital data for Re/subdivisions/Subdivisions shall be provided to the Planning and Zoning Office after the recording of the final mylars on the land records.
  - i. The Digital Data shall include:
    - A) (1) one PDF copy of the project.
    - B) Copy of the project in ArcView (GIS) format or AutoCAD
      1. Shapefile (.shp)
      2. Geodatabase (.mdb)
      3. Export file (.e00)
      4. AutoCAD.dwg

### 6.5.5 Supplemental Information

Whenever the Commission shall deem it reasonably necessary or appropriate to a property disposition of any written request for acceptance of a completed road, it may require submission of any other information in such form as it may prescribe. Until such supplemental information has been received by the Commission, it shall decline to make any recommendation to the Board of Selectmen regarding acceptance.

#### 6.5.6 Acceptance

Prior to considering acceptance of a road, the Commission shall determine whether or not the road and all associated improvements, including but not limited to detention basins, water storage tanks and any required off-site improvements, conform to the approved location, layout, design and construction plans and to the criteria and standards hereinafter specified or prescribed for such road and all associated improvements in or pursuant to these Regulations.

#### 6.5.7 Maintenance Bond

Prior to the acceptance of any road by the Board of Selectmen, the applicant shall post with the Planning and Zoning Commission, a maintenance bond or bonds, in an amount and with surety and conditions satisfactory to the Planning and Zoning Commission, indemnifying the Town for a one year period against costs and expenses of labor and materials necessary or appropriate to correct or replace improper or defective materials or faulty workmanship, including any damage to any property of the Town resulting therefrom, or to complete construction in conformity with the standards, criteria and specifications prescribed in these Regulations. Such maintenance bond shall be in an amount equal to not less than ten percent (10%) of the total project road cost. The maintenance bond shall be delivered to the Town Planner, who shall deliver the maintenance bond to the Treasurer for review and safe keeping.

#### 6.5.8 Recording of Documents

The owner shall provide all supporting information, including the required maintenance bond, prior to acceptance of the completed road by the Town. Final acceptance of a completed road shall not be deemed effective until all required documents have been filed on the Town Land Records.

### **6.6 ROAD CRITERIA (Please see appendix for all details)**

#### 6.6.1 Road Types

Any road, highway, or street dedicated to the movement of motor vehicles and that is shown on a subdivision plan approved by the Commission and accepted by the town; or is a State numbered street - State of Connecticut Routes 2, 2A, 12, 117, 164, 165 and 605 (Old Shetucket Turnpike) or Town Road as found on the most current road list; private right-of ways, private roads, and discontinued, abandoned, or impassible streets are excluded.

- a) Business/Industrial Road: Roads within or directly serving business and industrial zones.
- b) Subcollector Street: a street that provides access to abutting lots and conducts traffic from local and minor street to a higher classification street or to an activity center. Usual ADT range is 200-1,000 trips and serves 26 to 80 parcels.
- c) Local Street: a cul-de-sac, loop street, or short street that primarily provide access to abutting lots, but may also serve as a connector to other local and minor streets. Usual ADT range is 75-350 trips and services sixteen (16) to twenty-five (25) parcels.
- d) Minor Street: A short-dead-end or loop street that serves only as access to

abutting lots which shall number no more than fifteen (15). Minor streets do not serve as through streets to any other street. Usual ADT range is less than 100 trips and serves 1 to 15 parcels.

**6.6.2 Road and Right-of-Way Width**

The minimum pavement width of roads, as measured from face to face of curbs, shall be as follows:

Classification	Right-of-Way	Pavement Width
Business/Industrial	60	30'
Sub/Collector Street	50	26'
Local Street	50	24'
Minor Street	50	22'

**6.6.3 Preservation of Existing Resources**

All significant existing natural, human-made, or scenic resources shall be preserved and protected to the greatest extent possible. The Commission may request the applicant to provide an explanation why such significant resource must be altered or removed. Such resources include, but are not limited to: stonewalls, steep slopes with a gradient greater than 25%, ledge outcroppings, specimen trees and stands of trees including rare and unusual flora and fauna, endangered species, species of special concern, watercourses, ponds, wetland, scenic vistas, ridge lines and any other significant geological features.

**6.6.4 Horizontal and Vertical Design Controls**

Road Classifications

Design Element	Business/ Industrial	Sub- Collector	Local	Minor
Design Speed, mph	40	30	25	20
Maximum Gradient, % (2)	10	10	10	10
Minimum Gradient, %	1.0	1.0	1.0	1.0
Stopping Sight Dist. (3) ft.	70	36	25	20
Sag	80	40	30	24
Minimum Center Line Radius, (5) ft.	400	300	200	150
Min. Sight Distance at Intersections (6) ft.	500	360	300	240

- a) All values shown for arterial streets are for a 50-mph design speed.
- b) The maximum grade may be increased up to 2% in special cases by the Commission with recommendation from the Town Engineer and/or the Public Works Manager/Director. The applicant shall provide alternatives to increasing the grade for the Commission’s consideration.
- c) Criteria for determining the Minimum Stopping Sight Distance: height of eye, 3.75 ft.,

- and height of object 0.5 ft.
- d) K value is a coefficient by which the algebraic difference in grade may be multiplied to determine the length in feet of the vertical curve which will provide minimum sight distance.
  - e) Depend on the application of super elevation.
  - f) Intersection sight distance is measured from a point of the intersecting road twenty (20) feet from the edge of the other road pavement and measured from a height of eye of 3.75 ft. on the intersecting road to a height of object of 4.5 ft. on either lane of the other road.

#### 6.6.5 Intersections

The following standards shall apply to all intersections:

- a) No more than two (2) roads shall intersect at any one (1) location.
- b) Cross (four-cornered) intersections shall require approval by the Town Engineer and the Public Works Manager/Director.
- c) Spacing of intersections, as measured between centerlines, shall be at least two hundred (200) feet.
- d) Driveways shall not be located any closer than seventy-five (75) feet from an intersection.
- e) Wherever possible, roads shall intersect at a 90-degree angle, or as close thereto as is practical. In no event, however, shall an intersection be allowed where the angle of intersection is less than seventy-five (75) degrees within one hundred (100) feet of the intersection.
- f) The minimum radii of curb lines at intersections shall be as follows:
 

g) Sub Collector/Local/Minor/Roads	25 feet
h) Business/Industrial Road	35 feet

  - i. The Commission may require greater radii where the angle of intersection is less than 90 degrees.
- i) The visibility at intersections (intersection sight distance) shall be such as to allow a stopped vehicle on the intersection roadway, located fifteen (15) feet back from the gutter line, to see and to be seen from, a vehicle approaching from either direction along the intersected roadway at a distance of not less than two hundred fifty (250) feet, based on a height of eye and object of three and one half (3.5) feet.
- j) Sufficient clearing and regrading shall be accomplished to meet the sight distance visibility requirements of Subparagraph (G) of this subsection and no structures, fences, walls, hedges, rock, shrubs, trees or other landscaping shall be permitted to obstruct such visibility.
- k) Permanent sight line easements shall be provided on all private property so as to maintain the sight line requirements established in this subsection. In addition, no objects of any kind, that are located on private property outside the limits of a permanent sight line easement, shall be permitted to extend or protrude within the plane of such easement. In the case of trees, all foliage shall be trimmed up to a minimum height of six (6) feet as measured from the top of curb or edge of pavement adjacent to the nearest road. The owner of the lot is required to maintain sight line easement areas; however, the town may have the right to enter the sight line easement area for the removal of any item that obstructs sight distance at the expense of the owner.

#### 6.6.7 Cul-De-Sacs

All cul-de-sacs, permanent and temporary, shall be provided with a circular right-of-way at the terminating end. The required radii of the right-of-way and pavement shall be as follows:

a) Layout

The layout of the turnaround shall be in accordance with the most current Standard Detail Drawings for either a circular or offset type turnaround.

b) Snow Storage Reserve Area

Unless otherwise approved, an open unrestricted area shall be reserved at the end of all turnarounds for the storage of snow. Such area(s) shall be located at the end of the turnaround between the curb and the right of way line for distance(s) and location(s) as shown on the Standard Detail Drawings. This area, which shall be delineated on the Record Subdivision Map, shall be free from all obstructions including, but not limited to, driveways, mailboxes, landscaping and fences.

c) Length

The maximum length of a dead-end road shall be as specified in the Preston Subdivision Regulations and shall be measured from the gutter line of the intersected road to the center of the turnaround.

#### 6.6.8 Shoulders and Slopes

For all roads, a shoulder area from edge of pavement to the right-of-way line in width in back of the curbing shall be excavated to a depth of at least six (6) inches, and then backfilled and final graded with not less than six (6) inches of topsoil, as hereinafter specified also:

a) Grading of Shoulder Areas

The shoulder areas shall be graded so as to slope toward the centerline of the road at a cross slope of 3/8 inch per foot unless otherwise approved by the Town Engineer and the Public Works Manager/Director due to special conditions encountered during construction.

b) Grading Beyond Shoulder Areas

Areas outside of the shoulders shall be graded up or down to existing grades, at a slope not to exceed two (2) feet horizontal to one (1) foot vertical. In rock cuts, slopes of one foot horizontal to not more than six feet vertical shall be allowed, but care shall be taken to ensure that all exposed rock is stable and free from faults, cracks or other infirmities which might lead to collapse or flaking.

c) Special Conditions

The Town Engineer and the Public Works Manager/Director may require additional measures to be taken to maintain the stability of slopes, and to control groundwater seepage, under prevailing soil conditions encountered during construction. These measures may include, but not necessarily be limited to, a decrease in the amount of slope, stabilization blankets or grids, stone slope protection, plantings, wedge drains, underdrains, terracing, drainage swales or retaining structures. In cases where the exposed face of a cut slope consists of decomposed, flaking, highly fractured or unstable rock, slopes shall be flattened so as to protect public safety and minimize future maintenance.

d) Limits

No cut or fill slopes shall extend beyond the limits of the right-of-way onto

private property unless appropriate slope rights are acquired which provide a perpetual right, running with the land in favor of the owner of the road, to enter upon said private property for purposes of construction, maintaining and repairing such slopes. In the absence of such slope rights, appropriate retaining structures shall be constructed to prevent encroachment on adjoining private property.

e) Trees

If, in the opinion of the Commission, a slight modification of the shoulder or slope would result in the saving a valuable shade tree, the Commission may be in its discretion to allow such variation.

#### 6.6.9 Curbing

Curbs shall be constructed along the edge of street pavement in accordance with the dimensions and details shown in the most current Standard Detail Drawings.

#### 6.6.10 Utilities

For new road construction, all utilities within the right-of-way of a road shall be located underground and installed as shown in the most current Standard Detail Drawings for underground utility assignments. Individual services shall be extended to the right-of-way line prior to the placement of any pavement. Installation of utilities within existing road right-of-ways shall be as approved by the Public Works Manager/Director. To the extent possible, separation distances shall be maximized from existing municipal utilities.

#### 6.6.11 Guide Rails

Guide rails shall be installed wherever necessary to minimize the risk of personal injury or property damage resulting from vehicle departure from the right-of-way. In general, guide rails shall be installed at the following locations:

6.6.11.1 Embankments – Such protective barriers shall be required on any roadway section constructed on an embankment which places the roadway surface five (5) feet or more above the existing ground surface at the toe of the embankment slope. This requirement may be waived by the Commission with a recommendation from the Town Engineer and the Public Works Manager/Director where the embankment slopes are not steeper than four (4) feet horizontal to one (1) foot vertical.

6.6.11.2 Culvert Endwalls – Such protective barriers may be required at culvert endwalls, depending on the height of the endwall and its proximity to the edge of the road.

6.6.11.3 Roadside Obstacles – Such protective barriers may be required to shield natural or man-made fixed object hazards including, but not limited to, trees, rock outcrops, ditches, retaining walls, bridge abutments and permanent bodies of water.

Where marginal situations occur with respect to the placement or omission of a guide rail, or where it is determined that a vehicle striking a guide rail could potentially be more severely damaged than an accident resulting from hitting an unshielded roadway obstacle, the Town Engineer and/or the Public Works Manager/Director may approve the use of an object marker in accordance with meeting the “Manual of Uniform Traffic Control”.

#### 6.6.12 Fencing

A securely anchored PVC coated chain link fence four (4) feet in height shall be installed wherever necessary to minimize the risk of personal injury.

In general, fencing shall be installed at the following locations:

6.6.12.1 Rock Cuts – such protective barriers shall be required along the top of slope where a rock cut exceeds five (5) feet in height.

6.6.12.2 Culvert Endwalls – such protective barriers shall be required at the top of any endwall that exceeds five (5) feet in height.

#### 6.6.13 Road Lighting

Road lighting shall be provided if deemed necessary by the Town Engineer and/or Public Works Manager/Director at any location where illumination in darkness is necessary to minimize the risk of accident involving vehicles or pedestrians or to assure safe and convenient vehicle and pedestrian passage. In general, the placement of lighting should be limited to intersection and when required at turnarounds. Lighting standards and luminaries shall conform to the Standard Detail Drawings, unless otherwise approved by the Public Works Manager/Director. They shall be so located as to safeguard against discomfort glare and disability glare and avoid adverse effects from illumination upon the use, enjoyment, and value of adjacent property.

#### 6.6.14 Monuments

All new roads shall be accurately monumented to allow the ready determination of points along all rights-of-way lines. Monuments shall be placed at all points of tangency and points of curvature and elsewhere as required to permit seeing from one monument on a line to another on the same line. Monuments are also required at the extreme corners of the subdivision.

#### 6.6.15 Road Names and Signs

Road and other location names shall be approved by the Commission, and be so distinctive as to preclude possible confusion with other existing roads and locations within the Town. Road name signs shall be installed at all intersections. Such signs shall be erected in such places as to assure clear legibility by vehicle operators and shall conform to the dimensions and details as approved by the Public Works Manager/Director.

#### 6.6.16 Traffic Control Devices

Traffic control devices, including signs, pavement markings, object markers, and other regulatory devices, shall be provided in such places as may be necessary to minimize the risk of accident involving vehicles or pedestrians and to assure safe and convenient vehicle and pedestrian passage also:

a) Signs

The design and placement of regulatory, warning and guide signs (Stop, Speed Limit, No Outlet, etc.) shall conform to the most current edition of the Manual of Uniform Traffic Control Devices.

b) Pavement Markings

The location, type, color, width and patterns of pavement markings and object

markers, shall conform to the most current edition of the Manual of Uniform Traffic Control Devices. In general, pavement markings shall include stop lines and crosswalks. Longitudinal pavement markings (center lines), to delineate the separation of traffic flows in opposing directions, shall only be required on business/industrial roads or other roads as required by the Public Works Manager/Director.

c) Object Markers

- i. The design and placement of Type 2 Object Markers shall conform to the most current edition of the Manual of Uniform Traffic Control Devices.

6.6.17 Sidewalks

The Commission may require the installation of sidewalks upon recommendation of the Public Works Manager/Director and the Town Planner, along roads and in pedestrian easements. In general, when required, the installation of sidewalks should be limited to projects located adjacent to arterial, collector, and subcollector streets; adjacent to local streets within 1.5 miles of a school, library or recreational facility; in the vicinity of public or quasi-public buildings, playgrounds, shopping areas, transit stops or high density residential areas; and, at other locations when deemed necessary where the expected or probable volume of pedestrian traffic makes sidewalks necessary or appropriate in the interest of public safety and convenience. Curb cuts shall be provided at all pedestrian crosswalks to provide access for the safe and convenient movement of physically handicapped persons. Such curb cuts shall conform to the most current State Statutes and the American with Disabilities Act Accessibility Guidelines.

6.6.18 Alternative Open Drainage System

In certain circumstances the Commission may permit an open drainage system where such system would be more consistent with the surrounding neighborhood and where the Commission, upon recommendation from the Public Works Manager/Director and/or the Town Engineer determines that such a system would be more appropriate to the particular site and the Town Engineer may require the applicant to provide data, reports, studies, test borings, and other information to make this determination. This determination shall be based upon at least the following factors and the applicant shall submit a report that addresses each of these items:

- 6.6.18.1 The depth to highest ground water level;
- 6.6.18.2 The location of the site in the watershed and the amount of overland flow anticipated;
- 6.6.18.3 The design of the storm drainage system of the surrounding streets;
- 6.6.18.4 The natural features of the site (such as slopes and depth to ledge) that would permit restrict the construction of open swales;
- 6.6.18.5 The proposed density of the subdivision including proposed lot size;
- 6.6.18.6 The impacts of ground water recharge that may result from the proposed drainagesystem;
- 6.6.18.7 Roadway intersections, where a closed drainage system may be more acceptable;
- 6.6.18.8 Location of open space;
- 6.6.18.9 The type of roadway swale linings proposed and the difficulty of long-term maintenance;
- 6.6.18.10 The potential for erosion and sedimentation on the site as well as

both temporary and permanent erosion control measures.

## 6.7 ROAD CONSTRUCTION STANDARDS

### 6.7.1 Construction Survey Procedure

The centerline of the traveled portion of the road shall be placed in the center of the right-of-way, and shall be located in the field by a State of Connecticut licensed land surveyor. Suitable construction ties shall be established at all control points, which shall be protected during construction so that the centerline may be re-established at any time.

Also:

#### a) Stations

Stations shall be established every fifty (50) feet and at all radius points (P.C. and P.T.'s). The beginning of this line shall be located in the gutter line of the intersected street and shall be designated as Station 10+0. A construction stake shall be placed at right angles to each station, clear of construction and grading. This stake will show the station on the side facing toward Station 10+0 the measured distance to centerline (offset) on the side facing away from Station 10+0 and on the face nearest to center line the cut or fill which will establish the center line grade. A grade list showing the Stations, stake elevations, offset from centerline grade, cuts and fills shall be provided to the Town Engineer and the Public Works Manager/Director by the Applicant, or his designee who is to have charge of the construction layout, before construction begins.

#### b) Bench Marks

A permanent Bench Mark shall be established at the beginning and end of each road and at intervals not exceeding five hundred (500) feet along the length of the road. These Bench Marks shall be referenced to the same datum shown and identified on the construction drawings for the road. Sketches showing at least three (3) ties to each Bench Mark, the Bench Mark elevation and a description of each Bench Mark shall be provided to the Public Works Manager/Director.

#### c) Protection of Stakes and Bench Marks

Grade stakes and permanent Bench Marks shall be protected and preserved until the road construction has been approved by the Town Engineer and the Public Works Manager/Director. If such stakes or Bench Marks are disturbed, they shall be replaced immediately.

### 6.7.2 Clearing and Grubbing

All trees, brush, boulders, structures, walls, fences, perishable matter and debris of whatever nature shall be cleared from the full width of the right-of-way, including areas necessary for cuts and fills, construction of storm drainage systems, and required sight lines, except that valuable shade trees may remain in shoulder areas as approved by the Planning and Zoning Commission with a recommendation of the Public Works Manager/Director. All roots and stumps within the clearing limits shall be grubbed and excavated. All stumps shall be chopped or disposed of off-site in a lawful manner. No stumps shall be buried on site.

### 6.7.3 Trees

Valuable shade trees may be permitted by the Commission to remain in shoulder areas

but not within three (3) feet of any curb line, if no substantial increase in the risk of injury or damage results by reason of its presence in the particular place where it stands, and a written opinion is provided from a qualified arborist stating that the long-term health of the tree will not be adversely impacted by proposed construction or proximity to proposed road improvements. Any such tree shall be effectively protected and preserved so as to ensure that it will suffer no damage during construction operations. All tree branches overhanging the roadway pavement or shoulder areas shall be trimmed by a qualified arborist to a clearance of sixteen (16) feet above the finished grade of the road. The inspection shall be scheduled immediately, but no later than twenty-four (24) hours from the date and time of the request provided during normal working hours.

#### 6.7.4 Roadway Excavation, Formation of Embankment and Disposal of Surplus Material.

The excavation, filling, compaction, and the disposal of all surplus or unsuitable materials required to construct the roadbed, subgrade, shoulders, slopes and other associated improvements shall be accomplished in accordance with all applicable requirements of the State of Connecticut Standard Specifications for “Roadway Excavation, Formation of Embankment and Disposal of Surplus Material” except as modified herein. All unsuitable material, including material removed during clearing and grubbing and preparation of subgrade, shall be removed from within the limits of the right-of-way and disposed of in a lawful manner. Surplus suitable material may be used to flatten fill slopes within the limits of the right-of-way and any slope easement if approved by the Public Works Manager/Director. Surplus suitable materials that cannot be so utilized shall be disposed of in a lawful manner. Blasting shall be performed only by a Connecticut licensed competent personnel and shall be done in accordance with all applicable State and Federal laws, local ordinances, rules and regulations pertaining thereto, and only after obtaining all necessary permits. All blasting shall be approved by the Preston Fire Chief. A pre-blast survey shall be required.

#### 6.7.5 Preparation of Subgrade

All topsoil, peat, other organic matter and all soft and yielding material shall be stripped and removed to their dull depth, and boulders and ledge rock removed to a depth of at least twelve (12) inches below finished subgrade. The surface shall then be backfilled up to subgrade elevation with bank or crushed gravel conforming to the requirements of the State of Connecticut Standard Specification Sections M.02.1 and M.02.06 (Grading B). All construction methods shall conform to the requirements of the State Standard Specifications for “Subgrade”.

#### 6.7.6 Rolled Granular Base

After the subgrade has been compacted, proof rolled and approved by the Public Works Manager/Director, a rolled granular base shall be applied for the full required width of pavement plus one (1) foot beyond each curb line. The rolled granular base shall not be less than eight (8) inches thick after compaction and shall have the cross-slope shown on the Standard Detail Drawings. Construction methods shall conform to the requirements of the State of Connecticut Standard Specifications for “Rolled Granular Base”, and materials shall conform to the requirements of the State Standard Specification Sections M.02.03 and M.02.06 (Grading A).

#### 6.7.7 Processed Aggregate Base

After the rolled granular base has been placed and compacted, processed aggregate base shall be applied for the full required width of pavement plus one (1) foot beyond each curb line. The process aggregate base shall not be less than four (4) inches thick after compaction and shall have the cross slope shown on the Standard Detail Drawings. Construction methods shall conform to the requirements of the State of Connecticut Standard Specifications for “Processed Aggregate Base”, and materials shall conform to the requirements of the State Standard Specification Section M.05.01.

#### 6.7.8 Bituminous Concrete Pavement

After the processed aggregate base has been brought to the required grade and cross slope, rolled, and compacted, the roadway shall be surfaced with bituminous concrete Class I binder course for the full required width of pavement plus one (1) foot beyond each curb line to a compacted depth of not less and tow and one half (2 ½) inches. After placement of bituminous concrete curbing on the binder course, a bituminous concrete Class II top or surface course not less than one and one half (1 ½) inches thick after compaction shall be placed. The total compacted depth of Class I binder course and Class II top or surface course shall not be less than four (4) inches. Prior to the pavement of the Class II surface course, the surface of the binder course shall be broomed clean and a tack coat applied. No paving shall be permitted Between October 31 and April 1 unless the Public Works Manager/Director specifically permits an exception due to unusually mild weather conditions. No paving shall be permitted on any day where the base temperature is less than thirty-five (35) degrees Fahrenheit or when weather conditions of fog or rain prevail or when the pavement surface shows any signs of moisture. Pavement shall be placed so that each course shall have the cross-slope shown on the Standard Detail Drawings. All materials and construction methods shall conform to the requirements of the State Standard Specifications for “Bituminous Concrete” except as modified herein. “Bituminous Concrete” shall conform to the requirements of the State Standard Specifications Section M.04.01 and M.04.03 (Class I for the binder course and Class II for the top or surface course). All bituminous concrete pavement materials shall be obtained from a plant certified by the State Department of Transportation for provision of such materials for use in State highway construction. Original signed copies of certification by the supplier that each load of bituminous concrete pavement materials incorporated in the work conforms to the requirements specified shall be submitted to the Public Works Manager/Director.

#### 6.7.9 Curbing

The type of curbing shall be of the several types listed below as directed by the Commission and the Public Works Manager/Director. Machine laid “Cape Cod” style bituminous concrete curbing six (6) inch bituminous concrete lip curbing, concrete curbing and/or granite curbing as shown on the Standard Detail Drawings, shall be placed on both sides of the pavement along the entire length of new and improved roads at the offset from centerline of road shown on the Standard Detail Drawings. Bituminous concrete curbing shall not be required on existing Town roads where it is determined by the Public Works Manager/Director that the installation of enclosed storm drainage systems is not warranted. Wavy or damaged curbing shall not be accepted, and the Public Works Manager/Director shall require that improperly placed or unacceptable curbing be removed and replaced. All materials and construction methods shall conform to the requirements of the State Standard Specifications for “Bituminous Concrete Lip Curbing”, “Concrete Curbing” and “Granite Curbing”. For bituminous curbing types

curbing shall be placed on the road binder course at a height which will maintain a six (6) inch reveal after placement of the road surface course. Prior to the placement of any curbing, the surface of the pavement shall be cleaned of all loose and foreign material. The surface of the pavements, which shall be dry at the time the curbing is placed, shall be coated with an approved tack coat. All curbing shall conform to the shape shown in the Standard Detail Drawings.

#### 6.7.10 Guide Rail

Guide railing shall be installed as shown in the Standard Detail Drawings. The type of guide rail to be utilized shall be as follows:

- a) Metal beam rail or, three (3) cable guide rail with steel posts shall be used on all new road ways provided that the minimum clear zone of eleven and one half (11.5) feet is maintained behind the guide rail so as to accommodate the maximum deflection distance. The use of alternate types of guide rail may be required by the Public Works Manager/Director where insufficient clear zone or other conditions warrant.
- b) Steel backed timber guide rail may be required in areas of aesthetic or historical significance as determined by the Commission.
- c) End Anchorage - Regardless of the type of guide rail to be used, all leading and trailing ends shall be secured with concrete end anchors. Blunt or flared ends shall not be permitted.
- d) Materials and Methods - for three cable guide rail and end anchorages, construction methods shall conform to the requirements of the State of Connecticut Standard Specifications for "Three Cable Guide Railing (1-Beam Posts) and Anchorages", and materials shall conform to the requirements of the State Standard Specification Sections M.10.08 for wire rope, steel posts and plate anchors, fittings and anchorages, and M.18.09 for reflective delineators.

#### 6.7.11 Fencing

Fencing shall be a minimum of four (4) feet in height and shall be installed as shown in the Standard Detail Drawings. Steel fabric, posts, and all hardware shall be coated with a black colored polyvinyl chloride, with all materials conforming to the requirements of the State of Connecticut Standard Specifications Section M.10.05. All construction methods shall conform to the requirements of the State of Connecticut Standard Specifications for "Chain Link Fence" with the exception that top tension wires shall be provided in lieu of top rails.

#### 6.7.12 Monuments

Monuments shall be of reinforced concrete, not less than four (4) inches square at the top and not less than three (3) feet long, shall have a cross mark indented in the top to indicate the exact point of reference, and shall be set so as to project not more than two (2) inches above finished grade. Under no circumstances shall monuments be buried beneath the ground surface or covered with landscape or other materials such that they are not visible. Monuments shall conform with the dimensions and details shown in the most current Standard Detail Drawings. In exposed ledge areas, a brass plug one half (½) inch in diameter and three (3) inches long shall be installed in the ledge and cemented in place with mortar.

#### 6.7.13 Traffic Control Devices

Except for street signs, which shall conform to the Standard Detail Drawings, the design and placement of signs, pavement markings, and object markers shall conform to the most current edition of the Manual of Uniform Traffic Control Devices. All other signs shall be sheet aluminum with materials conforming to the requirements of the State Standard Specification Section M.18.09 and M.18.13. Construction methods shall conform to the requirements of the State Standard Specifications for “Sign-Face – Sheet Aluminum”. Materials for metal sign posts and sign mounting bolts shall conform to the requirements of the State Standard Specification Section M.18.14 and M.18.15 respectively. Posts shall be galvanized U-channel with a weight of two (2) pounds per foot. Construction methods shall conform to the requirements of the State Standard Specifications for “Painted Pavement Markings”, and materials shall conform to the requirements of the State Standard Specifications Section M.07.20 for 15-minute dry paint. Construction methods shall conform to the requirements of the State Standard Specifications for “Object Marker”. Materials shall conform to the Requirements of the State Standard Specifications Sections 18.13 for Sheet Aluminum, 18.09 for Reflective Sheeting, 18.14 for Metal Sign Posts, and 18.15 for Sign Mounting Bolts. Post shall be galvanized U-Channel with a weight of two (2) pounds per foot.

#### 6.7.14 Sidewalks

Sidewalks shall be located as shown on the Standard Detail Drawings, and shall be constructed of 3000 PSI Town Cement Concrete, with an air entraining admixture. Sidewalks shall be a minimum of four (4) feet in width and five (5) inches thick, and shall be constructed on a granular fill base having a minimum compacted thickness of eight (8) inches. At all driveway crossings, the concrete thickness shall be increased to eight (8) inches, and a welded wire fabric reinforcement provided. All materials and construction methods shall conform to the requirements of the State Standard Specifications for “Concrete Sidewalks”, except that a one-quarter inch premolded bituminous joint, set one-quarter inch below the finished surface of the walk and extending the full width and depth of the walk, shall be provided at sixteen (16) foot intervals, and dummy joints placed at four (4) foot intervals. “Granular Fill” shall conform to the requirements of the State Standard Specifications Sections M.02.01 and M.02.06 (Grading A). Cement Concrete shall conform to the requirements of the State Standard Specifications Section M.03.01 (Class C). Welded wire fabric reinforcement shall be WWF 6x6-W2.9xW2.9.

#### 6.7.15 Handicap Ramps – General

Handicap ramps shall be constructed to the dimensions shown on the Standard Detail Drawings; shall be located as shown on the Approved Design Drawings; and shall be constructed of 3000 PSI Town Cement Concrete, with an air entraining admixture. Handicap Ramps shall be five (5) inches thick, and shall be constructed on a granular fill base having a minimum compacted thickness of eight (8) inches. A detectable warning strip approved by the Public Works Manager/Director shall be installed at each ramp. All materials and construction methods shall conform to the requirements of the State Standard Specifications for “Concrete Ramps”. “Granular Fill” shall conform to the requirements of the State Standard Specifications Sections M.02.01 and M.02.06 (Grading A). Town Cement Concrete shall conform to the requirements of the State Standard Specifications Section M.03.01 (Class A). Welded wire fabric reinforcement shall be WWF 6x6-W2.9xW2.9.

## 6.8 DRAINAGE DESIGN CRITERIA

### 6.8.1 Design Criteria

Proposed drainage facilities shall be designed to accommodate surface runoff from proposed land development as well as the entire upstream drainage area and to protect wetlands, watercourses, and water bodies from the adverse impacts of post construction stormwater runoff. Also:

a) Analysis

Computations, conforming to the requirements outlined in this section, shall be submitted for sizing all proposed storm drainage facilities as well as the analysis of any existing off-site facilities required by the Commission. In addition, computations shall be submitted for both pre-development and post-development conditions for the 2, 10, 25, 50 and 100-year frequency 24-hour duration Type III storm events at each location from which storm water discharges will exit the property under development.

b) Potential Overload

Where the proposed land development, including roadway and drainage facility construction, is likely to cause an increase in the rate of stormwater runoff such as to hydraulically overload or cause damage to existing downstream drainage structures, facilities, or watercourses, and/or cause flooding which would likely result in physical damage of land and improvements adjacent thereto, adequate stormwater runoff control measures shall be designed and constructed to prevent or alleviate such harmful effects.

c) Stormwater Runoff Control

Where stormwater runoff control measures are required by the Commission, they may include, but not be necessarily limited to, retention and/or detention with controlled release of increased flows, increasing the hydraulic capacity of downstream drainage facilities, erosion protection measures, stormwater treatment or any combination of the above.

d) Stormwater Quality

Best Management Practices as recommended in the Connecticut Stormwater Quality Manual shall be used to enhance the removal of both particulate and soluble pollutants during storm events so as to improve the quality of stormwater runoff discharged to receiving waters.

e) Stormwater Detention

When stormwater detention facilities are required, they shall be sized such that the peak discharge after development shall not exceed the peak discharge prior to development for each of the storm frequencies identified. Design and construction of surface stormwater detention facilities shall conform to the requirements for "Detention Basin" as outlined in the "Connecticut Guidelines for Soil Erosion and Sediment Control", with the exception that basin side slopes shall not exceed 4H:1V, and the maximum basin depth (as measured from the bottom of basin to the top of berm) shall not exceed six (6) feet. In addition, detention basins shall be located no closer than one hundred fifty (150) feet from an existing or proposed residential dwelling, or active recreation area. To the maximum extent possible, detention basins shall be designed as extended detention ponds or wet ponds, or used in conjunction

with other stormwater treatment practices to provide water quality benefits; shall be irregular in shape and landscaped so as to enhance the appearance of the surrounding environment; shall be screened; and, shall be designed to minimize future maintenance. All detention basins shall be readily accessible for maintenance purposes via an improved access drive. In addition, unless specifically waived by the Commission, six (6) foot high fencing shall be required around the perimeter of all detention basins. In granting any requests for a waiver of this requirement, the Commission shall consider the proximity of the basin to adjacent residential dwelling; future population density in the general vicinity; and, the size and depth of the proposed basin.

f) Discharge

Unless otherwise approved by the Commission, the discharge of all stormwater shall be into established watercourses, wetlands, or Town/State Highway drains having adequate capacity to accommodate such discharges.

g) Drainage Easements and Rights to Discharge

Where the discharge of stormwater shall be onto or through private property, perpetual drainage easements and discharge rights, in favor of the owner of the road (the Town), shall be secured by the applicant. Where drainage easements are required, they shall have a minimum width of thirty feet (30'). For open channels, flared end sections/headwalls, and other outlet protection measures, they shall extend a minimum of fifteen feet (15') beyond the outside edge of such measures.

h) Diversion Permit Required

The diversion of stormwater runoff from one watershed or watercourse to another shall normally be avoided. Where it is necessary to create such a diversion, special provisions shall be made to minimize the potential damages which may occur as a result of such diversion.

i) Capacity Within Roadway

Storm drainage systems within the roadway, exclusive of culverts and bridges carrying flows under the road, shall be designed to safely accommodate flows resulting from storms of the maximum intensity which can be expected to occur on an average of once in twenty-five (25) years (25-year storm) without being surcharged.

j) Capacity Under Roadways

Culverts crossing under roadways shall be designed to accommodate the following flows:

i. Minor Structures

These shall include pipe, box culverts or bridges providing for the drainage of adjacent lands less than one (1) square mile in area in which there is no established watercourse. These structures shall be designed to pass a 25-year frequency discharge without flooding or damaging the highway or adjacent property.

ii. Small Structures

These shall include pipe, box culverts or bridges providing for the drainage of adjacent lands less than one square mile in area in which there is an established watercourse. These structures shall be designed to pass a 50-year frequency discharge with one foot of freeboard, and without flooding or damaging adjacent property. The effects of a discharge equal to the 100-year frequency storm shall be checked.

Where such effects are likely to cause damage to persons or property, structures shall be designed to alleviate these problems.

iii. Large Structures.

These shall include pipe, box culverts or bridges for the drainage of adjacent lands one (1) square mile or larger in area. These structures shall be designed to pass a 100-year frequency discharge with a minimum one foot (1') under clearance, relative to the low chord of the upstream face of the structure, and shall not create a backwater which will flood or endanger property or roads upstream.

iv. Capacity Within Open Drainage Channels

New open channels and existing open channels into which a new or expanded storm drainage system is proposed to discharge, shall be designed to accommodate flows resulting from storms of the maximum intensity which can be expected to occur on an average of once in twenty-five years (25) with a minimum freeboard of six (6) inches. When conditions are such that lining of the open channel with riprap is necessary to prevent erosion, the size of the riprap shall be no less than "intermediate", and the thickness shall be no less than eighteen (18) inches.

v. Municipal Improvements

The requirements specified in Section 6.8 are not intended in any way to preclude the Public Works Department from making storm drainage improvements on existing public roadways. Such improvements, including, but not limited to the conversion of roadside ditches to piped drainage systems, the extension, repair, or replacement of existing storm drainage systems, and the installation of new storm drainage systems, shall be permitted provided that a determination is made by the Public Works Manager/Director that such improvements will not result in significant adverse impacts.

6.8.2 Computation of Stormwater Flows

Stormwater flows may be computed by use of the Rational Method or by use of the methods described in the most current edition of the U.S. Soil Conservation Service Technical Release No. 20, or Technical Release No. 55. In general, the use of the Rational Method is discouraged for use in computing flow from drainage areas in excess of two hundred (200) acres, or for computing flows from 100-year frequency storms.

Regardless of the method that is utilized, all computations shall include a Drainage Analysis Map which clearly delineates the drainage area and flow path used for determining the time of concentration to each proposed drainage facility and each existing downstream drainage structure that may become hydraulically overloaded or damaged. The drainage analysis map shall show existing topography of the drainage areas (based on the best available existing mapping), existing and proposed roads, watercourses, wetlands, flood hazard zones, existing and proposed vegetation (woods, fields, lawns, etc.), existing and proposed drainage facilities and structures, and the proposed area of development. When U.S. Soil Conservation Service methods are used,

the drainage analysis map should also show soil types as shown on the most currently available soils maps as prepared by the U.S. Soil Conservation Service.

Where the Rational Method formula is used, computations shall conform with the following guidelines:

a) **Runoff Coefficients**

Where the Rational Method formula is used, the following runoff coefficients (“C” values) shall be the minimum values utilized for each type of surface, and a composite “C” value computed for each tributary drainage area. In any case, a composite “C” value of less than 0.30 shall not be used for single family residential developments.

Type of Surface	<u>Runoff Coefficient “C” (1) (10-year Storm)</u>
Pavement, Roofs & Impervious Surfaces	0.90
Embankment Slopes (Cuts & Fills)	0.40
 <u>Lawns:</u>	
Fast Slope (2% or Less)	0.17
Average Slope (2% to 7%)	0.22
Steep Slope (7% or Greater)	0.35
 Cultivated Fields	 0.45
Pasture	0.30
Meadows (Moist, Level Grassland)	0.10
Forested Areas	0.20

For 25-year storm increase runoff coefficients by 25%, for 50-year storm increase by 40%, and for 100-year storm increase by 60% (except for pavement, roofs and impervious surfaces)

b) **Time of Concentration**

Time of concentration (t) shall be determined by the Technical Release No. 55 Method.

c) **Rainfall Intensities**

Rainfall intensities (i) shall be determined using the frequency/intensity/duration curves for Preston, Connecticut. The minimum allowable time of concentration shall be five (5) minutes.

6.8.3 Minimum Pipe Sizes

All pipe carrying surface drainage or a combination of surface drainage and subsurface drainage (groundwater) shall have a minimum internal diameter of twelve (12) inches. All subsurface drainage pipe used exclusively for intercepting groundwater shall have a minimum internal diameter of six (6) inches.

6.8.4 Catch Basins

Catch basins shall be provided in order that surface water will not travel along the roadway curb line without interception for more than three hundred fifty (350) feet on roads with grades up to and including five (5) % and not more than two hundred fifty (250) feet on roads with grades up to and including 10%.

Catch basins shall also be installed at low points, roadway intersections and at the lower end of all cul-de-sacs. Catch basins located within the paved roadway shall have Type “C” heads and provided with two (2) foot deep sumps. Where it is necessary to provide catch basins in off-road locations outside of the limits of pavement, they shall have Type “C-G” heads and provided with two (2) foot deep sumps. Where additional inlet capacity is necessary, the installation of double Type II catch basins, or more closely spaced catch basins shall be required.

#### 6.8.5 Manholes

In general, a manhole is less preferable to a catch basin and should only be provided where the use of a catch basin is not feasible. Manholes shall be provided at each change of drainage pipe slope or horizontal alignment, at all pipe junctions and otherwise at intervals of approximately three hundred fifty (350) feet on long lengths of pipe where catch basins are not used.

#### 6.8.6 Flared End Sections/Headwalls

The inlets and outlets of all exposed drainage conduits shall be protected with flared end sections except where hydraulic, or other considerations necessitate the use of a headwall. When headwalls are provided, they shall be of reinforced concrete construction. Wingwalls shall be provided when required to contain and protect the adjacent earthen slopes and/or direct the flow of water entering or leaving the conduit. Outlet protection shall be provided in accordance with the standards outlined in the “Connecticut Guidelines for Soil Erosion and Sediment Control”.

#### 6.8.7 Open Channels

In general, open channels shall be avoided, except as may be required at storm drainage system outlets to convey storm water discharges to an acceptable outlet. Where open channel flow is required, the channel shall be properly designed to safely carry the design flow. Open channels shall be in the form of a trapezoid having a bottom width of at least two (2) feet and side slopes of not less than two (2) feet horizontal to one foot vertical. The channel shall be seeded and protected with erosion control blankets, sodded, ripped or otherwise stabilized as the flow quantities and velocities require. Special attention shall be given to the stabilization of open channels in the immediate vicinity of pipe inlets and outlets, bridges, at bends and curves and at other critical locations as required to prevent scouring, erosion and/or siltation of watercourses and culverts, and undermining of drainage structures. Hydraulic design of open channels and design of bed and bank stabilization shall be done in accordance with the applicable criteria of the most current edition of the Federal Highway Administration publication entitled “Design of Roadside Drainage Channels”.

#### 6.8.8 Underdrains

The installation of subsurface drainage systems or underdrains will be required beneath the edge of pavement of a proposed street wherever the ground water is known or found to be less than three (3) feet below the proposed finished grade of the street. Underdrains shall also be installed where localized seeps or springs are observed within the proposed street lines during construction, or where otherwise required by the Public Works Director/Town Engineer.

#### 6.8.9 Connection of Private Drains

Unless otherwise approved by the Public Works Manager/ Director and/or the Town Engineer, private storm drains, footing drains, curtain drains, underdrains, basement drains, yard drains, or area drains of any kind shall not be permitted to discharge up gradient of or into a town road or road proposed to be dedicated to the Town at a future date. Any such private drains shall be connected to storm drainage structures. When such a connection is not possible or practical, they may be connected directly to an existing or proposed storm drain if approved by the Public Works Manager/Director and/or the Town Engineer. Where direct connections are made, they shall utilize appropriate fittings, and be preceded by an access extended to grade. Such access shall be located within a town road right-of-way or easement, and shall have a minimum diameter of twelve (12) inches, or as otherwise deemed necessary to provide direct observation and to facilitate sampling. All access structures shall be provided with a secure top to preclude accidental entry. The following notation shall be placed on all design drawings where the connection of private drains is proposed; "Private drains are the sole responsibility of the owner and the Town shall assume no responsibility for any maintenance, replacement and/or repair. The owner of the drain shall hold the Town harmless for any damage or injuries resulting from such connection".

### **6.9 DRAINAGE CONSTRUCTION STANDARDS**

#### 6.9.1 Pipe

All pipe used for storm drainage shall be either Class IV Reinforced Concrete Pipe (RCP) or High-Density Corrugated Polyethylene Smooth Interior Pipe (CPEP).

#### 6.9.2 Minimum Cover

The minimum cover over all storm drainage located within the right-of-way shall be two (2) feet. Where conflicts with other subsurface facilities occur, and with approval of the Public Works Manager/ Director and/or Town Engineer, pipe may have a little as (eighteen) 18 inches of cover, but in such cases extra strength Class V RCP shall be used with a crushed stone bedding extending to a minimum depth of four (4) feet below finished grade.

#### 6.9.3 Slotted or Perforated Storm Drains

Where water is encountered in the pipe trenches, or where underdrains are required under Section 6.8.8, storm drains shall either be slotted RCP or Perforated High Density Corrugated Polyethylene Smooth Interior Pipe.

#### 6.9.4 Additional Underdrains

Where additional underdrains are deemed necessary in locations not requiring other storm drainage, Perforated High Density Corrugated Polyethylene Smooth Interior Pipe with a minimum internal diameter of six (6) inches shall be used.

#### 6.9.5 Materials and Methods

Except as noted herein, construction methods shall conform to the State Standard Specifications for "Culvert" and "Underdrain and Outlets". Where High Density Corrugated Polyethylene Smooth Interior Pipe is used for storm drains, it shall be installed in a Type II installation, regardless of the internal pipe diameter, with backfill

material conforming to the State Standard Specifications for No. 8 crushed stone (3/8") under Section M.01.01, with geotextile fabric conforming to the State Standard Specification Section M.08.01-26 placed over top of the crushed stone. Backfill conforming to the Connecticut Department of Transportation Materials Testing Lab Reference File 163-1 for medium processed aggregate (3/4" minus) will also be permitted. Use of this material will not require placement of a geotextile fabric. Where reinforced concrete pipe is used for storm drains, it shall be installed in a Type II installation with backfill material conforming to the State Standard Specifications Section M.02.06 – Grading C. For underdrains, pipe shall be installed with holes in a downward position. Aggregate used for backfilling around underdrains and slotted or perforated pipe shall conform to the State Standard Specifications Section M.08.03 – 1 (No. 8 Crushed Stone). Sand shall not be permitted as backfill around underdrains. Geotextile fabric, conforming to the State Standard Specification Section M.08.01 – 26, shall be wrapped around the aggregate as shown in the Standard Detail Drawings. Reinforced concrete pipe shall conform to the State Standard Specifications Section M.08.01 – 6, or Section M.08.01 – 10 for Slotted Reinforced Concrete Pipe. Material used for sealing joints in concrete pipe shall conform to the State Standard Specifications for Cold-Applied Bituminous Sealer (Section M.08.01-18), or Pre-formed Plastic Gaskets (Section M.08.09.19). High Density Corrugated Polyethylene Smooth Interior Pipe shall conform to the AASHTO Standard Specifications M 294 Type S, or M 294 Type SP/M 252 Type SP for Perforated High Density Corrugated Polyethylene Smooth Interior Pipe.

#### 6.9.6 Catch Basins and Manholes

Catch basins and manholes shall be precast reinforced concrete constructed in accordance with the Connecticut Department of Transportation Standard Sheets. Except as noted herein, all materials and construction methods shall conform to the requirements of the State Standard Specifications for "Catch Basins, Manholes and Drop Inlets". All catch basin and manhole structures shall be of precast reinforced concrete construction. Use of brick, concrete building brick or masonry concrete units shall not be permitted unless otherwise approved by the Public Works Manager/Director. However, a course of brick or concrete building brick shall be provided to allow for adjustment of catch basin tops and manhole frames. All pipe penetrations shall be bricked and mortared inside and outside of all catch basin and manhole structures. All catch basin frames and grates shall be 507K – Type A, constructed of galvanized steel. Manhole frames and covers shall be heavy traffic duty, constructed of cast iron. Frames shall have a twenty-four (24) inch internal opening. Covers shall be marked "STORM". Where required by the Public Works Manager/Director or the Town Engineer, covers shall be bolted.

#### 6.9.7 Flared End Sections/Headwalls

Flared end sections and headwalls shall be constructed in accordance with the Connecticut Department of Transportation Standard Sheets. All materials and construction methods shall conform to the State Standard Specifications for "Culvert Ends" and "Retaining Walls, Endwalls and Steps". When high density corrugated polyethylene smooth interior pipe is used, and culvert ends are specified, they shall be metal culvert ends. High density polyethylene culvert ends shall not be permitted.

#### 6.9.8 Riprap

Stone for this work shall be of the size, and placed to the limits and depth, specified on the Drawings. Construction methods shall conform to the requirements of the State

Standard Specifications for “Riprap” and materials shall conform to the requirements of the State Standard Specification Section M.12.02. Where geotextile fabric is specified underneath riprap, it shall conform to the requirements of the State Standard Specification Section M.08.01 – 26.

#### 6.9.9 Stabilization of Open Channels

Open channels shall be stabilized with riprap, sod, or seed protected with erosion control/turf reinforcement mattings. The method of stabilization shall be as specified on the drawings. For stabilization with riprap, all work shall conform to the requirements specified above. For stabilization with sod or seed protected with erosion control/turf reinforcement mattings, all materials and methods shall conform to the State Standard Specifications for “Sodding” and “Turf Establishment” respectively.

#### 6.9.10 Special Structures

Special structures, including but not limited to bridges, box culverts, retaining walls and stormwater treatment units shall be designed and constructed in accordance with the most current applicable standards of the Connecticut Department of Transportation, or as otherwise directed by the Public Works Manager/Director and/or Town Engineer. Plans and specifications prepared and sealed by a licensed professional engineer registered in the State of Connecticut who is competent in the field of structural engineering shall be submitted for all special structures. In the case of bridges, such plans and specifications shall be accompanied by a written statement from the design engineer certifying that the bridge has been designed to withstand AASHTO HS20 Live Loads, and that any waterway opening conforms to the Standards established in Section 6.8.1 of these Regulations. Upon completion of construction of any special structure, the licensed professional engineer shall be required to provide a written statement to the Public Works Manager/Director and Town Planner that the special structure was constructed in substantial conformance with the approved design drawings and specifications. Where private drain access structures are required prior to a direct connection to a storm drain, they shall be fabricated from high density corrugated polyethylene pipe and fittings conforming to AASHTO Standard Specification Sections M 294 Type S and M 252 Type S. The fabrication of the access structures shall include as a minimum a standard 12”x12”x12” tee with reducers and couplings as required at each end of the horizontal run, and a 12-inch inside diameter vertical riser pipe extending to grade. A snap on end cap shall be securely fastened at the end of the vertical riser pipe, and shall be set flush with the proposed finish grade elevation.

### **6.10 STREET SIGNS.**

Street name signs shall be placed at all intersections on at least two (2) diagonally opposite corners. In the case of a T-Junction, only one (1) sign shall be required.

6.10.1 Streets which join or are in alignment with streets of an adjoining or neighboring property shall bear the same name.

6.10.2 No duplication of streets names shall be permitted; all street names shall be subject to approval by the Commission.

### **6.11 OPEN SPACE, PARKS AND PLAYGROUNDS.**

The Commission may require open spaces, parks, playgrounds in a proposed subdivision up to a maximum of ten percent (10%) of the gross site area. In determining the need for open spaces and recreation areas, the Commission shall take into account the density of the populations and existing public open spaces in the vicinity of the subdivision. The Commission should also make reference to the recommendations of the Plan of Development regarding recreation and open space and, if advisable, consult with the Conservation Agricultural Commission and the Parks and Recreation Commission. In the event the Commission determines that open space, park, or playground is to be dedicated, the following methods may be used for accepting such open space, park, or playground; said format of the dedication shall be acceptable to the Commission and be approved by the Town:

- a) Deeded playground/land after all improvements, as applicable, have been made to a homeowner's association within the subdivision upon such terms and conditions, as approved by the Commission, which will protect the public welfare and assure the continued use of the open space for the purpose intended. A copy of the homeowner's deed and the by-laws of the homeowner's association shall be submitted with the application.
- b) Open space reserved for common use by all property owners in the subdivision covenant in the deed. A copy of the covenant shall be submitted with the application and filed with the Town Clerk's Office after approved by the Commission.
- c) Deeded land to a land trust under terms acceptable to the Commission. Copy of such deed shall be provided with the application and filed in the Town Clerk's Office after approved by the Commission
- d) Development rights for property deeded to the Town while ownership is retained by the homeowners. All conditions of the development rights shall be approved by the Town Board of Selectmen after recommended by the Commission.

**6.11.1 Dedication of land for Open space, Parks and/or Playground or payment of Fee in Lieu of Land for Open Spaces, Parks and Playgrounds.** The Commission may require the applicant to pay a fee to the Town of Preston or pay a fee and transfer land to the Town of Preston in lieu of providing open spaces, parks and playgrounds.

Intent: It is the intent of the Commission to provide usable open space for the enjoyment of the future residents of the subdivision or to aid in the preservation of significant natural or archaeological resources for public educational purposes, and to create a regulation that can be flexible, responsible, and serves the needs of the Town. In order to ensure an understanding of the intent of the regulation, it is strongly recommended that a meeting with the Town Planner be scheduled prior to designing your subdivision. If there are any questions or issues with the dedication of open space or fee in lieu of such, the Planner may refer the matter to the Commission for further review.

Criteria for the Dedication of land for Open Space, Parks and/or Playground or the Payment of Fee, (as determined to be acceptable by the Commission):

- a) The Commission desires to receive not less than eighty thousand (80,000) square feet of land area, if land is to be offered. The dedicated land shall contain eighty (80) percent land with slopes with less than a five (5) percent grade and land that is not defined as wetland areas. Active recreational equipment may be required to serve the families within the subdivision, such as swing sets, slides or playscapes.
- b) Subdivisions containing significant natural or archeological resources as identified in the Preston Plan of Conservation and Development, or by the Preston Conservation Agricultural Commission, or the State of Connecticut Department of Energy and Environmental Protection: The Commission may require the dedication of such resources for open space. In addition to said dedication, the Commission may require that an educational program be developed for the general public that may include installation of interpretive signs and walking or hiking trails.
- c) Subdivisions on ridgelines or containing scenic vistas or agricultural resources, the Commission may require the dedication of open space for the protection of scenic vistas or agricultural resources.
- d) All other subdivisions shall pay a fee in lieu of open space when the subdivision does not meet any of the above noted criteria.

**6.11.2 Process of Determining Fee in Lieu of Open Space:** a list of three (3) appraisers shall be submitted to the Commission with the subdivision or re-subdivision application. The Commission will select an appraiser from the list. The applicant will be responsible for obtaining the appraisal by the selected appraiser from which the fee in lieu of open space will be determined.

- a) Such payment or combination of payment and the fair market value of land transferred shall be equal to ten percent (10%) of the fair market value as undeveloped land of the land to be subdivided prior to the approval of the subdivision.
- b) The fair market value shall be determined jointly by the applicant and the Commission. The applicant shall submit the names of three (3) appraisers, licensed in Connecticut, doing business in New London County. The Commission shall select one (1) of the three (3) to conduct the appraisal of the land to be subdivided. The costs of the appraisal shall be borne by the applicant.
- c) A fraction of such payment, the numerator of which is one (1) and the denominator of which is the number of approved parcels in the subdivision, shall be made at the time of the sale of each approved parcel of land in the subdivision.
- d) Said payment shall be deposited with the Treasurer of the Town of Preston in a fund which shall be used by the Town of Preston for the purpose of preserving open space or acquiring additional land for open space for recreational, conservational, or agricultural purposes.

**6.11.3 Exemptions from Open Spaces and Recreation Land Requirements.** The open space and recreation land 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, or if the subdivision is to contain affordable housing, as defined in Section 8-39a of the Connecticut General Statutes, equal to

twenty percent (20%) or more of the total housing to be constructed in such subdivision.

## **6.12 FLOODING CONSIDERATIONS**

The Commission shall determine that proposed subdivisions (including manufactured home subdivisions) are reasonably safe from flooding. When a subdivision is proposed in an A or AE Zone on the Town's Flood Insurance Rate Map, dated July 18, 2011, or any subsequent revisions thereof, it shall be reviewed to assure the following:

- a) That all proposals are consistent with the need to minimize flood damage within the flood-prone areas.
- b) That all public utilities, such as sewer, gas, electrical and water systems are located and constructed to minimize or eliminate flood damage.
- c) That adequate drainage is provided to reduce exposure to flood hazards.
- d) That new and replacement water supply systems are designed to minimize or eliminate infiltration of flood waters into the systems.
- e) That new and replacement sanitary sewer systems are designed to minimize or eliminate infiltration of floodwaters into systems or discharges from the systems into floodwaters.
- f) That on-site sewage disposal systems are located to avoid impairment of them or contamination from them during flooding.
- g) That the flood-carrying capacity is maintained within any altered or relocated portion of any watercourse.

**6.13 COASTAL AREA CONSIDERATIONS.** Any person submitting a coastal site plan, as required in Section 5.9 of these Regulations shall demonstrate that such activity is consistent with the goals and policies in Section 22a-92 of the Connecticut General Statutes.

## **6.14 FLOOD ELEVATIONS.**

All applications for subdivisions (including manufactured home subdivisions) greater than five (5) acres or fifty (50) lots (whichever is less) shall include with such applications base flood (100-year flood) elevation data for that portion of the subdivision which permits the construction of buildings and which is located with A and AE Zones on the Town's Flood Insurance Rate Map, dated July 18, 2011, or any subsequent revision thereof. In addition, the Commission shall obtain, review, and reasonably utilize any base flood evaluation and floodway data available from a Federal, State, or other source as criteria for requiring that new construction, substantial improvements, or other development in A and AE Zones, meet the standards of these Regulations.

## **6.15 FLOODWAY ENCROACHMENTS.**

Within the floodway designated on the Flood Insurance Rate Map for New London County, dated July 18, 2011, or any subsequent revision thereof a copy of which is on file with the Commission, all encroachments, including fill, new construction, substantial improvements to existing structures, and other development, are prohibited unless certification, with supporting technical data by a Connecticut registered professional engineer is provided by the applicant demonstrating, through hydrologic and hydrodynamic analyses performed in accordance with standard engineering practice, that such encroachment shall not result in any increase in flood levels during the base flood (a flood having a one percent (1%) chance of

being equaled or exceeded in any given year).

#### **6.16 UTILITY LINES.**

Except where deemed impracticable by the Commission and because of topography or other conditions, electric power, telephone and cable television lines, shall be installed underground when serving lots on new streets.

#### **6.17 DRIVEWAY**

Adequate sight distance shall be provided for all driveway intersection with the street. All sight line improvements required to ensure adequate sight distance shall be completed at the expense of the owner of the subdivision or the subsequent owner of the lot as determined by the Commission. Such determination shall be based on the condition of the road and the feasibility of moving the driveway to an alternate location. The sight distance shall be based on the posted speed and ASHTO standards. A minimum vertical curve of five percent (5%) shall be provided at the intersection of the driveway and the road for a distance of thirty feet (30'). No driveway shall outlet drainage directly onto the road. Any driveway in excess of eight percent (8%) grade shall be paved or surfaced with a non-erosive surface acceptable to the Commission. The Zoning Enforcement Officer shall not issue a zoning permit for the construction of a residence until all sight line improvements are made and acceptable to the Public Works Manager/Director. A driveway permit is required for all new driveways and curb cuts and must be approved by the Public Works Manager/Director.

#### **6.18 SPECIAL STRUCTURES**

Bridges, box culverts, headwalls, deep manholes and other special structures shall be designed in accordance with the Town of Preston, the Connecticut Department of Transportation standards, these Regulations, and good engineering practices acceptable to the Commission and shall be designed for one hundred (100) year storm event.

- a) **Size.** Bridges, culverts, headwalls, or other structures designed to carry streets over existing watercourses shall be designed to handle maximum anticipated flow for a one hundred (100) year storm, unless otherwise required by the Commission.
- b) **Capacity.** All structures should be designed to accept a live load of HS20-44.
- c) **Width.** No bridge or culvert shall be constructed to less than the full width of the minimum required roadway, plus a sidewalk if required by the Commission.
- d) **Endwalls and flared end units.** These shall be constructed in accordance with Town of Preston standards and the Connecticut Department of Transportation standards.

### **SECTION 7: WAIVERS**

**7.1 Waivers.** The Commission may waive a requirement of these Regulations, in whole or in part, by a three-quarters ( $\frac{3}{4}$ ) vote of all the regular members of the Commission in cases where conditions exist which effect the subject land and which are not generally applicable to other land in the area, except that no waiver shall be granted that would have a significant adverse effect on adjacent property or on public health and safety, and no waiver shall be granted unless one of the following conditions exist:

- a) The proposed subdivision includes land in more than one (1) municipality, and lots located

wholly or partially in Preston are at least as large in total as the minimum lot size required for that area by the Preston Zoning Regulations, and the street frontage requirement is satisfied for each lot, regardless of the municipality in which the street is located.

- b) Strict adherence to the requirements of these Regulations would result in the alteration or destruction of a significant or unique natural feature, such as a large tree, a watercourse, a wetland, or a rock formation.
- c) A subdivision design standard would impair maximum access to the sun for solar energy on one (1) or more lots in the subdivision.
- d) A required subdivision plan ingredient may be waived if the Commission finds it will not contribute to an understanding of the subdivision.
- e) *Waiver for road or other required improvements.* All subdivision roads shall comply with subdivision design requirements. However, the Commission may, based on a report from the Public Works Manager/Director, waive certain design standards for any proposed road improvements depending upon site conditions. Such waivers may be granted only in cases where conditions exist that prohibit the road to be constructed to standards or where improvements are required for an unimproved town road.
- f) Reason for Actions on Waivers. The Commission shall state upon the record the reasons for which a waiver is granted in each case.

## **SECTION 8: VIOLATIONS AND PENALTIES**

8.1 Any person, firm or corporation making any subdivision of land without the approval of the Planning and Zoning Commission of the Town of Preston shall be fined not more than five hundred dollars (\$500) for each lot sold or offered for sale or so subdivided. Said penalty is pursuant to Section 8-25 of the Connecticut General Statutes, as amended.

## **SECTION 9: SEPARABILITY**

9.1 If any section, subsection, sentence, or portion of these Regulations is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision, and such holding shall not affect the validity of the remaining portions of these Regulations.

## **SECTION 10: AMENDMENTS**

10.1 These Regulations may be amended from time to time in accordance with the procedures specified in Section 8-25, Chapter 126 of the General Statutes 1958 Revision, as amended.

## **SECTION 11: EFFECTIVE DATE**

11.1 These Regulations amend and replace subdivision regulations adopted by the Commission and made effective in May of 1962 and subsequently amended.

THE EFFECTIVE DATE OF THESE REGULATIONS IS NOVEMBER 1, 2021

# **DETAILS**