



TOWN OF COLUMBIA

SUBDIVISION

REGULATIONS

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**TOWN OF COLUMBIA PLANNING AND ZONING COMMISSION
SUBDIVISION REGULATIONS**

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TOWN OF COLUMBIA PLANNING AND ZONING SUBDIVISION REGULATIONS

1. CHAPTER 1. AUTHORITY AND PURPOSE

1.1 Authority

Pursuant to the authority conferred on it by the Connecticut General Statutes, as amended, the Columbia Planning and Zoning Commission adopts the following regulations for the subdivision of land in the Town of Columbia, Connecticut.

1.2 Purpose

It is declared to be the policy of the Commission to consider land subdivision as part of a plan for the orderly, efficient and economical development of the Town so as to further the general welfare and prosperity of its people.

Accordingly, it is the purpose of these Regulations to insure that: land to be subdivided shall be of such character that it can be used for building purposes without danger to health or the public safety; proper provision shall be made for water supply, surface drainage and sanitary sewerage, and, in areas contiguous to brooks, rivers or other bodies of water subject to flooding, proper provision shall be made for protective flood control measures; proposed roads shall be in harmony with existing or proposed principal thoroughfares shown in the Plan of Development as the same may be amended from time to time, especially with regard to safe intersections with such thoroughfares, and proposed roads shall be so arranged and of such width as to provide an adequate and convenient system for present and prospective traffic needs, and roads and driveways shall provide adequate access to properties for fire fighting apparatus and other emergency services; when and in places deemed proper by the Commission open spaces for parks and playgrounds shall be shown on the subdivision plan; proper provision shall be made for soil erosion and sediment control pursuant to Section 22a-329 of the General Statutes of the State of Connecticut; provisions shall be made for energy-efficient patterns of development and land use, the use of solar and other renewable forms of energy, and energy conservation.

These Regulations are not intended to interfere with, abrogate, or annul any other ordinance, regulation, or other provision of law, or any easement, covenant, or other private agreement or legal relationship. With regard to any easement, covenant, or other private agreement or legal relationship, however, it is not the purpose of these Regulations to interfere with resolve, or arbitrate any private civil dispute. When these Regulations impose restrictions different from those imposed by any other statute, ordinance, or other requirement imposed by any level of government, whichever provisions are more restrictive or impose higher standards shall control.

2. CHAPTER 2. DEFINITIONS

Amended Subdivision – Any change in a property line or improvement shown on a Subdivision or Resubdivision map which has been approved and filed with the Town Clerk pursuant to these Regulations, other than a new subdivision or a resubdivision.

Americans with Disabilities Act Accessibility Guidelines – Appendix A to Part 36 entitled, “ADA Accessibility Guidelines for Buildings and Facilities” as published in the Federal Register Vol. 56, No. 144, Friday, July 26, 1991, including any revisions.

Applicant – Any person, firm, corporation or partnership who shall apply to the Commission for approval of a subdivision, as hereinafter defined, either for himself or as an agent for others.

Application – A request for approval of a specific subdivision, including an application form and check list as may be prescribed by the Commission, accompanied by all supporting information, documents, reports, and the like which may be required by these Regulations.

Board of Selectmen – The Town of Columbia Board of Selectmen.

Bond – A form of financial guarantee including certified check, passbook, certificate of deposit, or other instrument of credit in an amount and form required by Chapter 7 of these regulations; and may include Performance Bonds, Maintenance Bonds and Erosion and Sedimentation Bonds.

Commission – The Town of Columbia Planning and Zoning Commission.

Connecticut Department of Transportation Standard Sheets – The most current detail drawings, including all revisions thereto, as issued by the Connecticut Department of Transportation.

2002 Connecticut Guidelines For Soil Erosion and Sediment Control – The most current document entitled, “Connecticut Guidelines For Soil Erosion and Sediment Control” including all corrections thereto, as published by the Connecticut Council on Soil and Water Conservation.

2004 Connecticut Storm Water Quality Manual – The most current document entitled, “2004 Connecticut Storm Water Quality Manual” including all corrections thereto, as published by the Connecticut Department of Environmental Protection.

Conservation Easement – The grant of a property right transferred to a non-profit or government entity where the landowner retains legal title and all rights associated with the land except provided the land shall remain in its natural state and precluding future development as set forth in the standard “Conservation Easement” used by the Town of Columbia, including easements preserving agricultural rights.

Cul-de-sac – A local street with only one outlet that terminates in a vehicular turnaround and having an appropriate terminal for the safe and convenient reversal of traffic movement.

Date of Receipt – The day of the first regularly scheduled meeting of the Commission immediately following the day of submission of the Application to the Commission, or its agent, or thirty-five (35) days after such submission, whichever is sooner.

Development for Agricultural Purposes – Development exclusively for use as "agricultural land", as that term is defined in Connecticut General Statutes Section 22-26bb. (See definition of "Subdivision").

Disturbed Area – An area where the natural vegetative ground cover is destroyed or moved removed.

Drainage Easement – The right, at any time, to direct the flow of water, whether derived from surface or subsurface sources, across any property owned or proposed to be owned by another.

Driveway – A private vehicular access-way that has not been accepted as a public road by the Town or approved as a private road by the Commission.

Easement – The right, established in deed or other legal means, of one party to use a designated portion of a second party's land for a specific, limited purpose.

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

Final Subdivision Plan – The final map, drawing or drawings, prepared for endorsement by the Commission and filing in the office of the Town Clerk and shall include all supporting data required by these Regulations

Flood Hazard Districts – All special flood hazard areas designated as Zone A, A1-30 on the Town of Columbia, Connecticut Flood Insurance Rate Maps (FIRM) and the Flood Boundary and Floodway Maps (Floodway), dated September 16, 1982 or any subsequent revision.

Half Street – A proposed street, or extension of an existing street, along and roughly parallel to a property line such that less than the entire required right-of-way and street improvements, longitudinally, would be located on one property.

Improvement – Any change or alteration to the existing conditions of the subdivision site for the purpose of complying with these Regulations, or any approval granted hereunder, or rendering the site more suitable for development and/or habitation. As used in these Regulations, Improvements include but are not limited to: Construction and installation of roadways, paved streets, curbs, gutters, utilities, street signs, monuments, shade trees, drainage facilities, erosion and sedimentation control measures, buildings, earth filling or removal, seeding and grading.

Inland Wetlands Agency – The Columbia Inland Wetlands Commission, being the agency designated pursuant to Connecticut General Statutes Section 22a-42(c).

Loop Street – A street having only one outlet to another road that curves back to intersect with itself, and may include a designated one-way traffic pattern.

Lot – The unit or units into which land is divided or proposed to be divided with the intention of offering such units for sale, lease or other conveyance, either as developed or undeveloped sites.

Manual of Uniform Traffic Control – The most current document entitled, “Manual on Uniform Traffic Control Devices for Streets and Highways”, as published by the U.S. Department of Transportation Federal Highway Administration.

Open Space – Land or water which include but are not limited to: areas left in their existing state; agricultural land for which development rights have been assigned or otherwise alienated in perpetuity; areas and facilities for non-commercial, non-profit recreation; areas for wildlife habitat, passive and active recreation, groundwater recharge, scenic preservation, and other lands accomplishing the purpose set forth in Chapter 9 of these Regulations.

Pedestrian Walk – A right-of-way dedicated to public use to facilitate pedestrian access through a subdivision and/or to a public facility such as a school or park.

Plan of Conservation and Development – The Plan approved by the Town of Columbia under Section 8-23 of the Connecticut General Statutes for the future growth, protection and development for the Town of Columbia, affording adequate facilities for housing, transportation, comfort, convenience, public health, safety and general welfare for its population.

Plan and Profile – The drawings depicting respectively the horizontal and vertical design for street construction and drainage, and complying with the requirements of Section 5.3 of these Regulations.

Private Road – A street, avenue, drive, road, lane and any other way, exclusive of driveways, serving more than two lots intended for residential use only. Where required by Connecticut General Statutes, the private road and right-of-way shall be owned and maintained by a Common Interest Ownership Association in accordance with Connecticut General Statutes.

Public Road – Any road lawfully accepted by the Town or the State of Connecticut for public vehicular travel.

Print – A blueprint, photo-stat, litho-print, or other copy which reproduces exactly the data on the original drawing(s) from which it is made.

Reserve Strip – Land controlling access to an area dedicated or to be dedicated to public use.

Re-subdivision – A change in a map or an approved or recorded subdivision or re-subdivision if such change (a) affects any street layout shown on such map, (b) affects any area reserved thereon for public use, or (c) diminishes the size of any lot shown thereon and creates an additional building lot, if any of the lots shown thereon have been conveyed after the approval or recording of such map.

Right-of-Way – A strip of land intended for, or dedicated and accepted for the purpose of vehicular traffic, which includes the roadway, sidewalks, drainage facilities, shoulders and other improvements.

Sediment – Solid material, either mineral or organic, that is in suspension, and is transported, or has been moved, from its site of origin.

Standard Specifications and Details – For the purposes of these Regulations, the specifications and details for construction and materials will be those found in the Specifications for Roads, Bridges and Incidental Construction, Connecticut Department of Transportation, Form 814, 1988, or latest revision, and the 2002 Connecticut Guidelines For Soil Erosion and Sediment Control or latest revision, and which are made a part of these Regulations.

Statute (s) – A law or laws enacted by the Connecticut General Assembly as amended to date.

Street – Any street, avenue, lane, or any right-of-way: (a) dedicated and legally accepted by the Town or the State of Connecticut for the purpose of public travel; OR (b) shown on a subdivision duly approved by the Commission and complying

with all requirements of these Regulations, recorded in the Office of the Town Clerk, and bonded or constructed in accordance with these Regulations.

Street Line – That line separating the public right-of-way of a Street from adjoining properties.

Street Pavement – The wearing or traveled surface of the roadway used by vehicular traffic.

Street Width – The distance between Street Lines.

Subdivision – The division of a tract or parcel of land into three 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 re-subdivision. Subdivision Regulations were adopted by the Commission on November 20, 1954.

These Regulations – The Subdivision Regulations of the Town of Columbia, including amendments thereto.

Town – The Town of Columbia, Connecticut.

Town Engineer – The individual or firm hired by the Town to provide professional engineering services.

Town Road – Any road lawfully accepted by the Town for public vehicular travel.

Traveled Width – The distance between curb faces, i.e. the width of the Street pavement.

Watercourse/Wetlands – Areas designated and defined as “Watercourses” and “Inland Wetlands” by the Town of Columbia Inland Wetlands and Watercourses Agency pursuant to its Regulations, as the same may be amended from time to time.

Zoning Regulations – The Zoning Regulations of the Town of Columbia, including amendments thereto.

3. CHAPTER 3. GENERAL REQUIREMENTS

3.1 Transfer or Sale of Land

No subdivision of land shall be made, no land in any subdivision shall be sold or offered for sale and no construction of private structures, utilities or public improvements shall be started until a plan of subdivision, prepared in accordance with these regulations, has been approved by the Commission, with such approval endorsed thereon by the Chairman, and filed by and at the expense of the applicant in the office of the Town Clerk within the time provided by statute.

3.2 Conformity to Regulations

The Commission shall approve no subdivision plan unless it conforms to these Subdivision Regulations and the Zoning Regulations of the Town.

3.3 Plan of Conservation and Development

The plan for subdivision shall conform to the Plan of Conservation and Development prepared by the Commission.

3.4 Public Health and Safety

No land shall be subdivided unless it shall be of such character that it can be used for its intended purpose without danger to health and the public safety and is also in conformance with all applicable regulations of the Town and State of Connecticut, as may be amended hereafter and unless it can adequately accommodate water, drainage and sewage, and, in areas contiguous to brooks, rivers, or other bodies of water subject to flooding, it can adequately be protected through flood control measures.

3.5 Streets

No subdivision plan shall be approved unless the proposed streets are in harmony with existing or proposed streets and so arranged and of such width as to provide an adequate and convenient system for present and prospective traffic needs.

3.6 Energy Planning

The Commission shall encourage energy efficient patterns of land use, energy conservation and the use of renewable forms of energy. Any person submitting a plan for subdivision shall demonstrate, to the satisfaction of the Commission, that in developing the plan, they have considered the use of passive solar energy techniques which shall include, but not be limited to, (1) house orientation, (2) street and lot layout, (3) vegetation utilization; and (4) consideration for the natural and man-made topographic data and protection of solar access within the subdivision through the use of covenants or deed restrictions. The intent of this section is to promote energy efficient land uses in accordance with the statutes. The applicant, on the form provided by the Commission, shall prepare a written statement on utilization of solar energy.

3.7 Erosion and Sedimentation Control

All subdivision plans shall have a separate section or plan dealing with proper measures to control erosion and reduce sedimentation as set forth in the 2002 Connecticut Guidelines For Soil Erosion and Sediment Control, as amended, and in accordance with any other applicable provisions of these Regulations.

3.8 Specifications

All design specifications shall be in accordance with Chapter 6 – Streets, Highways and other Public Improvement Standards

4. CHAPTER 4. PROCEDURES

4.1 Requirements of Approval of Subdivision Plan

4.1.1 Subdivision Plan Approved and the Sale of Lots

All plans for the subdivision or re-subdivision of land must be submitted to the Commission for approval and no lot resulting from or affected by the subdivision or re-subdivision of any tract or parcel of land shall be sold or except to the extent permitted by state law, offered for sale or use for building development and no Certificate of Zoning Compliance (Zoning Permit) for any use, nor any building permit for the erection or enlargement of any building on such lot shall be granted without the prior approval of the subdivision or re-subdivision plan, or any amendment thereof, by the Commission, and the filing of the endorsed Final Subdivision Plan in the Office of the Town Clerk.

4.1.2 Review Prior to Application

All prospective applicants for subdivision or re-subdivision are encouraged to meet with the Town Planner prior to submission of a formal application. The Town Planner shall coordinate the review of all the materials submitted by the prospective applicant with other Town staff, officials and consultants, and may set up informal meetings among the prospective applicant and others, including the Commission. The purpose of any and all pre-application reviews, meetings and comments shall be advisory only, and no comments made by any Town staff or Commission member or other Town official or consultant shall be deemed to be binding in any way on the Town, any member of the Town staff, or the Commission if and when a formal application for approval is submitted.

4.1.3 Amended Subdivision

An amended subdivision may be approved by the Commission, with or without public hearing, upon request of the Applicant. All provisions of the original approved subdivision or re-subdivision shall be complied with, except as specifically approved by the Commission. No amended subdivision shall be deemed final until an endorsed Final Subdivision Plan has been filed in the Office of the Town Clerk. The submission will include an alteration box, in addition to the original signature box required by this Chapter, noting the nature of the amendment, the date of its approval, and the signature of the Chairman or Secretary of the Commission.

4.1.4 Receipt of Application for Subdivision and Re-subdivision

In compliance with the General Statutes of the State of Connecticut, the receipt of an application for subdivision shall be the day of the next regularly scheduled meeting of the Planning and Zoning Commission, immediately following the day of submission to the Commission and its agent, or thirty-five days, whichever is sooner.

4.2 Final Subdivision Action

The applicant shall file with the Commission an application for the consideration of a subdivision or re-subdivision plan. Such application shall be made to the Building Department and shall consist of:

(a) An application and **checklists including but not limited to a checklist from the Building Department and a checklist from the Conservation Commission** on forms provided by the Commission, signed by the applicant and also the owner of the land to be subdivided or his/her authorized agent.

(b) Six (6) prints of a Final Subdivision Plan conforming to Chapter 5 of these Regulations and seven (7) 11" x 17" copies.

(c) Six (6) prints of a Plan and Profile conforming to Chapter 5 of these Regulations and seven (7) 11" x 17" copies.

(d) A Hydraulic Study conforming to Chapter 5 of these Regulations.

(e) Six (6) prints of an Erosion and Sediment Control Plan, in accordance with Chapter 5 of these Regulations and seven (7) 11" x 17" copies.

(f) A final report from the Town Sanitarian indicating compliance with the Public Health Code for each and every lot depicted upon the Final Subdivision Plan; or, if the applicant proposes to utilize a community sewerage system, as defined in Connecticut General Statutes, Section 7-245, a report from the Columbia Water Pollution Control Authority indicating that all requirements of Connecticut General Statutes have been satisfied.

(g) A report from, and evidence of approval by, the Columbia Inland Wetlands Commission of any permits required pursuant to the Columbia Inland Wetlands and Watercourses Regulations for the Final Subdivision Plan as submitted; and, in addition, written evidence of approval of the activities depicted on the Final Subdivision Plan by the Connecticut Department of Environmental Protection and/or other regulatory agencies, where required by applicable law.

(h) A report from the Columbia Conservation Commission on the environmental impact of the subdivision.

(i) Where the applicant owns or controls land adjacent to the proposed subdivision, and where such adjacent land has previously been subdivided, a statement of tentative plans for the development of such land, including the prospective road system for such land

(j) In accordance with Section 8-25a of the Connecticut General Statutes, any subdivision providing water by means of a "water company", as that term is defined in Connecticut General Statutes Section 16-262m(a), shall provide to the Commission a certified copy of the Certificate of Public Convenience and Necessity issued for the subdivision by the

Connecticut Department of Public Utility Control; or, in the alternative, a certified copy of a resolution from the Board of Selectman waiving such Certificate and agreeing that the Town of Columbia shall be responsible for the operation of the subject water company in the event that the company is at any time unable or unwilling to provide adequate service to its customers.

(k) A written estimate, prepared and sealed by the applicant's Connecticut Registered Professional Engineer, of the cost of installation of any and all improvements depicted on the Final Subdivision Plans or required by these Regulations. Such written estimate shall contain a detailed analysis of the materials and services required, the cost per unit, and such other information as the Town Engineer may require to facilitate his/her review of the estimate. The Town Engineer shall review the estimate, and make a recommendation to the Commission that it be accepted with or without modifications.

(l) Each sheet of the Final Subdivision Plans shall contain a printed signature box as follows:

<u>APPROVED</u>	
COLUMBIA PLANNING AND ZONING COMMISSION	
_____ Chairperson/Secretary	_____ Date
_____ Chairperson Inland Wetlands & Watercourse Commission	_____ Date
_____ Town Sanitarian	_____ Date
THE FIVE YEAR APPROVAL PERIOD EXPIRES ON _____	

(m) Where the proposed subdivision includes only a portion of an existing tract or only a portion of the applicant's property, a preliminary plan of the future street and lot pattern for the remainder of the tract or property shall be submitted.

(n) Where existing topography is proposed to be altered, the volumes of material to be removed from, or brought onto, the site; areas of proposed blasting, and the estimated volume thereof the location to which excavated material being removed from the site will be deposited, if known, and the time such removal is anticipated to occur.

(o) A description of any existing deed restrictions, covenants, easements, rights-of-way, or similar encumbrances which run with the land, including the identity of the dominant and servient estates, the volume and page of the Columbia Land Records where the same are recorded, and the date upon which they will expire, if any.

(p) The name and address of the mortgage holder, and volume and page of recording, of any mortgage deed secured by the property to be subdivided.

(q) A parcel history map, depicting the tract as of the effective date of the adoption of subdivision regulations for the Town of Columbia (November 20, 1954). Such map shall be at a scale of 1" = 200', more or less, and shall indicate all divisions of the property, or any property of which was formerly a part, since the said effective date of subdivision regulation in Columbia; and a table containing the dates of such divisions and the grantors and grantees of any parcels or subdivisions so created.

It is the burden of the applicant to submit a complete application, and to demonstrate compliance with all criteria and requirements of these Regulations. Accordingly, the applicant may submit such additional reports or information as may be required to satisfy that burden, any application found to be incomplete might be denied by the Commission without prejudice to a future complete application. The applicant is advised to discuss the subdivision proposal with the Town Planner and other town officials before the application is filed. The filing of an application with the Commission shall be deemed to constitute permission by the applicant for the Commission or its agents to enter onto the subject property for the purpose of inspections and tests; and, if the Commission designates a formal site walk, such permission shall allow the general public, in company with the Commission only, to inspect such property.

The application shall be submitted to the Town Planner at least five (5) days before the next regularly scheduled meeting of the Commission; however, submission of such application less than five (5) days prior to such meeting shall not alter the date of receipt for the purposes of these Regulations.

4.3 Receipt of Application and Initial Review

In compliance with the statutes, the receipt of an application for a subdivision shall be the day of the next regularly scheduled meeting of the Commission, or thirty-five (35) days, whichever is sooner. Upon receipt of the application, the Commission may:

- (a) Identify any problems evident from the material submitted.
- (b) Identify any additional data required for review of the plan.
- (c) Arrange for an on-site inspection of the subdivision if such inspection is deemed warranted by the Commission.
- (d) Schedule a Public Hearing, if one is necessary under the conditions described in Section 4.6 below.

4.4 Fees for Application

The Commission will charge a non-refundable application fee, in accordance with Town Ordinance, in the form of a check made payable to the Town of Columbia, for all Subdivisions and Re-subdivisions.

4.5 Technical Data Requirements

If the Commission determines, per Section 4.2, that additional data is necessary for proper review of the plan, said data shall be submitted prior to the scheduled Public Hearing, or if no Public Hearing is scheduled, at the next regularly scheduled meeting at which the subdivision will be scheduled for review. Additional data may include, but shall not be limited to, technical reports on:

- (a) Environmental Impact
- (b) Traffic Impact
- (c) Fiscal Impact
- (d) A Professional Engineer having recognized expertise in the specific area shall prepare any such Technical Report that is required by the Commission.

4.6 Public Hearing

The Commission shall hold a Public Hearing on any application for a re-subdivision and any subdivision. All Public Hearings shall be scheduled in accordance with the appropriate provisions of the Statutes.

4.7 Notice to Neighboring Property Owners

The applicant shall notify, by certified mail, on a form provided by the Commission, all persons who are current owners, as set forth in the records of the Assessor's Office, as of the date of submission, of land within 500 feet of the perimeter boundaries of the proposed subdivision. Such notice shall be sent at least ten (10) days prior to the date of the scheduled Public Hearing and shall include a copy of the subdivision application form submitted to the Commission, the date and time of the scheduled Public Hearing and the fact that the subject plans are on file in the office of the Town Building Department. A copy of the applicant's notice to neighboring property owners, a list of the property owners notified, and receipts from the certified mailings shall be filed with the Zoning Agent at least five (5) days prior to the Public Hearing.

4.8 Notices Mandated by Statute

In accordance with C.G.S. Section 8-26b any proposed subdivision which will abut or include land in another municipality, shall be referred to the regional planning agency or agencies of the region in which the other municipality or municipalities is/are located, prior to action on such subdivision application.

In accordance with C.G.S. Section 8-7d(f) the Commission shall notify the clerk of any adjoining municipality of the pendency of any application concerning any subdivision in which:

- (a) Any portion of the property affected is within five hundred (500') feet of the boundary of the adjoining municipality;
- (b) A significant portion of the traffic to the completed subdivision will use streets within the adjoining municipality to enter or exist in the subdivision;
- (c) A significant portion of the sewer or water drainage from the subdivision will flow through and significantly impact the drainage or sewerage system within the adjoining

municipality; or

(d) Water run-off from the subdivision will impact streets or other municipal or private property with the adjoining municipality.

Such notice shall be made by certified mail and shall be mailed within seven (7) days of the receipt of the subdivision application, and no public hearing shall be held on any subdivision application unless or until such notice has been received. The adjoining municipality may, through a representative, appear and be heard at any hearing on such application.

In accordance with C.G.S. Section 8-3i, in any subdivision application for any property which is within the aquifer protection area delineated pursuant to C.G.S. Section 22a-354c or the watershed of a water company, as defined in C.G.S. Section 16-1, the applicant shall provide written notice of the application to the water company, and the Commissioner of Public Health of the State of Connecticut in a format prescribed by said Commissioner, provided such water company or said Commissioner has filed a map showing the boundaries of the watershed on the land records of the Town or the aquifer protection area has been delineated in accordance with C.G.S. Section 22a-354c, as the case may be. Such notice shall be by certified mail, return receipt requested, and shall be mailed not later than seven days after, the date of the application. The applicant shall submit evidence of such notice to the Commission at the time of application. Such water company and the Commissioner of Public Health may, through a representative, appear and be heard at any hearing on such application.

4.9 Sign to be Posted on Property to be Subdivided

The applicant shall post a sign, to be furnished by the Commission, on the property for which the subdivision application is filed. Such sign shall be posted at least ten (10) days prior to the scheduled Public Hearing and shall give the date, time and location of the Public Hearing. The sign is to be posted on the site in a location to be determined by the Commission and posted in a manner that will offer maximum visual access to the public. If the Commission has determined that no Public Hearing will be held, the applicant shall post a sign, following the procedure described above, at least ten (10) days before the first meeting at which the Commission will review the subdivision.

4.10 Action by the Commission

Within sixty-five (65) days from the close of the public hearing, the Commission shall take action on the Final Subdivision application, unless a later date is for decision is permitted under Section 8-7d(e) of the Connecticut General Statutes. Such action shall consist of approval, modification and approval, or disapproval of the application. "Modification", as used in this Section, may include conditions which must be satisfied prior to endorsement and filing of the Final Subdivision plans, prior to the issuance of Certificates of Zoning Compliance, prior to the release of bonds, or at other appropriate points in time. One or more extensions, as authorized by the Connecticut General Statutes, may be had with the consent of the applicant, provided the total period of any such extension or extensions shall not exceed sixty five (65) days.

4.11 Notification of Action

Within fifteen (15) days after action by the Commission, the Commission shall provide notice of its decision to the general public and notify the applicant and all adjoining landowners who shall have requested notice in writing, of the action taken by the Commission. Such notice shall be by publication in a newspaper of general circulation in the Town of Columbia, and by sending a copy thereof by registered or certified mail to the applicant, and by regular mail to the aforesaid adjoining landowners, on or before the date of publication. Such notice shall be a simple statement that such application was approved, modified and approved, or disapproved, together with the date of such action. Any person aggrieved by the official action of the Commission may appeal there from within fifteen (15) days of publication of notice of such official action to the Superior Court, as provided by Statute.

4.12 Signature on Final Subdivision Plan

Upon approval of a Plan, the Commission shall designate the Chairman or Secretary to endorse the approval and the date thereof upon the Plan on its behalf. In the event of approval upon certain modifications, the applicable modifications shall be made to the Plan. The Final Subdivision Plan to be signed by the Commission shall be printed on a material, and of such dimensions, as comply with the filing requirements of the Columbia Town Clerk.

4.13 Endorsement and Filing of Final Subdivision Plan

Upon approval of an application, the applicant shall, provide a Final Subdivision Plan on a material suitable for filing in the office of the Columbia Town Clerk. The Plan shall incorporate any modification attached to such approval, and shall be accompanied by any documents required by these Regulations, such as bonds, road deeds, liens, conservation and drainage easements, and the like. Any conveyance to the Town of Columbia shall be accompanied by a current Certificate of Title, prepared by an attorney admitted to the bar of the State of Connecticut, and certifying that such conveyance is free and clear of, or subordinated to, any mortgage, lien, restriction, or other encumbrance.

The Plan for filing shall include, reproduced on the face thereof, a copy of the motions of approval (including any conditions or modifications made a part thereof) from both the Commission's subdivision approval and any Inland Wetlands Permit approved by the Columbia Inland Wetlands Commission.

Within ninety (90) days after the expiration of the time for taking an appeal from the approval of the subdivision has lapsed, or, in the event of an appeal, after the termination of such appeal by dismissal, withdrawal or judgment in favor of the applicant, the applicant shall file the endorsed Final Plan with the Town Clerk and pay any necessary filing fees. The Commission may, upon request of the applicant, grant up to two (2) extensions of up to ninety (90) days each for such filing. Any Final Subdivision Plan not so filed shall become void. The Commission shall have no responsibility to retain any Final Subdivision Plans rendered void by operation of this provision.

4.14 Alteration of Final Subdivision Plan Prior to Filing with Town Clerk

If the Final Subdivision Plan is altered, changed, erased or revised in any way between the time the Commission's approval is endorsed thereon and the time the Plan is filed with the Town Clerk, the approval shall be void unless the alteration has been approved by the Commission and so indicated on the Plan.

4.15 Alteration of Final Subdivision Plan After Filing with Town Clerk

If the Final Subdivision Plan is altered, changed, erased, or revised in any way after the time the Plan is filed with the Town Clerk, the approval shall be void unless the Commission has approved the amended Subdivision and a new Final Plan endorsed and filed with the Town Clerk.

4.16 Revocation of Approval

Approval of the subdivision plan may be revoked by the Commission, following a public hearing with notice, by certified mail, return receipt requested, to the applicant and current owner, if it finds that any requirements of the Subdivision Regulations are violated. Notice of such revocation shall be placed in the Columbia Land Records and shall be indexed in the name of the record owners. Notice of such revocation of approval shall be sent to the applicant by certified mail, return receipt requested.

4.17 Preconstruction Meeting

It shall be the responsibility of the applicant to notify the Town Planner seven (7) days in advance of the beginning of any site work or construction. The Town Planner will then schedule a Preconstruction Meeting with the contractor, the Public Works Director, Sanitarian, Inland Wetlands Agent, representatives of the private utilities involved with the project and any other town personnel or private parties as the Town Planner deems proper. The purpose of such meeting is to define the construction inspection schedule which includes, but is not limited to initial site inspection prior to any construction and inspection of all work performed in conjunction with streets, utilities, services and other improvements, and conditions of subdivision approval.

4.18 Completion of Required Work

All work required in connection with a subdivision shall be completed within the period specified in the Connecticut General Statutes. Failure to complete all work within such period shall result in the automatic expiration of the approval of such plan, provided the Commission shall file on the Columbia Land Records of the Town notice of such expiration and state such expiration on the Subdivision Plan on file in the office of the Town Clerk. No additional lots shall be conveyed after such expiration. If lots have been conveyed during such period, the Town shall call the surety to the extent necessary to complete the bonded improvements.

5. CHAPTER 5. SPECIFICATIONS FOR SUBDIVISION PLANS AND PLAN PROFILES

5.1 Subdivision Plans

The Subdivision Plan submitted to the Commission for approval shall be a clear and legible print at a scale of one inch equals forty feet (1" = 40') on sheets twenty-four by thirty-six inches (24"x36") or eighteen by twenty-four inches (18"x24"). When more than one (1) sheet is required, an index sheet of the same size showing the entire subdivision shall be submitted with the Plan. The Plan shall show the following information:

- (a) Name(s) of applicant(s), owner(s) and proposed applicant(s), if other than owner(s), proposed subdivision name and identifying title and location, scale of drawing, north arrow, date of drawing and name, license number and seal of surveyor or civil engineer.
- (b) Location and dimensions of all existing property lines of the subdivision with reference to monuments, pipes, drill holes, foundations or other points of reference of a fixed or semi-permanent nature. Assessor's map and parcel numbers; the location of any Town boundary line within the subdivision, and the square footage of the proposed lot located within the Town and not within the Town; utility poles and numbers.
- (c) All permanent features, such as existing structures, easements of record, watercourses, ponds, wetlands, wooded areas, ledge and rock outcroppings, stone walls, and area of all land that may be set aside for community wells (if any), playground, park or open space use.
- (d) Name(s) of owner(s) of record of abutting properties, as disclosed by the records of the Town Assessor, name(s) and approval date(s) of abutting subdivisions.
- (e) Lines of proposed and existing roads, lots, easements and areas that may be dedicated to public use or open space, lengths of all straight lines and detailed data for all curves. All lengths shall be to the nearest hundredth of a foot and all angles shall be given to the nearest 10 seconds.
- (f) Gross area of all lots in square feet. Each lot shall be numbered and its dimensions on all sides given. If a side is a bent or curved line, a single dimension shall be given in addition to any subordinate dimensions.
- (g) The area of each lot which meets the minimum lot area and shape requirements of the Columbia Zoning Regulations as being free of watercourses, lakes, ponds, swamps, marshes, wetlands, exposed ledge, and slopes in excess of twenty percent (20%) over more than ten percent (10%) of the required contiguous area, as specified in the Columbia Zoning Regulations.
- (h) Proposed road names which shall not duplicate already existing names unless an extension thereof, and for which Board of Selectman approval has been granted, per

established Town procedures.

(i) Any additional data necessary, together with the aforesaid data, to enable a licensed surveyor to determine readily the location of every street line, lot line, boundary line, and to reproduce such lines upon the ground.

(j) Existing and proposed contour lines at two foot intervals or less where the topography of the site and the area around it cannot be otherwise accurately and fairly represented, extending fifty (50') feet beyond site boundaries. Contour information shall be collected by an actual field survey or by means of photo-grammetry (aerial photography) and certified to an accuracy of T-3. No other sources will be acceptable.

(k) Where a new road is involved all lots shall have street numbers assigned in accordance with established Town procedures.

(l) Certificate under seal of (1) a Connecticut licensed civil engineer as to the adequacy of proposed public improvements, and (2) a Connecticut licensed land surveyor that both the survey and the map conform to the standards of survey and map accuracy respectively of Class A-2 as defined in the Recommended Standards for Surveys and Maps in the State of Connecticut, as adopted by the Connecticut Association of Land Surveyors, Inc. September 26, 1996, or as the same may be amended from time to time.

(m) A reference map to the scale of one inch equals one thousand feet (1" = 1000') or one inch equals two hundred feet (1" = 200') showing the proposed subdivision and tie-in to the nearest street intersection. If the application covers only a part of the applicant's or present owner's holdings, contiguous to the subdivision, a map which may appear on the same sheet, drawn on a scale in which one inch equals one thousand feet (1" = 1000') showing an outline of the total area with its proposed road system and an indication of a possible future road system for the remaining portion of the tract.

(n) Soil types and inland wetlands and watercourses, as defined in the Columbia Inland Wetlands and Watercourses Regulations, delineated by a certified soils scientist; Flood Zones, in accordance with the most current Federal Flood Insurance Rate Map; existing wells, public water supply watersheds, and other public or private water supplies.

(o) The application of passive solar energy techniques, if any.

(p) The location of any proposed highway right-of-way, as on file in the Office of the Town Clerk.

(q) The location of all septic system primary and reserve leaching fields; the location of deep observation holes and percolation tests located in each such field; the results of all such tests, in tabular form; and the designation of any lot for which an engineered system is required pursuant to these Regulations.

(r) Where a subdivision is proposed to be developed in phases, such phases shall be

clearly delineated on the Subdivision Plan.

(s) Any additional data necessary to identify existing temporary or permanent landmarks to permit the Commission to identify approximate locations of planned lot lines in the field without requiring the use of special survey equipment.

(t) Report of the Conservation Commission.

5.2 Plan Profiles

When new roads or improvements to existing roads are involved in a subdivision, the Subdivision Plan shall be accompanied by complete plan-profiles of each such road drawn on a sheet that shall be either twenty-four by thirty-six inches (24"x 36") or eighteen by twenty-four inches (18"x 24") in size. The horizontal scale shall be the same as that used in the Subdivision Plan. When the horizontal scale of one-inch equals forty feet (1" = 40') is used, the vertical scale shall be one inch equals four feet (1" = 4'). Such plan-profiles shall show:

1. Existing ground surface on the centerline, the proposed line grade, and existing elevations at both street-side lines.
2. Elevations at each high and low point and at each entry and exit point of the storm drainage system.
3. By proper notation, location and elevations of benchmarks, based on U.S.C. & G.S. datum.
4. Grades expressed as percentages.
5. Stations at high and low points, at centerline intersections, and at suitable intervals
6. Data showing disposition of surface water, including, but not limited to, catch basins, plunge pools, retention/detention basins, and the like; water and sanitary sewer pipes (if any), including sufficient data to permit checking of drainage designs; and the location of all associated easements or rights of way in favor of the Town or any public utility.
7. Typical cross-section of each road indicating location, dimensions and materials of proposed paved, improvements and utilities.
8. Certificate under seal of a Connecticut licensed civil engineer as to the adequacy of proposed public improvements.

5.3 Hydraulic Study

The applicant shall provide a hydraulic study sufficient to demonstrate compliance with the requirements of Section 6.3 of these Regulations.

5.4 Erosion and Sedimentation Control Plan

A soil erosion and sediment control plan consistent with the most current document entitled, "2002 Connecticut Guidelines for Soil Erosion and Sediment Control", published by the Connecticut Council on Soil and Water Conservation in cooperation with the Connecticut Department of Environmental Protection as the same may be amended from time to time, shall be submitted with all subdivision applications when the disturbed area of development is more than one-half (1/2) acre.

5.5 Groundwater Management Plan

If the seasonal groundwater elevations could affect the structures, sewage disposal systems or the roadway, a system of under drains shall be shown on the plans.

6. CHAPTER 6. STREET, HIGHWAY AND OTHER PUBLIC IMPROVEMENT STANDARDS

6.1 General Requirements

The following improvements shall be required in all subdivisions except where waived in accordance with the regulations of the Open Spaces section of this document, by a specific resolution of the Commission: curbs, storm sewers and pavement on proposed streets, as well as curb and pavement between edge of the existing pavement and the new curb line on existing streets which bound or intersect the proposed subdivision. The applicant shall also be required to install street signs, monuments, and loam and seeding. The Commission may require the installation of fire ponds, dry hydrants, street lighting, sidewalks and shade trees. Materials and construction methods for all improvements shall conform to state standards as described in Standard Specifications for Roads, Bridges and Incidental Construction Connecticut Department of Transportation, Form 814, 1988, or latest revision.

All designs for storm water runoff management systems shall conform to the standards as described in the 2002 Connecticut Guidelines For Erosion and Sedimentation Control, or latest revision.

The Rules and Regulations of the State Board of Registration for Professional Engineers and Land Surveyors, dated January 1, 1966, with all revisions, shall apply to all technical work done in conjunction with subdivisions. The technical responsibilities of the Registered Professional Engineer and Land Surveyor in regard to subdivision work are:

(a) The design of roads, both horizontal and vertical alignment; drainage systems, including the design and location of structures and pipe; sanitary sewer systems; sewage disposal systems; and water supply and distribution constitute professional engineering and as such shall be sealed by a Registered Professional Engineer. A land surveyor's seal or an architect's seal is not acceptable for this phase of land subdivision design work.

(b) The phase of land subdivision which relates to topography maps and the delineation of the boundary lines of the outside perimeter as well as the interior lots and streets constitutes land surveying within the meaning of the statute and as such shall be sealed by a registered land surveyor. A professional engineer's seal or an architect's seal is not acceptable.

6.2 Streets and Highways

Proposed streets and highways shall conform to the following specifications:

(a) Proposed roads shall be in harmony with existing and proposed thoroughfares shown within the Town's plan of development, including proposed realignments, and their layout and design shall be approved in each case by the Commission.

(b) The layout of the streets shall be designed whenever possible to discourage permanent dead-end streets in favor of closed loops which are more compatible with the town's rural atmosphere, enhance the circulation of traffic and facilitate road maintenance. Taking into account the total acreage of the tract and its topography, the Commission may disapprove a layout calling for permanent dead-end streets.

(c) Straight street segments: layout of streets shall be designed to avoid long straight segments that encourage speeding or detract from the general appearance of the subdivision. After consideration of the projected traffic load, the topography and other site conditions, the commission may disapprove a street layout showing straight segments exceeding eight hundred feet (800') in length.

(d) The applicant, should as far as practical, consider street alignments along an east-west axis to encourage the development of buildings facing true south.

(e) Street Arrangement. The arrangement of streets in the subdivision shall provide for the coordination of principal streets of adjoining subdivisions, and for proper projection of principal streets into adjoining properties which are not yet subdivided, in order to make possible necessary fire protection, movement of traffic, and the construction or extension, either present or when later required, of needed utilities and public services such as drainage facilities. The Commission may waive, in accordance with Chapter 12, or modify this requirement, if the topography or other conditions make such continuance impracticable. To the maximum feasible extent, proposed streets shall be designed in harmony with existing topography so as to minimize cuts, fills, and other disturbance of the natural landscape, and whenever possible, follow a gentle curving alignment with the terrain.

(f) New Streets. Where the subdivision adjoins un-subdivided land susceptible to being subdivided, the Commission may require new streets to be carried to the boundaries of the proposed subdivision on such terms the Commission or Town may require.

(g) Reserved Rights-of-Way. When required by the Commission, the applicant shall dedicate to the Town reserved rights-of-way for future street connections to adjoining property susceptible of being subdivided. Such reserved rights-of-way shall be included in an agreement by and between the Town and the developer, and shall include slope rights at least fifteen feet (15') outside of the street right-of-way. Wider slope rights shall be provided as needed to completely contain all grading areas for the street. Lots adjoining these rights-of-way shall be so laid out that access to the house or garage shall not be over the reserved right-of-way. When the adjoining property is subdivided, the developer of said adjoining property shall be required to connect to and build the street over the reserved right-of-way at his/her own expense.

(h) Construction Standards. Road construction standards shall be as described in Plates 1, 2 and 3 of this Chapter, depending on the designation of the road.

(i) Street Widths. Minimum widths for various street designations shall be as shown in the following table:

Designation	Street Width (Right of Way)	Traveled Width
Arterial Road	80 feet	40 feet*
Major Collector Street (See Plate 1)	50 feet	30 feet*
Minor Collector Street (See Plate 2)	50 feet	26 feet*
Local Street (See Plate 3)	50 feet	24 feet*

*Wherever the preceding street designations are used in these Regulations, the designation for each existing street shall be as set forth in the Plan of Development. The Commission, after evaluating the following factors, will determine the designation for each new street:

- (1) The type of land use permitted in the subject zone, and/or proposed for the subdivision, such as, residential, commercial, industrial, or institutional.
- (2) The residential density and/or development intensity of any permitted and/or proposed land uses.
- (3) The number of acres or residential units or non- residential buildings to be served, both immediately and in the future, including potential extensions of existing or proposed streets.
- (4) The physical characteristics of the property through which the street is proposed, such as topography, surface geology, water table, and the like.
- (5) The recommendations of the Plan of Development.

(j) The Commission shall have the discretion to allow a reduction of pavement width to twenty-two feet (22’).

(k) Where a subdivision abuts or contains an existing street that does not comply with the specified width requirements, the applicant shall dedicate the necessary area to the Town for street widening and show such widening on the Subdivision Plan.

(l) Block Dimensions. The maximum length of a block shall be one thousand two hundred feet (1,200') and the minimum length shall be two hundred feet (200').

(m) Cul-de-sac Streets:

All cul-de-sac Streets: Cul-de-sac streets shall be equipped with a turn-around which has a minimum right-of-way radius and a minimum pavement radius of one-and-one-half times the minimum width for streets of that classification, but in no event less than a right of way radius of sixty feet (60') and a minimum pavement radius of forty-five feet (45').

Cul-de-sac Streets. Where a permanent cul-de-sac street is included in a subdivision, it shall not serve more than fifteen (15) residences.

Where the cul-de-sac adjoins un-subdivided land susceptible to being subdivided, the Commission may require the cul-de-sac to be carried to the boundaries of the proposed subdivision on such terms the Commission or Town may require. When there is a possibility of extension of a street, all portions of the cul-de-sac, including pavement, grass strip and sidewalk (if any) that fall outside of the limits of the normal right-of-way width shall occupy the space by virtue of a temporary easement conveyed to the Town before acceptance of the street.

The developer extending a street from a cul-de-sac shall be required to remove the existing pavement outside of the standard traveled way, loam and seed said area in which pavement has been removed and install curbs in the original cul-de-sac area in accordance with Town requirements and at his/her own expense. The temporary easement described in the preceding paragraph shall provide for its automatic release upon acceptance of the street extension by the Board of Selectmen.

(n) Loop Streets. Loop streets shall not originate at another loop street or a cul-de-sac street. Loop streets shall not provide access to more than twenty (20) lots. No lot within the loop shall have its rear line fronting on the street, unless waived by the Commission, in accordance with Chapter 12.

(o) Half Streets. Half Streets shall be prohibited.

(p) Side Slopes. Streets in cut or fill shall be provided with slopes not steeper than two feet (2') horizontal to one foot (1') vertical, or the permanence of the street grade shall be otherwise provided to the satisfaction of the Commission.

In all areas where the side slopes are steeper than four feet (4') horizontal to one foot (1') vertical and slope down from the street, metal or pressure-treated wood beam guide rails, at the Commission's option, shall be installed in accordance with the recommendations of the Town Engineer.

When new streets abut private property, the developer shall obtain necessary slope rights when in cut or fill, and these slope rights shall be shown on the plans submitted to the Commission. The developer shall investigate the effect of fills on adjacent private property within the slope rights area. The developer shall provide the Commission with evidence that no drainage problems or other problems will arise on adjacent property due to construction or fill operations.

(q) Relation to Topography. The streets in a proposed subdivision shall bear a logical relation to the topography and all streets shall be arranged so as to obtain as many of the building sites as possible at or above the grade of the street. Streets shall be designed to maximize the preservation of natural and historic features, except as approved by the Commission; examples include specimen trees, large isolated trees, stone walls/fences, historic markers, hedges, and the like.

(r) Intersections: Number of Streets Intersecting. No more than two (2) streets shall intersect or meet at any one point and the centerline of all streets entering an intersection shall pass through a single point.

(s) Angle of Intersection. Except where impracticable because of topography or other conditions, all streets shall join each other so that for a distance of at least one hundred feet (100') the street is at approximately right angles to the street it joins.

(t) Grades of Intersection. Grades approaching intersections shall not exceed five percent (5%) for a distance of not less than one hundred feet (100') from the center line of said intersection.

(u) Corner Radii. Intersecting local streets shall have a minimum radius of fifteen feet (15') at the street line. Intersections of local streets with arterial streets and commercial streets shall have minimum radius of twenty feet (20') at the street line. All other intersections shall have a minimum radius of twenty-five feet (25') at the street lines.

(v) Distance Between Intersections. Intersections shall be spaced a minimum of two hundred feet (200') apart measured from the points of intersection of the centerlines. Two streets intersecting opposite sides of a third street are to have the same point of intersection or else their center lines are to be separated by a minimum of two hundred feet (200') on a third street.

(w) State Road Intersection. The Subdivision Plan shall be submitted to the State Department of Transportation if a proposed street in the subdivision intersects with a State Highway. State Department of Transportation conditional approval shall be given in writing before the Commission gives subdivision approval

(x) Sight Lines. For a distance of fifty feet (50') from the point of two (2) intersection property lines nearest to the street intersection, all planting, screening and grades shall be so designed and maintained as to assure adequate visibility for approaching pedestrian and vehicular traffic. This sight line shall be shown on the map and secured by a permanent easement in favor of the Town.

(y) Street Signs. Street name signs shall be erected at points designated by the Town and

shall be shown on the Subdivision Plan. They shall be installed in accordance with state standards and at the expense of the applicant. Each entrance to a subdivision may be marked by a single sign that meets with the standards of the zoning regulations of the town of Columbia. Any further entrance treatment, including gates, walls, fences or flagpoles require the approval of the commission which shall approve only those installations that are compatible with the character of the town and as per the town of Columbia's Plan of Development.

(z) Street Names. Road names shall be accepted by the planning commission and should bear a meaningful relationship to the history, geography, character, natural features or landmarks of the vicinity or of the town. Road names should not closely replicate any existing road name in Columbia or vicinity so as to cause confusion of addresses.

(aa) Street Lights. Streetlights shall be installed at all intersections and at the end of cul-de-sacs, unless specifically waived by the Commission. Where power is overhead (i.e., intersections with existing roads), a luminaire which conforms to the type used on comparable streets by the franchised electric company for the area shall be mounted off an existing pole; where power is underground, the applicant shall submit the type of luminaire and pole to be installed for review and approval by the Commission. The Commission may require that a decorative luminaire shall be used, as provided by the franchised electric company for comparable rural residential areas. All new light poles shall be located a minimum of four feet (4') from the curb.

(bb) Grades. The minimum grade of all streets shall be one percent (1%). Maximum grades shall be as follows, with the lower limit being the desirable maximum grade and the upper limit being the absolute maximum grade. The Commission shall determine the allowable maximum grade for any particular installation.

Classification	Grade	Grade
	Desirable Max	Absolute Max
Arterial Roads	5%	8%
Collector Streets	7%	10%
Local Streets	8%	12%

(cc) Sight Distance. The minimum horizontal sight distance at intersections, measured from a point ten feet (10') back from the curb line of the cross line, shall be as follows:

Classification	Horizontal Sight Distance
Arterial Roads	450'
Collector Streets	300'
Local Streets	200'

(dd) Existing Street Improvements.

(1) Whenever any subdivision is proposed for land accessible only by an unpaved street or an existing Town street which does not conform with minimum requirements of grade, alignment, width and construction set forth in these Regulations, and the Commission determines that approval of the Subdivision Plan would be contrary to the public safety unless such street was altered or improved where it fronts the proposed subdivision or beyond the limits of the proposed subdivision, the Commission may disapprove such plan or may condition its approval upon alteration of such street by and at the expense of the applicant, or may disapprove such plan until the Board of Selectman has authorized expenditures for such improvements.

(2) Frontage Improvements. Whenever any subdivision is proposed for land which fronts on an existing Town street which does not conform with the minimum requirements of width and construction set forth in these Regulations, the applicant shall improve such frontage from the center line of the street to the required street line, in accordance with the appropriate Plate 1, 2 or 3 of this Chapter. Where such improvement from the centerline is impractical, the Commission may require improvements of comparable value to be performed along the existing road frontage of the subdivision, or adjacent frontage impacted by the subdivision. In the alternative, the Commission may require that the cost of such improvements shall be paid to the Board of Selectman, or its designated agent, in lieu of the completion of such improvements by the applicant. Such payment shall be held in a separate fund to be used exclusively for the improvement of the subject street in ways that directly benefit the future owners of lots in the subdivision.

In making the above determination, the Commission shall take into account the ability of school buses and emergency vehicles to travel the street safely, the drainage conditions of the street, and generally the ability of any vehicle to use the street safely.

(ee) Utilities. All utility lines, including but not limited to, those required for electrical, communication, and cable television sources and related facilities, shall be placed underground within the street right-of-way, or adjacent right-of ways, and shall be shown on the Subdivision Plan. The applicant shall make all necessary arrangements with the service utility to provide the underground services. The methods of installation shall be approved by the particular utility company and be in conformance with these Regulations. The Commission may waive all or part of these requirements, in accordance with Chapter 12, if extreme circumstances such as topography or other conditions warrant.

(ff) Watercourses. Where a major watercourse separates an existing street from abutting property to be subdivided, provisions shall be made for carrying such watercourse by means of culverts or other structures.

(gg) Drainage. All curtain and cellar drains may be tied into the storm water drainage system, where required or approved by the Town Engineer. Catch basins are to be made of all pre-cast parts (e.g., sumps, reducers, and curb tops with grates). Manholes or center-placed catch basins are not to be used for storm drainage unless approved by the Town Engineer. Flared end section pipes shall be used at all culvert outlets or inlets, unless the Town Engineer approves headwalls.

(hh) Street Bound Monuments. Street bound monuments, composed of concrete or granite at least four inches (4") square at the top and at least three feet (3') long and containing a ferrous rod, shall be placed at all block corners, at angle points, and the points of curves in streets and at such intermediate points as may be necessary. The location of all street monuments shall be indicated on the Final Subdivision Plan. They shall be installed and their accuracy certified by a registered land surveyor.

(ii) Inspections During Construction. In the case of a new street or a change in an existing street, the Commission may require that the work be inspected by a registered civil engineer of its choosing at the following stages of construction.

- (a) At completion of rough grading.
- (b) After drainage and all other underground facilities are installed, and prior to back fillings.
- (c) During graveling and rolling and prior to placement of base material.
- (d) Prior to application of binder course.
- (e) Prior to application of top course.

The developer shall not proceed to work on any stage subsequent to the first stage until the Commission or its appointed agent has made such inspections, on the preceding stage, and approval in writing has been obtained for such stage. The developer shall give 72 hours notice, minimally, to the Commission or its appointed agent for each inspection.

(jj) Dedication of Streets. Approval of a Subdivision Plan shall not be deemed to constitute or affect an acceptance of any street by the Town. However, the filing of an approved Plan shall constitute an irrevocable offer of dedication by the owner of the land to the Town.

6.3 Storm water Runoff Management Systems

An applicant for any subdivision involving one or more of the following criteria shall submit a hydrologic review and summary to the Commission:

1. The development will involve the destruction or removal of vegetation or other ground cover and the exposure of soil materials on five (5) acres or more.
2. The subdivision will involve the grading or filling of five (5) acres or more of land.
3. The proposed impervious portion of the total subdivision area is 25% or greater.
4. The Commission finds that a hydrologic review and summary is necessary to protect the public health, safety, or welfare of the Town.

(a) Nature of Review. The methods used to estimate peak flows and runoff volumes shall be in accordance with those described in the 2004 Connecticut Storm Water Quality Manual, as they may be amended. The peak discharges from the two (2)-year, ten(10)-year, twenty-five (25)-year and one-hundred (100)-year frequency, 24-hour duration type III distribution storms before and after development and downstream impacts shall be analyzed. The report and analysis submitted to the Commission shall consist of a narrative, summary table and supporting calculations.

(b) Results of Review. If the Commission determines that downstream areas may be adversely affected by increased peak discharges or if peak discharges are increased for the two (2)-year storm, the ten (10)-year storm, or the one-hundred (100)-year storm, then the Commission shall require the applicant to submit a proposal for a storm water management system.

(c) Elements of a Storm Water Management System. The following standards shall be met in any storm water management system submitted to the Commission:

1. Except as provided below, no increase in peak flow from the analyzed storms shall be allowed unless an analysis of downstream areas shows that increases are acceptable considering:

- (i) The timing of peak flows from sub-watersheds,
- (ii) The increased duration of high flow rates,
- (iii) The stability of the downstream channels,
- (iv) Flood routing (the distance downstream that peak discharges are increased), and
- (v) Existing land use and zoning.

Detention basins, parking lot storage, underground tanks or other effective methods may accomplish prevention of peak flow increases.

2. Design of detention basins shall be in accordance with the Detention Basin (DB) measure contained in the 2004 Connecticut Storm Water Quality Manual, as may be amended.

3. Design of infiltration trenches, parking lot storage, and underground tanks shall be in accordance with the Runoff Management System Standard contained in the Soil Conservation Service Technical Guide Section IV (SCS Standard #570).

4. Inlets to a detention basin must be provided to allow entrance of flood flows in excess of the maximum capacity of the storm sewer pipe system.

5. Maximum infiltration to the groundwater is encouraged except in areas where the potential exists for contamination of an aquifer with polluted surface water. Design of the storm water management system shall consider reducing runoff by use of such techniques as minimizing impervious areas and maximizing travel times by using grass or rock-lined channels in lieu of storm sewers.

6. When the Commission determines that engineering, aesthetics, and economic factors make combined detention or other drainage facilities more practical for construction by the Town, the Town shall require a fee or equivalent dedication of land which shall be used to construct joint facilities. The Commission may permit several developers to construct joint facilities.

7. Runoff management system components shall be designed according to sound engineering principles and installed in a sequence that permits each to function as intended without causing a hazard. Single components shall not be installed until plans for the entire runoff management system are completed and approved. The Commission shall approve final discharge points.

8. If on-site facilities are not to be dedicated to the Town the owners shall properly maintain them so that they do not become nuisances. The owner, or others responsible for the system, to ensure that each component functions properly, shall prepare a plan of operation and maintenance for use. This plan shall provide requirements for inspection, operation, and maintenance of individual components, including outlets. It shall be prepared before the system is

installed and shall specify who is responsible for maintenance. Adequate rights-of-way must be provided for maintenance access. If a privately owned facility is not maintained in accordance with the provisions of this section, the Town shall take whatever measures are necessary to insure proper maintenance, at the expense of the owner.

9. All runoff control structures located on private property, whether dedicated to the Town or not, shall be accessible at all times for Town inspection. Where runoff control structures have been, or are intended to be, accepted by the Town for maintenance, access easements shall be provided.

10. Appropriate safety features and devices shall be installed to protect humans and animals from such accidents as falling or drowning. Temporary fencing can be used until barrier planting is established. Such protective measures as guardrails and fences shall be used on spillways and impoundments as needed.

11. Runoff management systems should be visually compatible with the surrounding landscape.

12. Permits for runoff management systems may also be required from the Columbia Inland Wetlands Commission, the Connecticut Department of Environmental Protection and/or other regulatory agencies. The applicant is responsible for securing these permits before Commission approval can be granted.

13. The Commission may submit copies of the proposed storm water management plan to the Tolland County Soil and Water Conservation District for review and comment.

14. Storm sewers shall have a minimum pitch of one-half percent (0.5%) and a maximum pitch of ten percent (10%). Variance from this requirement may be granted by the Commission if storm sewers are designed with a minimum self-cleaning velocity of three feet (3') per second with full flowing pipes.

15. A minimum cover of two and one-half feet (2 1/2') shall be provided for all storm drains.

16. No storm drain system shall outlet onto adjoining properties without a drainage easement; nor into a natural watercourse, whether continually flowing or intermittent, so as to exceed the capacity of the watercourse, or to cause erosion, sedimentation, scouring, or other adverse impacts on such watercourse.

17. The first inlet in a storm drain system shall be located within three hundred feet (300') of the roadway high point. A drainage structure, either an inlet or a manhole, shall be provided at three hundred foot (300') maximum intervals on all storm drains with the exception of the first inlet. A drainage structure shall also be

placed at each grade change along a storm drain, at each change in horizontal direction, and at each junction point of two (2) or more drains.

18. Under drain outlets shall be connected to drainage structures whenever practical. When impractical, they shall be terminated with an approved end wall or flared end pipe. At all under drain outlets, a “free outlet” condition should be provided.

19. The minimum pipe size for all public storm drain systems constructed under these Regulations shall be fifteen inches (15”) inside except that culverts of a lesser size may be permitted where recommended by the Town Engineer.

20. The following types of pipes shall be used for drainage installations:

- i. Reinforced concrete pipes or High Density Polyethylene (HDPE) pipe or equivalent for surface drainage storm sewer systems and cross culverts.
- ii. Where clearance is limited by utilities, pipe arches or oval pipe may be used.
- iii. On grades over ten percent (10 %), Corrugated HDPE or equivalent shall be used.

21. Drainage easements shall include a ten foot (10’) access strip in addition to the width of the channel or brook from bank top to bank top. Channels shall be rip rap stone or paved when deemed necessary by the Commission.

22. Drainage easements, outside of street lines, shall be at least thirty feet (30’) wide and shall include wording so as to allow inclusion of other utilities such as water and sanitary sewer. Easements for outlet pipes shall extend to a suitable existing storm drain, an adequate natural watercourse or a suitable infiltration system per Paragraph 5 of this Section. The centerline of storm sewer is not to be installed less than ten feet (10’) from the edge of the right-of-way.

23. Where the development streets join existing Town streets, the developer must provide drainage at intersections as necessary, or as directed by the Commission

24. The size and location of all private storm drains that connect to the town storm drain system shall be approved by the Commission prior to installation. A waiver, in a form approved by the Town Attorney, must be filed by the applicant with the Commission. The waiver shall relieve the Town of any responsibility for damage resulting from any failure of the private storm drainage system. This waiver shall be in the chain of title and shall run with the title to the property as to subsequent purchasers.

25. Details of special or unusual drainage structures shall be submitted to the Commission for review and approval before construction.

26. Where any proposed lot or lots has its required frontage on an existing Town street, and has an existing ditch or waterway along the front of said lot or lots, but within the Town right-of-way, the applicant, at his expense, shall install a storm water pipe drain, of suitable size and material, necessary catch basins and a curb, to conform with the curb line.

6.4 Drainage Design Criteria

Selection of the appropriate method of calculating runoff shall be based upon the size of the drainage area and the type of output, as described in the Connecticut Erosion and Sediment Control Guidelines, (2002), as may be amended. The following additional criteria shall be used in the design:

(a) All storm drainage facilities shall be designed based on the following storm return frequency criteria:

Residential Drainage Systems: Storm Sewers and Minor Ditches; 10-year storm.

Commercial Districts: All Drainage Facilities; 250-year storm.

Industrial Parks: All Drainage Facilities; 25-year storm.

(b) Rainfall intensities used for storm drainage shall be taken from Plate 4 of this Chapter

(c) Design discharges for major channels and brooks may, with the concurrence of the Commission, be based on a flood hydrograph or flood flow formula type of analysis.

(d) Off-site drainage and the ultimate development of adjoining land shall be addressed and calculations provided in the design of a storm drainage system for the subject site. All off-site impacts, alterations, easements, and similar information shall be shown on the subdivision plans.

6.5 Subdivision Street Work Prior to Acceptance

Prior to Town acceptance of new subdivision streets, all catch basins and detention basins are to be cleaned and all roadways swept. The applicant shall be responsible for any and all maintenance required on unaccepted subdivision streets, including snow removal.

7. **CHAPTER 7. GUARANTEE OF PERFORMANCE**

7.1 **Insurance**

(a) Prior to the endorsement of the Final Subdivision Plan in accordance with these regulations, the applicant shall file with the Commission, on a form provided by the Town, a general liability insurance policy. This policy shall be of the same term as the Performance Bond and shall be extended in conformance with any extension of the Performance Bond.

(b) The policy shall insure the Town of Columbia and its agents, and the applicant and shall cover all his operations in the development involving existence and maintenance of property and buildings and contracting operations of every nature including all public Improvements. Said policy shall have the following limits:

General Liability Insurance

Bodily Injury	
Each Person	Not Less Than \$1,000,000
Each Accident	Not Less Than \$3,000,000
Property Damage	
Each Accident	Not Less Than \$1,000,000

Note 1 – A policy providing a combined single limit of liability applying to both bodily injury and property damage of not less than \$3,000,000 may be substituted for the limits shown above.

Note 2 – A separate liability policy and an Umbrella Liability Policy with equivalent limits is also acceptable.

7.2 **Performance Bonds**

(a) Construction Bond. A construction bond shall be posted by the applicant prior to the endorsement of the Final Subdivision Plan, and prior to the commencement of construction of any improvement or work on any lot to insure the completion of required improvements and utilities in the event the applicant shall fail to install same within two (2) years from the date of the bond. The Commission, upon approval of a petition, may extend the term of the construction bond from the developer requesting an extension to the Commission (subject to agreement of such extension by the surety).

In computing the amount of the bond, the Commission shall include the construction cost of the following items:

1. The construction cost of all required improvements, including storm drainage system, erosion and sedimentation control measures, roads and pavements, sidewalks and curbs, trees, grading setting of monuments, and any other requirements made as a condition for subdivision approval or depicted on the endorsed Final Subdivision Plan, Plan and Profile, Erosion and Sedimentation Control Plan, or any other plan as approved by the Commission.
2. Estimated costs shall be those that would allow for the Town advertising, awarding a contract, and paying for construction of the Improvements.
3. Costs shall be projected to a point at the end of the construction bond term. Any extension of the term of the construction bond may result in an adjustment to the bond total.
4. The total estimated cost of the construction bond shall also include a fifteen percent (15%) addition to cover contingencies and engineering.
5. Where a subdivision is to be developed in phases, the applicant may petition the Commission in writing for permission to post a construction bond covering the costs itemized above, related to those Improvements and utilities located within or required to serve one or more phases rather than for the entire development. The applicant prior to commencing development of any or all additional phases shall obtain similar permission. Where the applicant bonds in phases as authorized in this paragraph, no Improvement, as that term is defined in these Regulations, shall be commenced in any phase for which no bond has been posted.

(b) Maintenance Bond. Of the bond amount described in the preceding Section, the Town, following acceptance of the improvements as a maintenance bond, shall retain ten (10%) percent. The maintenance bond shall be in the form of cash or Letter of Credit that complies with the following section. The maintenance bond will insure the maintenance and adequacy of the constructed public streets, utilities, services and other Improvements for a period of one (1) year after acceptance by the Town.

7.3 Form of Construction Bond

As used in these Regulations, the term “construction bond” or “bonded” or “bond” or similar terms shall refer to one of the following methods of assuring completion of Subdivision improvements:

- (a) Cash in the form of a certified check; or a passbook, assigned to the Town by assignment forms prescribed by the Commission’s legal counsel. The issuing bank (“surety”) shall be one maintaining offices in Hartford, Tolland, or Windham Counties.
- (b) A letter of credit in favor of the Town in the form prescribed by the Commission’s

legal counsel. Only a bank having a worthiness rating of “investment grade” or better and maintaining offices in the State of Connecticut shall issue such letter of credit. The issuing bank (“surety”) shall be one maintaining offices in Hartford, Tolland, or Windham Counties.

The above-referenced forms shall be acceptable by the Town and shall be the only ones acceptable to the Commission. The amount of the bond shall be the sum that the Commission shall require. The completion date of all required Improvements shall be as required by the Commission, but, in no event, longer than the period set forth in Chapter 126 of the Connecticut General Statutes.

7.4 Duration and Release of Bond

Release of such construction bond shall be contingent upon completion of all public Improvements within the term of such bond or any extension thereof. The commission, upon approval of a petition, may extend the term of construction and the associated bond from the developer requesting an extension.

The Commission may consider allowing the sum of the construction bond to be reduced from time to time. Each reduction shall be subject to concurrence of the Board of Selectmen. Before such reduction is allowed, the Commission must receive a report from a Connecticut licensed professional engineer, of its choosing, stating that all or some portion of the work has been completed in accordance with the approved subdivision plans and these Regulations. Application for the release of the construction bond shall include the submission of scale ‘as-built’ drawings that will include all changes in the plans as authorized by the Commission during the course of construction. However, if the Commission has agreed to release the bond in phases, ‘as-built’ drawings, as described above, are only required at the final phase of construction bond release. As-built drawings shall be signed and sealed by a land surveyor licensed in the State of Connecticut.

If such construction bond and/or maintenance bond is a cash bond, all accrued interest shall be held and released to the applicant only at the release of the bond. Upon final completion of the Improvements, in accordance with these Regulations and the approved Plan, and within the prescribed time limit of the portion of any road covered by such construction bond, the Commission shall release the bond and return any collateral. If such construction, at any phase, is not in accordance with such specification or if such portion of such road is not duly and finally completed within such time limit, the Commission may recommend that the Town utilize the bond for the completion of construction.

If at any time, the bond required by this section shall not be in effect for incomplete or unaccepted Improvements, the Commission may file a caveat on the Land Records warning potential purchasers of such fact; or may void the subdivision in accordance with the provisions of Chapter 12 of these Regulations.

7.5 Certificate of Zoning Compliance

Before any Certificate of Zoning Compliance (Zoning Permit) is issued for the construction of any building in such subdivision on a lot which fronts on a subdivision road which has not been accepted by the Town as a public road, the applicant shall complete such road to the satisfaction of the Town Engineer, in accordance with the specifications up to the farther side line of such lot, to a stage in construction at which only final surfacing of the road remains to be done before completion of the road. The foregoing shall not apply to street trees, sidewalks, or other types of road-related Improvements not required for vehicular travel, but shall apply to the installation of street name signs to facilitate the provision of emergency services. The balance of the work on such road, and all other public Improvements shall be bonded in accordance with the provisions of this Chapter. In addition, water and effluent disposal, be it by individual on-site systems or community systems, shall be operational and accepted by the appropriate Town or State agencies prior to the issuance of a Certificate of Zoning Compliance allowing the occupancy of the dwelling on any lot.

7.6 Agreement for Installation of Improvements

For any subdivision involving the installation of Improvements, the applicant shall, prior to the endorsement of the Final Plans, enter into a written agreement with the Town to perform such Improvements, which agreement shall be in a form specified by the Commission.

8. CHAPTER 8. LOT AND DRIVEWAY DESIGN SPECIFICATIONS

8.1 Lots

In general, all lots within the proposed subdivision shall conform to the following specifications.

8.1.1 All Land To Be In Lots

Land owned by the applicant and located adjacent to the proposed subdivision shall not be withheld if it is not capable of satisfactory independent subdivision into lots of the size specified, nor there any fragment of a lot in the subdivision area of less size than specified for lot dimensions. Fragments must be incorporated into full size lots.

8.1.2 No Unapproved Lots

No lot, regardless of size, which is rendered useless for building due to utility easements, right-of-way, watercourses, or topography, or which has not been demonstrated to comply with these Regulations and the Columbia Zoning Regulations, shall be shown as a building lot on any subdivision. Such property shall be included in adjoining lots.

8.1.3 Side Lines

Sidelines of lots shall, insofar as practicable, be either at right angles or radial to street lines. Variations from this section will be made only where it is impractical to do otherwise.

8.1.4 Parking and Turnaround

Space shall be provided on all lots for off-street parking for a least two vehicles, and provision shall be made for vehicular turn-around.

8.1.5 On-Site Sewer and Water

All lots shall have adequate area for on-site water and sewerage systems.

8.1.6 Zoning Compliance

All lots shall meet the minimum area and shape requirements as specified in the Town of Columbia Zoning Regulations.

8.1.7 Lot Boundary Markers

A lot boundary marker shall be placed by the applicant's surveyor on each lot corner and also at any point where a change in angle or curve of a lot line occurs. Such marker may be a steel rod, iron pin or other equally permanent material. The permanent marker location shall be shown on the subdivision map and must be placed on the site prior to the signing of the mylars. The Commission may waive this requirement on extremely large lots or remaining tracts of property.

8.1.8 Driveways

Driveways shall be designed and constructed to promote traffic safety and to prevent or

minimize drainage problems. All subdivision proposals shall show driveway locations with associated grading, tree and brush removal, drainage improvements, sightlines, and other information necessary to demonstrate compliance with the requirements of these regulations.

The following standards shall apply:

(a) Compliance with all Applicable Requirements. Driveways shall conform to applicable Town Ordinances, Zoning Regulations and to Department of Transportation requirements on State roads.

(b) Distance to Intersection. Driveway cuts shall be located a minimum of seventy-five feet (75') from any roadway intersection.

9. CHAPTER 9. OPEN SPACES AND RECREATION AREAS

9.1 Open Space Requirements

The Commission shall encourage the preservation of open space by requiring a dedication of fifteen percent (15%) of each subdivision of land over ten (10) acres as open space to be set aside by an applicant for the purposes of conserving natural or scenic resources; protecting natural streams, marshes, ponds and aquifers, supplementing existing open space (including recreational) areas; meeting recreational needs of present and projected populations in the area; protecting historical and archaeological sites, wildlife sanctuaries, distinct habitat and outstanding forests; preserving ridges, ravines, ledge outcroppings, and other unusual physical features; and promoting orderly community development.

The Commission shall approve the selection of the open space portion offered by the applicant of any subdivision. In its acceptance, the Commission shall consider any open space proposal made by the applicant and also any expert opinions presented by the state, regional, or town agencies and organizations as to the suitability of a proposed open space parcel for designation as open space. Such selection shall be based on a determination by the Commission that the parcel or parcels of land selected as open space are suited to the recommendations of the Plan of Conservation and Development or its most current amendments or updates and the uses enumerated herein.

9.2 Dedication

The Commission shall have the right to accept at least fifteen percent (15%) of the property to be subdivided to be dedicated as open space, park, or playground land. Open space, park or recreation areas larger than the specified fifteen percent (15%) may be proposed by an applicant for acceptance by the Commission.

9.3 Land Designation

In evaluating a potential open space dedication, the Commission shall have the right to consider all land within the property to be subdivided, and with the applicant's consent, any other nearby tract owned, controlled or optioned by the applicant. Subject to the criteria established in this regulation, the commission shall consider all applicant-proposed locations for open space, park or playground dedications.

1. Where required, the land so dedicated shall be designed as an integral part of the subdivision and shall be chosen on the basis of its value in providing open space, park or playground benefits to the future occupants of the proposed subdivision and its value in regard to the following factors:

- a. Protecting and conserving natural and man-made features and or scenic view and vistas;
- b. Promoting the Plan of Conservation and Development;

- c. Enhancing living conditions and protecting cultural and historic features;
- d. Creating recreational opportunity;
- e. Providing greenbelts and trails connecting parks and separated open space parcels and providing flexibility for potential open space, park or playground extensions onto adjacent properties;
- f. Protecting endangered and threatened species, State species of special concern, significant natural communities, and important wildlife corridors.

2. In accordance with the dedication options cited in Section 9.9., and in accordance with the other provisions of this regulation, all subdivisions involving more than ten (10) acres shall submit, as part of the subdivision plan, the following:

- a. A proposal for the location of land to be dedicated for open space, park or playground use, which considers the criteria of Section 9.3.1.
- b. The method(s) of dedication, and
- c. Any proposed improvements for the dedicated land.

For subdivisions of multiple sections or re-subdivisions, the subdivision area and number of the lots shall be calculated on a cumulative basis.

9.4 Final Determination

In all instances, final determination regarding the need of open space, park or playground land and the location, extent and use of open space, park and the appropriate methods of dedication shall be the responsibility of the Commission. Where required, each dedication shall be based on the criteria established in this regulation and shall be of a suitable size, location, topography and general character to serve the particular purposes deemed proper by the Commission.

9.5 Exemptions

In accordance with the provisions of Section 8-25a of the Connecticut General Statutes, the voluntary open space requirements of this section shall not apply if the transfer of all land in a subdivision of less than five 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 or more of the total housing units to be constructed in such subdivision. However, all applicants are encouraged to consider dedications for open space, park or playground purposes. The lots receiving the above family waiver may not be sold to non-family members within the first five years.

9.6 Referrals

For all subdivisions involving ten (10) acres, or more, the Commission shall refer the subdivision proposal to the Board of Selectman, Conservation Commission, Open Space Committee, Inland Wetlands Commission and any other agency or

organization the Commission deems may have an interest. Referrals are mandatory whenever an applicant proposes the payment or fee in lieu of dedication cited in Section 9.10. All referral comments shall be considered with respect to the proposed subdivision plan, site and neighborhood characteristics and the standards and objectives cited in this regulation. Referral comments should consider:

- a. The significance of the natural agricultural, cultural and historic features and resources of the site, the adequacy of their protection in the proposed plan and specific recommendations or measures or changes in the plan to effect their conservation and protection:
- b. The most appropriate method of open space, park or playground dedication, taking into account the subdivision characteristics and the objectives cited in Section 9.7.
- c. The size of the subject subdivision and the need (existing or anticipated) for active recreational facilities in the area of the site.
- d. The most appropriate location and extent of open space to be preserved and the locations of any recommended conservation easements.

9.7 Character of Land to be Dedicated

Where an open space, park or playground dedication is made, the land to be dedicated may include wetlands or watercourses as defined in the Connecticut General Statutes, and slopes over twenty percent (20%), but the Commission has the right to require that the percentage of the dedicated land within these wetland, watercourse and steep slope categories are not greater than the percentage of wetlands, watercourses, and slopes over twenty percent (20%) within the property to be subdivided and as applicable, within previous subdivision sections where dedications were not made.

For example, consider a one-hundred (100) acre tract to be subdivided with, cumulatively, forty (40) acres of wetlands, watercourses and slopes over twenty percent (20%) (forty percent (40%) of land to be subdivided) and sixty (60) acres of land without these limitations (sixty percent (60%) of land to be subdivided). The Commission shall have the right to require fifteen (15) acres of open space, park or playground land (.15 times 100), of which at least nine (9) acres (.6 times 15) does not include wetlands, watercourses or slopes over twenty percent (20%).

9.8 Location of Land to be Dedicated

In evaluating a potential open space dedication, the Commission shall have the right to all land within the property to be subdivided and with the applicant's consent any other adjacent tract owned, controlled or under agreement to buy or optioned by the applicant or by a corporation controlled or owned by the subdivider. Subject to the criteria established in this regulation, all applicant

proposed locations for open space, park or playground dedications shall be considered by the Commission.

9.9 Methods for Open Space Dedication

As noted in Section 9.7., final determination of the appropriate method(s) of meeting open space, park or playground dedication requirements shall be the responsibility of the Commission and shall be based on the criteria established in this regulation. The applicant may employ one of the following mechanisms, as deemed proper by the Commission:

- a. Dedication of land to the Town of Columbia;
- b. Dedication of land to the State of Connecticut as State Park and forestland;
- c. Dedication of land to private conservation trust or land trust;
- d. Provision of a conservation easement with full, limited, or prohibited public access;
- e. Provision of private open space, such as land held in common by an association of homeowners;
- f. Any other mechanism considered protecting the purposes to be served by setting aside open space land.

The Commission may establish such standards, limitations and conditions on use of any of the above mechanisms, as it deems reasonably necessary to assure the proper maintenance, operation and preservation of open space, and, where appropriate, public access.

The following dedication methods are discussed for consideration:

- a. Dedication to the Town of Columbia - In considering dedication to the Town of Columbia, the number of subdivision lots and the size, location, topography and general character of the site shall be evaluated with respect to potential benefits to the future residents of the proposed subdivision and with respect to potential benefits to the future residents of the proposed subdivision and with respect to municipal goals and objectives. In many cases, open space objectives will be suitably addressed through dedication methods other than municipal ownership. Subject to the comments of the Board of Selectman and other referral reports, dedication to the Town shall be most appropriate whenever one or more of the following criteria are met:

1. The land to be subdivided has Town-wide open space, historic or environmental significance or existing hiking trails or recreational attributes that would best be protected through municipal ownership;
2. The land to be subdivided is adjacent to existing municipal open space, parks, or playgrounds;
3. Where Plan of Conservation and Development or other open space or recreational goals or objectives would best be promoted through municipal ownership.

Unless otherwise indicated by the Commission, land to be dedicated to the Town shall be labeled on the final Subdivision Plan as “Land to be dedicated to the Town of Columbia for open space, park or playground purposes.”

- b. Dedication Through Conservation Easement - The Commission shall have the right to accept from the applicant/owner open space through the establishment of conservation easements. Conservation easements, which restrict the use of the land but do not transfer ownership, can be utilized to address open space, agricultural, historic and environmental protection objectives where a transfer of ownership is not necessary or appropriate to achieve land use goals. Conservation easements may provide for public access, but in most cases where public access is deemed appropriate, ownership by a governmental agency or private conservation organization should be considered. All conservation easements shall be shown on the subdivision plans. Draft easement documents, prepared in accordance with Town guidelines, shall be submitted for review in accordance with other provisions of these regulations.
 1. Procedures for the establishment of conservation easements shall be reviewed against the draft or samples as represented in these regulations for general conformity to equivalent goals and objectives.
 2. Procedures for the monitoring and enforcement of easements shall be reviewed against the draft or samples as represented in these regulations for general conformity to equivalent goals and objectives.
- c. Dedication through Other Governmental Agencies, Land Trusts, or Other Conservation Organizations - The Commission, upon the request of the applicant, may allow open space, park or playground dedication requirements to be met through the transferal of land to other government agencies, land trusts, or other conservation organizations. In cases where these methods are considered, the recipient agency shall indicate its interest in receiving the subject land and the actual transferal shall take place prior to or concurrent with the filing of the subdivision maps on the Land Records, unless an alternative schedule is approved by the Commission. The subject transferal shall be shown on the final subdivision plan.

d. Dedication through Homeowners Associations or Common Interest Ownership Community - The Commission, upon the request of the applicant, may allow open space, park or playground dedication requirements to be met through the transferal of land to an association of property owners. Such a transferal shall be in accordance with guidelines established by the Commission and shall include provision which:

1. Establish mandatory participation in an association of property owners to maintain the land reservation for established open space, park or playground purposes, with power to assess all members for all necessary costs;
2. Shall be binding on all future property owners;
3. Shall ensure adequate maintenance and liability protection;
4. Shall provide for the potential dissolution of the association by a vote of all members (at a minimum, a majority vote of all members shall be required for dissolution). Upon dissolution of the association, the open space dedication shall revert to the Town, which may take action through the Board of Selectmen to retain or dispose of said open space conservation easement. Where Town ownership is not retained, the land shall be subject to a conservation easement and shall be used only for purposes consistent with provisions of such easement.

After verification by the Commission and Town Attorney that the provisions of Section 9 have been incorporated, the legal documents establishing the Homeowners Association shall be filed by the applicant on the Land Records prior to or concurrent with the filing of the subdivision maps on the Land Records, unless an alternative schedule is approved by the Commission. The subject transferal shall be shown on the final Subdivision Plan.

9.10 Payment in Lieu of Dedication

After receipt of referral reports, the Commission may authorize all or part of the open space, park or playground dedication requirements to be met through a payment in lieu of dedication. This payment in lieu of dedication option shall be considered only where the Commission does not consider other dedication options appropriate. In cases where this option is utilized, the provisions of Section 8-25 of the Connecticut General Statutes shall be met and the subject payment shall be used for the purpose of preserving open space or acquiring additional land for open space or for recreational or agricultural purposes.

In lieu of any requirement to provide open spaces, the applicant may propose, and the commission may accept, the payment of a fee and the transfer of land to the town. Any such payment of combination of payment and the fair market value of

the land to be transferred may not exceed ten percent (10%) of the fair market value of the land to be subdivided, measured prior to the approval of the subdivision. Payment of fees in lieu of open space shall be paid into a dedicated fund that the Town has created specifically for the purposes of obtaining other open space parcels or purchase of development rights when they may become available at a future time.

9.11 Access Requirements

With the exception of conservation easements without public access or proposed expansions of existing open space, park or recreation areas which currently have adequate access, all open space, park and playground dedications shall extend or have a right-of-way to a street as defined in these regulations. The frontage or right-of-way shall be at least twenty feet (20') wide and the topography and physical character of the access way shall be suitable for vehicular and/or pedestrian traffic as determined by the Commission. At its discretion, the Commission may have the right to require the applicant to make improvements such as grading, drainage and surfacing along the access way to ensure safe and suitable access by fire, police or other emergency vehicles and the public.

9.12 Site Improvements

a. In addition to the access requirements of Section 9.11, the Commission may have the right to require an applicant to make site improvements such as clearing, grading, drainage, seeding and parking areas where active park, playground or hiking trail uses are deemed appropriate. The referral reports shall be considered in determining whether site improvements are appropriate. The degree of site improvements required shall be directly associated with the number of proposed lots within the subject subdivision. For example, a graded and seeded multi-purpose playground field may be suitable requirement for a larger subdivision of twenty (20) or more lots. In situations where site improvements are required, the site work shall be depicted and fully documented on final subdivision plans and the site work shall be completed or fully bonded to the Commission's satisfaction before final open space subdivision site plans are signed and filed on the Land Records.

b. With the exception of site work that may be required by the provisions of Sections 9.11 and 9.12, or agricultural activities approved by the Commission, all land dedicated as open space or park land shall be left in its natural state by the applicant and shall not be graded, cleared or used as a repository for stumps, rocks, brush, soil, building materials or debris.

9.13 Monumentation

In all cases where land is dedicated for open space, park, playground use or limited use in conservation easements, the applicant shall be required to place permanent markers on the ground to delineate the boundaries of the land so dedicated. Said markers shall be installed as per the standards cited in Section 9.9 of these regulations. In addition, the Commission shall have the right to require

applicants to place medallions showing Town of Columbia Conservation Land boundaries on stakes more than four feet high or on trees or posts along open space or conservation easement boundaries.

9.14 Legal Requirements

The applicant may propose and the Commission shall determine the form and adequacy of all arrangements for ownership, use and maintenance responsibility for all dedicated open space, park or playground areas and for all conservation easements. All conveyances of rights, title, interest and easements shall be in a form approved by the Town Attorney, shall be accompanied by a Certificate of Title and releases or subordinations of liens and encumbrances where appropriate, and shall be executed and recorded on the Columbia Land Records prior to or concurrent with the filing of the final Subdivision Plan, unless an alternative schedule is approved by the Commission.

9.15 Modifications to Approved Dedication Arrangements

In the event the Board of Selectman decides not to accept land offered as open space for dedication to the Town, or in the event another approved dedication arrangement cannot be finalized, a committee appointed by the Commission shall reanalyze the subject situation and recommend the appropriate manner of fulfilling the open space, park, or recreation requirements of these regulations.

9.16 Review of Preliminary Open Space, Park or Playground Plans

If questions arise regarding the provisions of this open space, park or playground dedication regulation, prospective applicants are encouraged to review their preliminary plans with the Commission's staff on an informal basis.

9.17 Trail Systems

In any case in which an existing trail system (including a rerouted trail system) crosses land to be subdivided or re-subdivided, the applicant is encouraged to preserve the system as it exists or reroute it to assure continued public access. The area covered by any legally valid easement for such a trail system, which adequately protects continued public access to the trail system shall be considered part of the total open space set aside.

9.18 Natural State Set Aside

Any land to be set aside as open space shall be left in its existing natural state by the applicant, and shall not be graded, cleared or improved, except as specifically approved by the Commission, and shall not be used at any time as a repository for stumps, brush, earth, building materials, or debris.

9.19 Visual Amenities

Open space shall be so located as to add to or to preserve the visual amenities of the vicinity by maximizing its visibility for persons passing the site or overlooking it from nearby properties. When open space is set-aside for recreational purposes, it shall be located so as to be suitable for the designated

recreational uses it is intended to serve. All open space and any proposed improvements thereon should be shown on the subdivision or re-subdivision plan.

10. CHAPTER 10. NATURAL FEATURES

10.1 Preservation

For the purpose of enhancement of property values and for erosion control, the applicant shall provide for the preservation and enhancement, where possible, of existing natural features, including but not limited to, rare and unusual flora, large trees, scenic points, wetlands, ledge outcroppings, other natural features and stone walls. The Commission may accept compromise to this requirement if the applicant supports the compromise with documented basis.

10.2 Trees, Soil Removal and Roads

(a) For the purpose of enhancement of property values and for erosion control, the preservation and protection (to the fullest extent possible) of shade trees and the natural features of the site throughout the subdivision shall be encouraged, except where they interfere with roads and utilities. Removal of trees shall be held to a minimum.

(b) Approval of a subdivision by the Commission shall not constitute approval of the removal of soil, topsoil or other excavated material from the premises other than that from the road area, and then only to the depths shown on the approved plan.

(c) The land located within a subdivision shall be properly graded and left in a condition that will be free of rubble and debris, and properly stabilized to eliminate erosion. Stumps, logs, construction materials, and other debris shall only be buried on site in locations designated on the approved subdivision plans, and in compliance with all applicable Town and State laws and regulations.

(d) Trees of fifteen (15) inches in diameter or larger located within twenty (20) feet of any street right of way shall be preserved and given suitable protection to ensure their survival during the construction phase. Proposed driveways shall be located with the objective of preserving said large trees. Where trees are proposed by the applicant or required by the commission, the applicant shall include the number, layout, species and size of plantings.

(e) Any of the new trees enumerated in the item above shall be replaced with new trees equivalent to those originally provided if they die within one year following completion of all subdivision improvements or acceptance of roads, whichever comes later. The applicant shall bear all replacement costs, including removal of dead trees. An allowance for such costs shall be included in the maintenance bond posted for the subdivision.

10.3 Scenic Features

The Commission may require that a subdivision plan provide protection for specific features other than through their placement within designated open space. Individual scenic features to be protected in this fashion shall have been determined by the Commission to have natural or historical importance to the town. Such features may

include, but are not limited to, old stonewalls or farm structures, waterfalls, trees or stands of trees and rocky peaks or outcrops.

11. CHAPTER 11 - FLOOD HAZARD DISTRICT STANDARDS

11.1 Conformance to Flood Hazard District Regulations

Any proposals for subdivisions having land in the Flood Hazard District shall conform to all the provisions of these Regulations, the Columbia Zoning Regulations and the following additional standards:

- (a) All subdivision proposals shall be consistent with the need to minimize flood damage and shall have adequate drainage provided to reduce exposure to flood hazards.
- (b) All subdivision proposals shall have utilities and facilities such as septic, gas, electric and water systems located and constructed in accordance with Columbia's Flood Hazard District Regulations.
- (c) In Zone A, base flood elevation data shall be provided for all subdivision proposals.

12. CHAPTER 12 - MISCELLANEOUS PROVISIONS

12.1 Gas Pipeline

A gas pipeline shall be deemed a hazard when carrying an internal pressure in excess of 200 pounds per square inch and when located within forty (40') feet of a property line. To lessen such hazards, the applicant shall:

- (a) Maintain forty foot (40') building setback lines on both sides of easement.
- (b) Locate wells, septic tanks and all appurtenances and connections on the same side of the pipeline as the buildings they serve.
- (c) Locate proposed streets and driveways so that they cross pipe lines at right angles as much as possible. In such street crossings, the pipe shall be in a vented casing the full width of the street right-of-way, and the distance from the top of the casing to the proposed road surface shall be at least four feet six inches (4'6").

12.2 Temporary Sanitary Facilities

If the Commission determines that the scope of the project warrants it, the developer shall be required to provide temporary sanitary facilities on the site.

12.3 Pedestrian Walkways/Bikeways

In order to insure the safety of school children and other pedestrians, the Commission may require the installation of graded pedestrian walkways or safe walking paths along the right of way of any arterial or connecting road or along any road that, because of width, curves, grades or traffic volume, represent severe hazard to pedestrians. Such paths shall be installed wherever children are obliged to walk to a school bus stop along roads judged hazardous. A graded pedestrian walk way shall be at least 36 inches in width, be constructed on public easements no less than fifteen feet in width and graded for easy pedestrian use. The walkways may be informal in design; finished in accordance with the specifications to be described in each case by the Commission.

The Commission may also require bicycle paths and trails. Locations shall be along the roadside and in other appropriate right-of-way locations where it is determined that there exists such a need for safety. Where required, the applicant, in accordance with specifications for base, width, alignment, wearing surface and safety markings as prescribed in each case by the Commission, shall construct these facilities.

12.4 Enforcement

These Regulations shall be enforced under, and violations hereof shall be subject to, the penalties set forth in the applicable provisions of the Statutes and any ordinance enacted pursuant thereto. The enforcement of these Regulations shall be by the Commission or its designated agent.

In addition, in the event that any applicant shall violate these Regulations, or the

conditions or requirements of any subdivision approved hereunder, the Commission may, following a public hearing with notice by certified mail to the violator and to the current property owner, void, in whole or in part, any such subdivision approval, and may cause notice thereof to be filed in the Columbia Land Records.

12.5 Waiver

The Commission recognizes that each parcel of property is unique in location, dimensions, orientation, topography and other parameters. And that the various factors in the design of subdivisions are variable with relation to each other and to the above characteristics of the property. Therefore, in accordance with Connecticut General Statutes Section 8-26, the Commission may modify or waive, subject to appropriate conditions, such requirements as, in its judgment of the special circumstances and conditions, are not requisite to the interest of public health, safety and general welfare. In considering a modification or waiver under this Chapter, the Commission shall only approve such modification or waiver by a $\frac{3}{4}$ vote of the Commission upon a finding that all of the following conditions are met:

- (a) Conditions exist on the subject property that are not generally applicable to other land in the Town or;
- (b) Said conditions are such that, if these Regulations were strictly applied, natural and historic features could not be preserved, as required by these Regulations or;
- (c) Said conditions were not created by the property owner or by his/her predecessor(s) in title or;
- (d) The granting of the modification or waiver would be in harmony with the purpose and intent of these Regulations or;
- (e) The granting of the modification or waiver would not have a significant adverse impact on adjacent properties values, the public health, safety, and welfare, and would not be in violation of the recommendations of the Plan of Conservation and Development, as the same may be amended from time to time.

Any request for modification or waiver under this Chapter shall be set forth on the Subdivision Application form, and, if granted, shall be noted on the Final Subdivision Plan with a reference to the lot(s) affected, and the Section of these Regulations modified or waived, and the extent or nature thereof. In granting or denying any request under this Chapter, the Commission shall state upon the record the reasons for such action.

12.6 Separability

If any section, subsection, sentence, clause, phrase 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 portion hereof.

12.7 Amendments

The Commission; at any meeting called for this purpose after a Public Hearing has been held on the proposed amendment, may amend these Regulations.

12.8 Enacting Clause. Short Title and Repeal

The Columbia Planning and Zoning Commission acting under authority of the General Statutes of the State of Connecticut, hereby adopts and enacts these Regulations as the “**Subdivision Regulations of the Town of Columbia**”. The provisions of the Subdivision Regulations heretofore in force and any amendments thereof, so far as they are the same as in these Regulations, are to be deemed continued and not as new enactments. Any and all provisions of said Regulations as originally enacted which are inconsistent with the provisions of these Regulations are hereby repealed, but this shall not affect any violations thereof already existing or any penalty incurred and the same may be prosecuted as if these Regulations had not been adopted.

12.9 Effective Date

These Regulations shall become effective on October 1, 2008. A copy of these Regulations shall be placed on file in the Office of the Town Clerk.

12.10 Consideration of Alternate Construction Standards

The Commission recognizes both the need for flexibility to accommodate individual site conditions and the desirability of using state-of-the-art technology. The Commission will consider and may approve alternative design and construction standards, including minimum width pavement and shoulders of engineered grassy swales in lieu of curbing, if all of the following conditions are met.

Such standards are prepared by a professional engineer, currently licensed in the State of Connecticut, with experience in the field of storm water runoff and municipal and highway engineering; and such standards do not conflict with the requirements of other town, state, federal regulatory bodies, unless exception are granted there under; and such standards can be shown to be equal or superior to requirements contained herein; and the commission’s designated reviewing engineer recommends in favor of the use of the alternative standard; and such standards are in accordance with the purpose and intent of these regulations as may be determined by a majority vote of members of the Commission.

13. CHAPTER 13. FIRE FIGHTING WATER SUPPLY

13.1 Requirements for Fire Fighting Water Supply

All new developments will have constructed by the developer one of the following types of water supply:

- A. Natural or dug water source capable of meeting the minimum requirements of dry hydrant installation as described below.
- B. Cistern (preferred) — 15,000 gallon underground tank.

The cistern design shall be approved by the Fire Department prior to purchase by Applicant.

13.2 Definitions

New Development — three or more new residences on an existing or new access point and new or expanded commercial/industrial development exceeding 2,500 square feet, except if the building has a self contained fire suppression system or a sprinkler system from a commercial water source

Water Supply:

- A. Natural or Dug Fire Pond with a minimum usable capacity of 15,000 gallons year round.
- B. Cistern pre-cast concrete or fiberglass tank with a minimum capacity of 15,000 gallons.

Parking Area: ten foot (10') wide by forty-five foot (45') long paved or compacted gravel area accessible year round adjacent to hydrant drafting head.

Lift: distance between the average surface level of the water supply and the surface in which the engine will park, plus thirty-two inches.

Access Point: any public/private roadway/driveway established for the purpose of entry to the development or residences.

13.3 Dry Hydrants

Each dry hydrant shall be deemed to provide the desired fire fighting protection for a distance of 2,000 feet as measured along the centerline of existing or proposed streets

13.4 Dry Hydrant Installation

1. All dry hydrants must be designed such that the total lift is not more than fifteen (15) feet, preferably ten (10).

2. Horizontal pipe length shall be limited to no more than forty (40) feet from hydrant head.
3. Hydrant head shall be a minimum of twenty-four (24) inches from finish grade and no more than forty-eight (48) inches. The hydrant head shall be parallel with the finish grade. Hydrant head shall be within ten (10) feet of the parking area.
4. All underground and under water piping shall be PVC schedule 40 with a minimum diameter of six (6) inches.
5. All joints shall be cleaned and securely glued before being placed in the water. All joints underground or underwater will be secured with stainless steel screws on every joint in at least three places. Gluing of joints above water or above ground is acceptable.
6. All piping extending into the water supply shall be supported on and secured to concrete or stone blocks at least every ten (10) feet such that the strainer portion is a minimum of twenty-four (24) inches off the bottom of the water supply. There shall be a minimum of twenty-four (24) inches of water at the bottom, left, and right side, and forty-eight (48) inches at the top to allow for twenty-four (24) inches of winter ice. The strainer and hydrant head will be purchased from the Columbia Volunteer Fire Department, Inc. at their cost.
7. The hydrant riser shall be protected by two (2) steel concrete filled posts, six (6) inches in diameter, placed twenty-four (24) inches either side of the riser and extending forty-eight (48) inches above finish grade. These posts shall be embedded in concrete after the hydrant is accepted by the Columbia Volunteer Fire Department Inc. Posts shall be painted safety yellow with a six (6) inch red band at the top.
8. A deed easement will be provided by the developer to the Town of Columbia for filling, maintenance, and use of the hydrant.
9. Piping installation shall be scheduled at least three (3) business days ahead of time with the Columbia Volunteer Fire Department Inc., as there must be an officer or department representative on site before any piping is buried or submerged.
10. Upon testing and acceptance of the hydrant, the Columbia Volunteer Fire Department Inc. will assume responsibility for future maintenance.

13.5 Underground Cistern

1. Tank to be constructed of pre-cast concrete or fiberglass, with a minimum capacity of 15,000 gallons of water.
2. Tank will have a six (6) inch dry hydrant drafting pipe, two and one half (2 1/2) inch return, four and one half (4 1/2) inch vent and a visible water gauge.

3. Tank shall be installed below the frost line and the only visible plumbing shall be the hydrant head, fill pipe, vent pipe, and water gauge. Hydrant head and associated plumbing shall be protected by six (6) inch steel concrete filled posts located no more than twenty-four (24) inches on either side and extending forty-eight (48) inches above final grade. These posts shall be embedded in concrete after acceptance by the Columbia Volunteer Fire Department Inc. Posts shall be painted safety yellow, with a six (6) inch red band at the top. Posts are to be set in concrete. Hydrant head shall be located no more than ten (10) feet from the parking area.
4. The number of tanks shall be determined by the Zoning Enforcement Officer and the Fire Chief.
5. A deed easement will be provided by the developer to the Town of Columbia for filling, maintenance, and use of the tank and associated plumbing.
6. The owner/developer will be responsible for the initial filling of the tank and the Columbia Volunteer Fire Department Inc. will conduct a flow test prior to acceptance of the tank/plumbing.
7. Upon testing and acceptance of the system, the Columbia Volunteer Fire Department Inc. will assume responsibility for future inspection, maintenance, and filling.
8. The cistern shall be installed in accordance with National Fire Protection Association (NFPA) 1142 (2001), appendix B and the manufacturer's instructions.