

SECTION 12. SPECIAL REGULATIONS

12.01. Public Garages and Auto Service Stations

12.01.01.

In addition to the statutory requirements concerning automobile dealers and gasoline stations, the Board of Appeals, under the appropriate conditions and safeguards and within the proper use districts, may permit the erection of a public garage or auto service station, or the conversion or use of any premises for such purposes, if any part of a building or premises to be so used is not within 300 feet of any entrance to a public park or playground, excluding small park areas within the boundaries of a highway, or not within 300 feet of the nearest point of any building in which there is established or maintained a school, hospital, church, theater, public library or building for civic assembly.

12.01.02.

No gasoline filling appliance shall be located within 20 feet of a street taking line or within 25 feet of an adjacent property line.

12.01.03.

No gasoline station shall be permitted unless such use adjoins a highway with a minimum right-of-way of sixty (60) feet.

12.01.04.

No gasoline station shall be permitted within one thousand (1,000) feet of any other gasoline station.

12.02. Protection of Intersections

12.02.01.

On a corner lot in any residential use district no planting, structure, fence, wall or obstruction to vision more than two feet in height shall be placed or maintained within the triangular area formed by the intersecting street lines and a straight line connecting points on said street lines each of which points is twenty-five feet distant from the point of intersection.

12.03. Trailers

12.03.01.

On application to the Zoning Enforcement Officer a temporary permit may be issued for the use of a trailer for residence purposes by the lot owners for a period not to exceed six (6) months while the lot owners' dwelling is actively under construction, providing there will be no

violation of state or town health or sanitary regulations. A new permit giving an additional six (6) month extension of time may be granted by the Zoning Enforcement Officer.

12.03.02.

On application to the Zoning Enforcement Officer a temporary permit may be issued for the use of a trailer or trailers for storage or office purposes for a period not to exceed six (6) months on construction sites, providing all state and local health and sanitary codes are complied with. These trailers shall not be used for residential purposes. A new permit giving an additional six (6) month extension of time may be granted by the Zoning Enforcement Officer.

12.03.03.

No trailer shall be permanently connected to the ground nor have any permanent connection with any permanent structure. Trailers to be placed on a site in a flood hazard area for more than 180 consecutive days shall be fully licensed and ready for highway use.

12.03.04.

A trailer belonging to an out-of-town owner, the occupants of which are visiting a Durham resident, may be parked on the property owned by the resident for a period not to exceed 30 days without a permit, provided state and town health and sanitary regulations are not violated. One extension of 30 days may be granted by the Zoning Enforcement Officer if conditions warrant.

12.04. Home Occupations

12.04.01.

A home occupation may be operated in a dwelling unit or existing accessory structure only after the permission of the Planning and Zoning Commission has been secured. The applicant shall give notice, by certified mail, to the owners of record of land within one hundred feet (100') of the property boundary no less than seven (7) days prior to the application being considered by the Commission at a regular or special meeting. Proof of such notification shall be presented to the Commission. A site plan as specified in Section 13.03. may be required if the Commission feels the use may generate any of the following conditions:

12.04.01.01.

Increased traffic-producing safety hazards in a residential zone.

12.04.01.02.

Increased parking requirements.

12.04.01.03.

Use might have deleterious effects on the neighborhood and its property values.

12.04.01.04.

Use might substantially alter the nature of an existing residential structure.

12.04.02.

A home occupation may be operated in a dwelling unit or existing accessory structure if it conforms to the following standards:

12.04.02.01.

The occupation is carried on primarily by residents of the dwelling, and there shall be no more than two non-resident employees.

12.04.02.02.

There shall be no external evidence of the operation of the home occupation so as to change the residential character of the dwelling, except that one sign of not more than two square feet in area shall be permitted.

12.04.02.03.

The total floor area for such occupation shall not exceed 25% of the total living area of a dwelling.

12.04.02.04.

Such occupation does not create offensive odors, noise, vibrations, light or other objectionable conditions as might adversely affect the neighborhood as to health, safety and welfare.

12.04.02.05.

A home occupation (or person conducting a home occupation) which has been approved by the Planning and Zoning Commission under this Section and has operated continuously and uninterrupted for two (2) or more years may continue, notwithstanding that the business is carried on by a non-resident of the dwelling, provided that (1) the person conducting the business resided in the dwelling when the home occupation permit was originally secured; (2) the person conducting the business shall demonstrate that the use continues to satisfy all other requirements of this Section by filing a new application and site plan; (3) the person conducting the business owns the dwelling or is a parent or child of the existing owner of the dwelling; (4) The dwelling is being used as a residence; (5) The number of home occupations permits granted to an applicant under this Section shall be limited to one (1). A discontinuance or

abandonment by the person conducting the home occupation for a period of twelve (12) months or more shall terminate the approval of the home occupation.

12.05. Sand and Gravel Pits

12.05.01. Excavation and Removal Permit:

12.05.01.01. Removal by Permit Only:

An excavation and removal permit from the Planning and Zoning Commission, issued under such conditions as the Commission may impose to prevent damage to adjoining property and to protect the health, safety, convenience and general welfare of the community, is required for the removal of sod, peat, stone, loam, soil, clay, gravel, or any other earth or mineral products from any land.

Said conditions shall include, among others, the submission of an application for permit in accordance with Section 12.05.02. herein.

12.05.01.02. Foundation and Trench Excavation Only:

In connection with work for necessary foundation and trench excavation only on the premises for which a building permit has been issued, up to but not exceeding 300 cubic yards of material described in Section 12.05.01.01. may be removed without a permit; in connection with work for necessary foundation and trench excavation only on the premises for which a building permit has been issued, 300 to 1,000 cubic yards may be removed with the approval of the Zoning Enforcement Officer without a permit. The Zoning Enforcement Officer shall give his approval when he is satisfied that the removal will comply with the conditions stated in Section 12.05. where applicable. For removal of over 1,000 cubic yards, a permit must be obtained from the Commission.

12.05.01.03. Landscaping and Grading Only

12.05.01.03.01.

In connection with work for landscaping and grading of land for which a building permit is not required: Up to but not exceeding 50 cubic yards of material may be removed with the approval of the Zoning Enforcement Officer without a permit. Fifty (50) to 300 cubic yards of material may be removed with approval of the Zoning Enforcement Officer, in addition, an Excavation and Removal Permit may be required if the Zoning Enforcement Officer feels any of the conditions listed in Section 12.05.01.01. might result. For removal of over 300 cubic yards, a permit must be obtained from the Commission.

12.05.01.03.02.

Approval will be given when the Zoning Enforcement Officer and/or the Commission are satisfied that the removal will comply with the conditions stated in Section 12.05. where

applicable.

12.05.01.03.03.

These regulations shall not be deemed to prohibit the transferral of sod, soil, clay, sand, gravel, or stone from one part of a lot or parcel of land to another part of the same lot or adjacent tract or parcel of land in the same ownership.

12.05.02. Application for an Excavation and Removal Permit

12.05.02.01.

All new applications for a permit to excavate and/or remove any of said products shall be subject to approval by the Planning and Zoning Commission as a Special Exception in accordance with Section 13.05. of these Regulations (except in LI and HID districts). Requests for renewal of an existing earth excavation and removal permit shall be subject to Site Plan Review in accordance with Sections 12.05.04. and 13.03. of these Regulations.

12.05.02.03.

The application shall be accompanied by a Site Plan in accordance with Section 13.03. and showing the following information:

- (1) Location of the premises, names of abutting owners, and all property owners as shown on the current tax assessors records and all structures within 150 feet of the lot lines, and an estimate of the amount, area and nature of material to be excavated or removed.
- (2) Grading plan showing existing contours in the area to be excavated and proposed contours for the area after completion of excavation. Such Plans shall include the area to be excavated as well as the surrounding area with 100 feet of the excavation to a scale of 1" = 200' or greater. Should the Commission desire, a boundary survey meeting the requirements of a Class A2 Transit Survey shall be submitted with the Grading Plan.
- (3) Storm drainage plans showing the drainage and estimated runoff of the area to be served by any existing drainage facilities, together with detailed plans and specifications of all proposed drainage facilities or other protective devices to be constructed in connection with, or as a part of, the proposed use to prevent the collection and stagnation of water and the prevention of harmful effects upon surrounding properties from water or sediment.
- (4) Landscaping plans showing the type, location and extent of all proposed planting or vegetation to be retained on, or otherwise provided for, the site in order to prevent erosion of the site.
- (5) Proposed vehicular access to the site and proposed work roadways within the site.

- (6) The estimated number and types of trucks and other machinery proposed to be used on the site and the location and type of any buildings to be erected.
- (7) The estimated starting and completion dates and the estimated hours and days of the week proposed for operation on the site.
- (8) Detailed plans for any proposed blasting and/or storing of explosives on the site.
- (9) The Planning and Zoning Commission may when deemed necessary to protect the public health, safety and general welfare, require an engineering-geological investigation, based on the most recent grading plan. The engineering-geological report shall include an adequate description of the geology of the site, and conclusions and recommendations regarding the effect of geologic conditions on the proposed development.
- (10) The Planning and Zoning Commission may, when deemed necessary to protect the public health, safety and general welfare, require a soils engineering investigation, based on the most recent grading plan. Such reports shall include data regarding the nature, distribution, and strength of existing soils, conclusions and recommendations for grading procedures, sediment control, and design criteria for corrective measures.
- (11) The Planning and Zoning Commission may require any additional information which it feels is necessary to determine whether the public health, safety and general welfare may be endangered by the proposed operation.

12.05.03. Granting of Permit

12.05.03.01.

The removal of earth products may be permitted by the Commission subject to Permit and Site Plan Approval and when it is satisfied that the following conditions will be complied with in the undertaking of such excavation:

12.05.03.01.01.

The premises shall be excavated and graded in conformity with the plan as approved and any deviation from the plan shall be a violation and cause for the Commission to revoke the permit.

12.05.03.01.02.

The applicant shall file with the Commission a performance bond executed by the owner and operator, if any, of the land on which such excavation is to be conducted, as principals, in such amount as the Commission shall deem sufficient to cover the cost of any proposed or required street grading, roadway paving or surfacing and street planting, the installation of gutters and the installation of all monuments, bridges, culverts, stormwater inlets, reclamation of the land,

and all such other improvements as the Commission deems necessary to promote public health and safety and to safeguard the town from undue expense in the future maintenance of all streets and open spaces. All improvements shall be designed in accordance with standards established or to be established and with all other rules and regulations applicable in the Town. The bond shall be released only upon certification by the Commission that all the required improvements have been completed to its satisfaction.

12.05.03.01.03.

- A. The Commission may permit the screening and sifting of sand, sand and gravel or topsoil in the Farm-Residential (FR), Commercial (C-1, C-2) or Design Development (DDD) districts subject to the issuance of a Special Exception in accordance with Section 13.05. of these Regulations. The screening and sifting of sand and gravel or topsoil may be permitted in the Light Industrial (LI) or Heavy Industrial (HID) districts subject to approval by Site Plan Review. In either case, the following conditions will be met:
- (1) Such use or any equipment used in such operation shall not be located within 100' of any property or street line;
 - (2) Noise levels on site shall not exceed 61 dBA as measured on the adjacent (receptor) property (measurements shall be taken from a point which is located beyond the boundary of the emitter's lot or parcel and approximately one (1) foot within the receptor's lot or parcel). The Commission may require the applicant to demonstrate, through the use of equipment on site, that the noise levels shall not exceed the maximum decibel level;
 - (3) Such use shall be incidental to a permit to excavate earth products pursuant to Section 12.05. of these Regulations;
 - (4) The processing of materials shall be limited to those found on the site.
 - (5) Such permits shall expire twelve (12) months from the date of issuance unless renewed by the Planning and Zoning Commission. Permit renewals shall be subject to Site Plan Review approval in accordance with Section 13.03 of these Regulations;
 - (6) The Commission may permit screening operations between the hours of 7:00 a.m. and 5:00 p.m. Monday through Friday and 7:00 and 12:00 noon on Saturday unless it is determined that more restrictive hours shall be appropriate. There shall be no screening of materials on Sundays or legal holidays unless approved by the Commission.
 - (7) The Commission may deny any application for renewal of a permit for the screening and sifting of sand, sand and gravel or topsoil if it finds that any of the above provisions have not been complied with.

B. No washing, crushing or other forms of processing of earth products shall be conducted upon the premises unless located within a heavy industrial (HID) zone and then it must not be located within 100' of any property or street line.

NOTE: A separate application shall be submitted to the Commission for approval of any screening or sifting operation.

12.05.03.01.04.

Quarrying of bedrock shall be prohibited unless it is located in a heavy industrial zone.

12.05.03.01.05.

No fixed machinery shall be erected or maintained within 500 feet or more of any property or street line.

12.05.03.01.06.

No excavation shall take place within 500 feet or more of an abutting property line or of a street line except as follows:

If the excavation within 50 feet of the street line is equal to or above the elevation of the established average grade of the street in the area being excavated; or

If the excavation is part of an integrated site improvement plan; or

If the excavation is part of a regrading plan for a future use of the site; or

If the excavation is designed to improve roadway drainage.

12.05.03.01.07.

No building shall be erected on the premises except as may be permitted in the general zoning regulations or except as temporary shelter for machinery and field office, subject to approval by the Zoning Commission.

12.05.03.01.08.

The Planning and Zoning Commission may require the applicant to reserve adequate slope and/or drainage easements on the lot in order to allow the necessary coordination of any grading, filling, excavating, or removal operations that might be permitted on any abutting lot or street.

12.05.03.01.09.

No materials shall be stockpiled and no equipment or structures authorized by the Permit shall be operated or located beyond the exterior limits of the specific area approved for filling or removal.

12.05.03.01.10.

During the period of excavation and removal, barricades or fences shall be erected as are deemed necessary by the Planning and Zoning Commission for the protection of pedestrians and vehicles.

12.05.03.01.11.

Truck access to the excavation shall be so arranged as to minimize danger to traffic and nuisance to surrounding properties. That portion of access road within the area of operations shall be provided with a dustless surface.

12.05.03.01.12.

Proper measures, as determined by the Commission, shall be taken to minimize the nuisance of noise, flying dust or rock and unsightly or dangerous conditions. Such measures may include, when considered necessary, limitations upon the practice of stockpiling excavated materials upon the site.

12.05.03.01.13.

Excavation shall be permitted between 7:00 a.m. to 5:00 p.m. Monday through Friday and from 7:00 a.m. to 12:00 noon on Saturday. There shall be no excavation or removal on Sundays or legal holidays except with the approval of the Commission.

12.05.03.01.14.

The operation shall insure protection of the working slope by continuous grading of the crest of the working face to eliminate dangers of earth slides and overhangs.

12.05.03.01.15.

When excavation and removal operations or either of them are completed, or work has progressed sufficiently to where reclamation is practicable:

- (a) The site and excavated area resulting from the quarrying of bedrock shall be benched to conform to a 1:2 (vertical to horizontal) line of slope. The maximum vertical standing face of the benched slope shall not exceed 60 feet.
- (b) The site and excavated area in all other cases of the removal of earth or mineral

products shall then be graded so that the slopes in disturbed areas shall be no steeper than 1:3 (vertical to horizontal). A layer of topsoil shall be spread over the excavated area, to minimum depth of six inches in accordance with the approved final grading plan. The area shall then be seeded with suitable grass mixture containing at least 50% permanent grasses and maintained by mulching, repairing and reseeded until the area is stabilized and approved by the Commission; except that this provision shall not apply to areas of water nor to exposed areas of ledge either existing prior to the work or authorized as an integral part of the Permit and Site Plan Approval.

12.05.04. Expiration and Renewal of Permit

12.05.04.01.

Any permit issued under these regulations shall expire 12 months from the date of issuance unless renewed by the Planning and Zoning Commission.

12.05.04.02.

The Commission may renew or extend a permit issued under these regulations upon the application of the permittees at the regular monthly meeting of the Planning and Zoning Commission next before the expiration of the permit, when the following conditions have been met:

- (1) Notice in writing to the Planning and Zoning Commission of the intent to renew the permit at least 14 days prior to the meeting of the Planning and Zoning Commission.
- (2) That the excavation already completed and to be completed in the next 12 months conforms with the plan of operation as approved.
- (3) The Commission shall require an updated set of maps depicting the proposed work area for the next 12 month period.
- (4) Filing of a performance bond as required under Section 12.05.03.01.02., to cover the period of renewal or extension.

Provided the provisions outlined in items (1) through (4) above are complied with, the Commission shall allow the applicant a 90-day grace period, from the date of expiration of the permit, to complete the permit renewal process.

12.05.04.03.

The Zoning Commission may deny an application for renewal or extension, if the permittee has not conformed to the plan of operation as approved, until such time as the permittee has brought his operations into conformance with the plan of operation.

12.05.04.04. Large Animal Incineration Facility:

In addition to all requirements of these Regulations, all applications for Large Animal Incineration Facilities shall meet the following location requirements: 1.) Situated on a parcel or lot of at least 10 acres; 2.) Situated on a parcel or lot with frontage on, and direct driveway access to, a state highway; and, 3.) Housed within a building which, at date of approval, is located at least 500 feet from any existing dwelling.

12.05.05. Enforcement

12.05.05.01.

The Zoning Enforcement Officer shall keep a record of all issued permits and make periodic inspections of all sites for compliance with the regulations, and report in writing all violations and deviations from the plans and specifications submitted by the owner and operator to the Commission; and take such action as the Planning and Zoning Commission may direct.

12.05.05.02.

The Commission may require the applicant to submit periodic reports, prepared and certified by a professional engineer licenses in the State of Connecticut, showing the status and progress of the operation.

12.05.05.03.

Powers of the Zoning Enforcement Officer: If the Zoning Enforcement Officer finds that the terms of a permit are being violated, or that any work is not being done in strict accordance with the provisions of this Zoning Regulation and of any other law or ordinance which may apply to the same, the Zoning Enforcement Officer shall order the whole or any part of such work to be stopped, and the said work shall not be resumed until the Commission is satisfied with the terms of the permit and all laws and ordinances appertaining thereto have been properly complied with.

12.05.06. Compliance of Existing Excavations and Regulations

12.05.06.01.

After passage of these regulations, no person, firm or corporation shall establish, maintain, conduct, or operate any excavation within the Town of Durham without having first obtained a permit except as otherwise contained in Section 12. The owner of an excavation which is in existence without approved permit upon the effective date of these regulations shall within 60 days present plans showing the present condition of the property, the extent of excavations contemplated and proposed ultimate development of the property, and further provided that the Commission approves said plans subject to such conditions as may be in the best interests of the Town and in harmony with these regulations.

12.06. Special Flood Hazard Area Regulations

12.06.01.

It is the purpose of this regulation to promote the health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

12.06.01.01.

Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion or, in flood heights or velocities;

12.06.01.02.

Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;

12.06.01.03.

Control the alteration of natural flood plains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters;

12.06.01.04.

Control filling, grading, dredging and other development which may increase erosion or flood damage;

12.06.01.05.

Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

12.06.02.

The objectives of this regulation are:

12.06.02.01.

To protect human life and health;

12.06.02.02.

To minimize expenditure of public money for costly flood control projects;

12.06.02.03.

To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

12.06.02.04.

To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in flood plains;

12.06.02.05.

To help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas; and,

12.06.02.06.

To insure that potential homebuyers are notified that property is in a flood area.

12.06.03.

The basis for establishing the Special Flood Hazard Area is the Federal Insurance Administration's scientific and engineering report entitled "The Flood Insurance Study for the Town of Durham, Connecticut, Middlesex County," effective, August 28, 2008, with accompanying Flood Insurance Rate Maps and Flood Boundary and Floodway Maps, as amended or revised. Such study, maps and other supporting data, and any revisions thereto, are adopted by reference and declared to be a part of these regulations.

12.06.04. Definitions

For the purpose of this Section, certain terms, words and phrases shall, whenever used in this Section only, have the meanings defined as follows:

12.06.04.01. Base Flood Elevation (BFE)

The elevation of the crest of the base flood or 100-year flood. The height in relation to mean sea level expected to be reached by the waters of the base flood at pertinent points in the floodplains of coastal and riverine areas.

12.06.04.02.

Basement means any area of the building having its floor subgrade (below ground level) on all sides.

12.06.04.03. Building

See definition for "Structure" Section 12.06.04.24.

12.06.04.04. Cost

As related to substantial improvements, the cost of any reconstruction, rehabilitation, addition, alteration, repair or other improvement of a structure shall be established by a detailed written contractor's estimate. The estimate shall include, but not be limited to: the cost of materials (interior finishing components, structural components, utility and service equipment); sales tax on materials; building equipment and fixtures, including heating and air conditioning and utility meters; labor; built-in appliances; demolition and site preparation; repairs made to damaged parts of the building worked on at the same time; contractor's overhead; contractor's profit; and grand total. Items to be excluded include: cost of plans and specifications; survey costs; permit fees; outside improvements such as septic systems, water supply wells, landscaping, sidewalks, fences, yard lights, irrigation systems, and detached structures such as garages, sheds, and gazebos.

12.06.04.05.

Development means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of materials or equipment.

12.06.04.06. Federal Emergency Management Agency (FEMA)

The federal agency that administers the National Flood Insurance Program (NFIP).

12.06.04.07. Finished Living Space

Finished living space can include, but is not limited to, a space that is heated and/or cooled, contains finished floors (tile, linoleum, hardwood, etc.), has sheetrock walls that may or may not be painted or wallpapered, and other amenities such as furniture, appliances, bathrooms, fireplaces and other items that are easily damaged by floodwaters and expensive to clean, repair or replace. A fully enclosed area below the base flood elevation (RFE) cannot have finished living space and needs to be designed for exposure to flood forces. This space can only be used for parking, building access or limited storage.

12.06.04.08. Flood or Flooding

A general and temporary condition of partial or complete inundation of normally dry land areas from either the overflow of inland or tidal waters, or the unusual and rapid accumulation or runoff of surface waters from any source.

12.06.04.09. Flood Boundary and Floodway Map

An official map of the Town of Durham on which the Federal Insurance Administration has delineated the 100-year, 500-year and floodway boundaries.

12.06.04.10. Flood Insurance Rate Map

An official map of the Town of Durham on which the Federal Insurance Administration has delineated the areas of special flood hazards and the risk premium zones applicable to the town, as well as base flood elevations at selected locations.

12.06.04.11. Flood Insurance Study (FIS)

The official study of a community in which the Federal Emergency Management Agency (FEMA) has conducted a technical engineering evaluation and determination of local flood hazards, flood profiles and water surface elevations. The Flood Insurance Rate Maps (FIRM), which accompany the FIS, provide both flood insurance rate zones and base flood elevations, and may provide the regulatory floodway limits.

12.06.04.12. Floodway

The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

12.06.04.13. Functionally Dependent Use or Facility

A use or facility that cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities. The term does not include seafood processing facilities, long-term storage, manufacturing, sales or service facilities.

12.06.04.14. Highest Adjacent Grade (HAG)

The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure

12.06.04.15. Historic Structure

Any structure that is: (a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; (b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historic significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; (c) Individually listed on a state inventory of historic places in states with historic preservation

programs which have been approved by the Secretary of the Interior; or (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either: (1) By an approved state program as determined by the Secretary of the Interior or (2) Directly by the Secretary of the Interior in states without approved programs.

12.06.04.16. Lowest Floor

The lowest floor of the enclosed area of a building (including basement).

12.06.04.17.

Manufactured Home means a structure that is transportable in one or more sections, which is built on a permanent chassis, and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes recreational vehicles, park trailers, travel trailers and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property. Recreational Vehicle is a vehicle which is: (a) built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projection; (c) designed to be self-propelled or permanently towable by a light duty truck; and (d) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

12.06.04.18. Manufactured Home Park or Subdivision

A parcel, or contiguous parcels, of land divided into two or more manufactured home lots for rent or sale.

12.06.04.19. Market Value

Market value of the structure shall be determined by a professional appraiser.

12.06.04.20. Mean Sea Level (MSL)

The North American Vertical Datum (NAVD) of 1988 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map (FIRM) are referenced.

12.06.04.21. New Construction

Structures for which the start of construction commenced on or after the effective date of this ordinance (not the revision date) and includes any subsequent improvements to such.

12.06.04.22. Special Flood Hazard Area

An area shown as an overlay on the Zoning Map of the Town of Durham which contains the land in the flood plain within the town subject to a one percent or greater chance of flooding in any given year. The Special Flood Hazard Area includes all Flood Insurance Zones A and A1-A30 as designated on the Flood Insurance Rate Maps.

12.06.04.23. Start of Construction

Includes substantial improvements, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement or other improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

12.06.04.24. Structure

A walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank, or other man-made facilities or infrastructure.

12.06.04.25. Substantial Damage

Means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damage condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

12.06.04.26.

Substantial Improvement means any repairs, reconstruction, or improvements of ~~to~~ a structure, taking place within a ten (10) year period, the cost of which equals or exceeds 50 percent of the market value of the structure either: (a) before the improvement or repair is started, or b) if the structure has been damaged and is being restored, before the damage occurred.

12.06.04.27. Variance

A grant of relief by a community from the terms of the floodplain management regulations that allow construction in a manner otherwise prohibited and where specific enforcement would result in unnecessary hardship.

12.06.04.28. Violation

Failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without required permits, lowest floor elevation documentation, flood-proofing certificates or required floodway encroachment calculations is presumed to be in violation until such time as that documentation is provided.

12.06.04.29. Water Surface Elevation

The height, in relation to the North American Vertical Datum (NAVD) of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

12.06.05. General Provisions

The Zoning Enforcement Officer will obtain and maintain records of the lowest floor and floodproofing elevations for all new construction and substantial improvements. Where BFE data is utilized, obtain and maintain records of lowest floor and floodproofing elevations for new construction and substantial improvements.

12.06.05.01.

A building permit, zoning permit, site plan approval and/or special exception shall be obtained before construction or development begins within any special flood hazard area. The applicant should review the Zoning Regulations with the Zoning Enforcement Officer to determine which permit approval process, or processes, are to be followed for the particular land use which is being proposed.

12.06.05.02.

The Zoning Enforcement Officer shall notify adjacent communities and the Connecticut Department of Environmental Protection, Inland Water Resources Division prior to any alteration or relocation of a watercourse, and evidence of such notification shall be sent to the Federal Insurance Administration. Maintenance shall be provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

12.06.05.03.

The Zoning Enforcement Officer shall advise applicant that additional Federal or State permits may be required, and if specific Federal or State permit requirements are known, require that copies of such permits be provided and maintained on file with any local permit. Such additional permit requirements may include, but not be limited to: Stream Channel Encroachment Line Permit, Water Diversion Permit, Dam Safety Permit, Corps of Engineers 404 Permit.

12.06.05.04.

The applicant shall provide information with the application which would show that any proposed building sites will be reasonably safe from flooding.

12.06.05.05.

Construction, reconstruction, extension of any building or structure, or any other development, including but not limited to mining, dredging, filling, grading, paving, excavation or drilling operations shall be prohibited in the Special Flood Hazard Area, except in conformance with these regulations.

12.06.05.06.

When base flood elevation data or floodway data have not been provided, the Zoning Enforcement Officer shall obtain, review and reasonably utilize any base flood elevation or floodway data available from Federal, State or other source in order to administer Sections 12.06.06., 12.06.07., and 12.06.08. of these regulations.

12.06.05.07.

The Zoning Enforcement Officer shall record and maintain the following: a) the as-built elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, b) the elevation (in relation to mean sea level) to which the new or substantially improved structures have been flood-proofed, c) certification as to floodway heights and d) any and all certifications required under Section 12.06. of these regulations.

12.06.05.08.

The Zoning Enforcement Officer shall make the necessary interpretation, where needed, as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions).

12.06.06. General Standards

12.06.06.01.

All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

12.06.06.02.

All new construction and substantial improvements shall be constructed with materials resistant to flood damage.

12.06.06.03.

All new construction and substantial improvements to structures shall be constructed to ensure that electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

12.06.06.04.

All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

12.06.06.05.

All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

12.06.06.06.

New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.

12.06.06.07.

On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

12.06.06.08.

All manufactured homes (including "mobile" homes placed on a site for 180 consecutive days or longer) to be placed or substantially improved shall be installed using methods and practices which minimize flood damage. Elevation construction standards include piling foundations placed no more than 10 feet apart, and the provision of reinforcement for piers more than six feet above ground level.

12.06.06.09.

A building permit, zoning permit, site plan approval and/or special exception/permit shall be obtained before construction or development begins within any special flood hazard area. The applicant should review the Zoning Regulations with the Zoning Enforcement Officer to determine which permit approval process, or processes, are to be followed for the particular land use which is being proposed.

12.06.06.10.

In a zone where base flood elevations have been determined, but before a floodway is designated, no new construction, substantial improvement, or other development (including fill) shall be permitted which will increase base flood elevations more than one (1) foot at any

point along the watercourse when all anticipated development is considered cumulatively with the proposed development.

12.06.06.11.

Use of land, construction or other activities permitted within this Section shall be subject to approval by all applicable federal or state agencies.

12.06.07. Specific Standards

The following provisions shall apply in all areas of special flood hazard A1-30, AE, AH, or A zones where base flood elevation data has been provided in accordance with Sections 12.06.05.06. or 12.06.08.#4. of these regulations.

12.06.07.01.

New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above base flood elevation.

12.06.07.02.

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

- a) be flood-proofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
- b) have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

A registered professional engineer or architect shall review and/or develop structural design specifications and plans for the construction, and shall certify that the design and methods of construction are in accordance with acceptable standards of practice for meeting the provisions of the subsection. Such certification shall be provided to the Zoning Enforcement Officer.

12.06.07.03.

Manufactured homes (Recreational Vehicles) shall be prohibited in Special Flood Hazard Areas.

12.06.07.04.

Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

- (a) Encroachments, including fill, new construction, substantial improvements, and other development unless certification, with supporting technical data based on hydrologic and hydraulic analysis conducted in accordance with standard engineering practices, by a registered professional engineer registered in the State of Connecticut is provided

demonstrating that encroachments shall not result in any (0.00) increase in flood levels during the occurrence of the base flood discharge.

- (b) All new construction and substantial improvements in the floodway shall comply with the flood hazard reduction provisions noted in this Section.

12.06.08. Standards For Subdivision Proposals

In all special flood hazard areas the following requirements shall apply:

1. All subdivision proposals shall be consistent with the need to minimize flood damage;
2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
3. All subdivision proposals shall provide adequate drainage to reduce exposure to flood hazards; and
4. Base flood elevation data shall be provided for all subdivision proposals and other proposed developments (including manufactured home parks and subdivisions) which are five acres or fifty lots, which ever occurs first, and are located in Zone A.

12.06.09. Warning and Disclaimer of Liability

The degree of flood protection required by these regulations are considered the minimum reasonable for regulatory purposes and is based on scientific and engineering consideration and research. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. These regulations do not imply or guarantee that land outside the special flood hazard area or uses permitted in such areas will be free from flooding or flood damages. These regulations shall not create liability on the part of the Town of Durham or by any officer or employee thereof for any flood damages that result from reliance on these regulations or any administrative decision lawfully made thereunder. The Town of Durham, its officers and employees shall assume no liability for another person's reliance on any maps, data or information provided by the Town of Durham.

12.06.10. Considerations and Conditions for Granting Variances in Flood Hazard Areas

12.06.10.01. Specific Situation Variances

12.06.10.01.01. Buildings on an Historic Register

Variances "may" be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places without regard to the procedures set forth in the remainder of this section, except for Section 12.06.10.03. (a) and (d), and provided the proposed reconstruction, rehabilitation, or restoration will not result in the structure losing its historical character.

12.06.10.01.02. Pre-Existing, Small Lot Location

Variations "may" be issued by a community for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with Section 12.06.10.02. (a) and (d).

12.06.10.01.03. Functional Dependent Uses

Variations "may" be issued for new construction and substantial improvement and other development necessary for the conduct of a functionally dependent use provided the structure or other development is protected by methods that minimize flood damage, create no additional threat to public safety and meet the requirements of Section 12.06.10.02. (a) and (d).

12.06.10.02. Considerations for Granting of Variations

In passing upon such applications, the Zoning Board of Appeals shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this regulation, and:

- (a) the danger that materials may be swept onto other lands to the injury of others;
- (b) the danger to life and property due to flooding or erosion damage;
- (c) the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (d) the importance of the services provided by the proposed facility to the community;
- (e) the necessity of the facility to waterfront location, in the case of a functionally dependent facility;
- (f) the availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
- (g) the compatibility of the proposed use with existing and anticipated development;
- (h) the relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- (i) the safety of access to the property in times of flood for ordinary and emergency vehicles;
- (j) the expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site, and;

- (k) the costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.

Upon consideration of the factors listed above, and the purposes of the flood hazard regulations, the Zoning Board of Appeals may attach such conditions to the granting of variances as it deems necessary to further the purposes of the flood hazard regulations.

12.06.10.03. Conditions for Variances

12.06.10.03.01.

Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and in the instance of a historical building, a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.

12.06.10.03.02.

Variances shall only be issued upon:

- (a) a showing of good and sufficient cause;
- (b) a determination that failure to grant the variance would result in exceptional hardship; and
- (c) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

12.06.10.04.

Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the structure is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation up to amounts as high as \$25.00 for \$100.00 of insurance coverage.

12.06.10.05.

The Zoning Enforcement Officer shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

12.06.10.06. Adoption Date of Regulation

See Section 14 of these regulations.

12.06.10.07. Effective Date of Regulations

See Section 14 of these regulations.

12.06.10.08. Citation of Statutory Authorization

The Legislature of the State of Connecticut has in Title 7, Chapter 98, Section 7-148 (c)(7)(A) and in Title 8, Chapter 124, Section 8-2 of the General Statutes delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

12.06.10.09. Disclaimer of Liability Section

See Section 12.06.09. of these Regulations.

12.06.10.10. Severability Section

If any section, subsection, paragraph, sentence, clause, or phrase of this regulation should be declared invalid for any reason whatsoever, such decision shall not affect the remaining portions of this regulation, which shall remain in full force and effect; and to this end the provisions of this regulation are hereby declared to be severable.

12.06.10.11. Abrogation and Greater Restriction Section

This regulation is not intended to repeal, abrogate or impair any existing easements, covenants, or deed restrictions. However, where this regulation and another ordinance, regulation easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

12.06.10.12. Compensatory Storage

The water holding capacity of the floodplain, except those areas that are tidally influenced, shall not be reduced. Any reduction caused by filling, new construction, or substantial improvements involving an increase in footprint to the structure shall be compensated for by deepening and/or widening of the floodplain. Storage shall be provided on-site, unless easements have been gained from adjacent property owners; it shall be provided within the same hydraulic reach and a volume not previously used for flood storage; it shall be hydraulically comparable and incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Compensatory storage can be provided off-site if approved by the municipality.

12.06.10.13. Equal Conveyance

Within the floodplain, except those areas which are tidally influenced, as designated on the Flood Insurance Rate Map (FIRM) for the community, encroachments resulting from filling, new construction or substantial improvements involving an increase in footprint of the structure, are prohibited unless the applicant provides certification by a registered professional engineer demonstrating, with supporting hydrologic and hydraulic analyses performed in accordance with standard engineering practice, that such encroachments shall not result in any (0.00 feet) increase in flood levels (base flood elevation). Work within the floodplain and the land adjacent to the floodplain, including work to provide compensatory storage shall not be constructed in such a way so as to cause an increase in flood stage or flood velocity.

12.06.10.14. Aboveground Oil Tanks

Above-ground storage tanks (oil, propane, etc.) which are located outside or inside of the structure must either be elevated above the base flood elevation (BFE) on a concrete pad, or be securely anchored with tie-down straps to prevent flotation or lateral movement, have the top of the fill pipe extended above the BFE, and have a screw fill cap that does not allow for the infiltration of flood water.

12.06.10.15. Portion of Structure in Flood Zone

If any portion of a structure lies within the Special Flood Hazard Area (SFHA), the entire structure is considered to be in the SFHA. The entire structure must meet the construction requirements of the flood zone. The structure includes any attached additions, garages, decks, sunrooms, or any other structure attached to the main structure. Decks or porches that extend into a more restrictive flood zone will require the entire structure to meet the standards of the more restrictive zone.

12.06.10.16. Structures in Two Flood Zones

If a structure lies within two or more flood zones, the construction standards of the most restrictive zone apply to the entire structure (i.e., V zone is more restrictive than A zone; structure must be built to the highest BFE). The structure includes any attached additions, garages, decks, sunrooms, or any other structure attached to the main structure. (Decks or porches that extend into a more restrictive zone will require the entire structure to meet the requirements of the more restrictive zone.)

12.06.10.17. No Structures Entirely or Partially Over Water

New construction, substantial improvements and repair to structures that have sustained substantial damage cannot be constructed or located entirely or partially over water.

12.06.10.18. That For New Construction or Substantial Improvements

Require that fully enclosed areas below the lowest floor that are usable solely for the parking of vehicles, building access, or limited storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit offload waters. Designs for meeting this

requirement must either be certified by a registered professional engineer or architect, or meet or exceed the following criteria: a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

12.06.10.19. Variance

See Section 15. to these regulations.

12.06.10.20. Enforcement

See Section 13 to these regulations.

12.06.10.21. Violation/Penalty

See Section 13.04. to these regulations.

12.07. Interior Lots:

An interior lot may be permitted as an exception, approved by the Town Planning and Zoning Commission, provided that it complies with all applicable Town Ordinances, codes and regulations, except those relating to frontage and to the formula for determining lot area. The applicant shall demonstrate to the Commission that interior lots are practical and appropriate due to topography, soil conditions, lot configurations or other relevant design factors; and that such use will be in harmony with the purpose and intent of the comprehensive plan.

12.07.01. Use:

Interior lots shall only be used for uses permitted in the Farm Residential (FR) Zone and industrial uses permitted in the Heavy Industrial District (HID) and Light Industrial (LI) Zone.

12.07.02. Access:

Each interior lot shall have a private access strip as part of the lot.

(1) Width of access strip:

	<u>ZONE</u>			
FR	LI		HID	

Single access strip	25 feet	50 feet	50 feet
Adjoining access strips	25 feet	30 feet	30 feet
Combined width of adjoining access strips	50 feet	60 feet	60 feet

- (2) The number of adjoining interior lot access strips shall not exceed two. The minimum distance between access strips as measured in a straight line from their closest points is as follows:

	<u>ZONE</u>		
	FR	LI	HID
Single access strip	300 feet	300 feet	400 feet
Adjoining access strips	400 feet	400 feet	600 feet

- (3) Each access strip shall extend to an accepted public road or to a road in an approved subdivision and shall have frontage equal to the required width; on curved streets the frontage shall be measured on the chord or tangent of the curve, whichever is smaller.
- (4) The grade of the access strip shall not exceed 15.0 percent within 35 feet of its intersection with the accepted or approved road and shall conform to the Town Ordinance requirements for driveways.
- (5) Minimum length of access strip:

<u>ZONE</u>	<u>LENGTH</u>
FR	150
LI	150
HID	200

- (6) Maximum length of access strip:

<u>ZONE</u>	<u>LENGTH</u>
FR	1,000
LI	600
HID	1,200

- (7) Access strips shall make adequate provision for water courses and run-off.

12.07.03. Area:

Each lot shall contain in area not less than 87,120 square feet. Private access strips shall not

be included in calculation of the lot area.

12.07.04. Maximum Number:

The maximum number of interior lots shall not exceed one third of the total number of lots in any subdivision in excess of ten (10) lots.

12.07.05. Yard Requirements:

The following yard requirements shall be observed: The lot line or lines nearest the street to which the lot has access and most nearly parallel thereto shall be considered the street line for the purpose of establishing the building line.

12.07.05.01.

		<u>ZONE</u>	
	FR	LI	HID
Minimum width on assumed street line as described above	200 feet	200 feet	270 feet
Minimum depth	200 feet	200 feet	270 feet
Minimum width at minimum depth	150 feet	150 feet	200 feet
Minimum setback from assumed street line	60 feet	60 feet	75 feet
Minimum side and rear yards	30 feet	30 feet	50 feet

12.07.06. Location:

No interior lot shall be located to the rear of another interior lot as determined by 12.07.05. above.

12.07.07. Interior Lots of Record:

Interior lots of record shall not be divided or otherwise altered in area or dimension except in conformance with these Zoning Regulations. The use of right-of-way as access to interior lots of record shall establish such lots as non-conforming.

12.08. Aquifer Protection Zone

12.08.01.

Within designated aquifer protection zone, no land shall be used and no structures erected, constructed, reconstructed, altered or used except in conformance with this subsection and all other requirements of the applicable zone.

12.08.01.01. Boundary:

The aquifer protection zone shall be all land which is so designated on the Durham Zoning Map and shall include primary and secondary recharge areas as measured from data established by the U.S. Geological Survey.

12.08.01.02. Permitted Uses:

All uses which are permitted in the existing zones are also permitted in the Aquifer Protection Zone with the following exceptions, restrictions and requirements.

- a) Sanitary waste water discharge to on-site septic systems shall not average more than the equivalent of one (1) single-family dwelling unit per acre.
- b) The following uses are prohibited:
 - (i) Road salt storage and loading sites
 - (ii) Solid waste disposal sites
 - (iii) Septage disposal sites and lagoons
 - (iv) Disposal of hazardous waste, as defined by Section 3001 of the Resource Conservation and Recovery Act of 1976.
 - (v) Underground fuel storage tanks unless designed in a manner which will prevent leakage.
- c) All commercial and industrial uses are subject to a site plan review by the Planning and Zoning Commission. In addition to the requirements set forth in 13.03. of these regulations, the site plan shall be accompanied by a report detailing the following information:
 - (i) Amount and composition of industrial or commercial wastes including fly-ash and proposed method of disposal of such wastes outside the aquifer protection zone.
 - (ii) Amount and composition of any hazardous materials including but not limited to those identified by Section 3001 of the Resource Conservation and Recovery Act, that are handled, transported, stored or discharged to the air or the ground at the site.

- d) New and enlarged manure storage sites shall be approved by the Department of Environmental Protection.

12.09. Erosion and Sediment Control Plan Regulations

A soil erosion and sediment control plan shall be submitted with any application for development when the disturbed area of such development totals, cumulatively, more than one-half acre. Only a single family dwelling that is not a part of a subdivision of land shall be exempt from the submission of a soil erosion and sediment control plan.

- A. To be eligible for certification, a soil erosion and sediment control plan shall contain provisions to adequately control accelerated erosion and sedimentation and reduce the danger from storm water runoff on the proposed site based on the best available technology. Such principles, methods and practices necessary for certification are found in the Connecticut Guidelines for Soil Erosion and Sediment Control (1985), as amended. Alternative principles, methods and practices may be used with prior approval of the Commission.

- B. Said plan shall contain, but is not limited to:

- 1. A narrative describing:
 - a. the development;
 - b. the schedule for grading and construction activities including:
 - 1. start and completion dates;
 - 2. sequence of grading and construction activities;
 - 3. sequence for installation and/or application of soil erosion and sediment control measures;
 - 4. sequence for final stabilization of the project site.
 - c. the design criteria for proposed soil erosion and sediment control measures;
 - d. the construction details for proposed soil erosion and sediment control measures;
 - e. the installation and/or application procedures for proposed soil erosion and sediment control measures; and
 - f. the operation and maintenance program for proposed soil erosion and sediment control measures.

- 2. A site plan map that is in compliance with Section 13.03.04. of the Durham Zoning Regulations.

- 3. Any other information deemed necessary and appropriate by the Commission or its designated agent.

- C. Minimum Acceptable Standards

- 1. Plans for soil erosion and sediment control shall be developed in accordance with

these regulations using the principles as outlined in Chapters 3 and 4 of the Connecticut Guidelines for Soil Erosion and Sediment Control (1985), as amended. Soil erosion and sediment control plans shall result in a development that: minimizes erosion and sedimentation during construction; is stabilized and protected from erosion when completed; and does not cause off-site erosion and/or sedimentation.

2. The minimum standards for individual measures are those in the Connecticut Guidelines for Soil Erosion and Sediment Control (1985), as amended. The Commission may grant exceptions when requested by the applicant if technically sound reasons are presented.

D. Certify/Deny Erosion and Sediment Control Plans

1. The Planning and Zoning Commission shall certify a soil erosion and sediment control plan when the plan complies with the requirements and objectives of this regulation. When the soil erosion and sediment control plan fails to comply with these regulations, the Commission shall deny certification of the plan.
2. When the Planning and Zoning Commission requires that a soil erosion and sediment control plan be submitted to the Soil and Water Conservation District and/or other agencies for review and comment, it shall be the responsibility of the applicant to submit the plans to the appropriate agencies. Comments from review agencies shall be submitted to the Planning and Zoning Commission as part of the application.

E. Conditions

1. The estimated cost of measures required to control soil erosion and sedimentation and for site stabilization at any time during the construction phase may be covered in a performance bond at the discretion of the Commission.
2. Zoning permits shall not be issued for construction on the site until the erosion and sediment control plan is:
 - a. certified by the Planning and Zoning Commission, and
 - b. the specified control measures, as outlined in the plan, are installed properly.
3. The developer/owner shall be responsible for maintaining all erosion and sediment control measures and facilities in proper working order throughout the life of the project.

F. Inspection

Inspections shall be made by the Commission or its designated agent during development to

ensure compliance with the certified plan and that control measures and facilities are properly installed and maintained.

G. Enforcement

Enforcement of the Soil Erosion and Sediment Control Regulations shall be the responsibility of the Planning and Zoning Commission or its designated agent. Failure to properly install and/or maintain any erosion and sediment control measure may result in the issuance of a stop work order until the problem is satisfactorily corrected.

12.10. Wireless Communication Towers, Antenna and Facilities

12.10.01. Description and Purpose

The intent of this section is to make provisions as required by Telecommunication Act of 1996 to permit the location of wireless communication towers, antennae and facilities in the Town of Durham while protecting neighborhoods as well as ecologic, scenic, historical and recreational resources; minimizing conflicts with adjacent areas; and ensuring protection of public health. Specific objectives are as follows:

1. To accommodate the need for communication towers and antennae while regulating their location and number;
2. To minimize the adverse visual effects of towers, antenna and facilities through careful design, siting and vegetative screening;
3. To encourage shared or joint use of towers and facilities;
4. To reduce the number of antennae or towers needed in the future.

12.10.02. Definitions

When used in this section the following words or phases shall have the meaning found below:

1. Accessory Structure: An accessory facility or structure serving or being used in conjunction with a communications tower, and located on the same parcel as the communications tower. Examples of such structures include utility or transmission equipment storage sheds or cabinets including back-up power supplies.
2. Antenna: A device used to receive or transmit telecommunications or radio signals. Such signals shall include but not be limited to radio, television, cellular, paging, personal communications services (PCS) and microwave communications.
3. Co-located Antennae: Antennae which utilize existing towers, buildings or other structures for siting of a new telecommunications facility.

4. Telecommunications Facility: Towers and/or antennae and accessory structures and equipment used in receiving or transmitting telecommunications or radio signals from mobile communication sources and transmitting those signals to another wireless site, and other communication source or receiver or to a central switching computer which connects the mobile unit with land based telephone lines.
5. Tower: The structure designed to support equipment and antennae used to transmit and/or receive telecommunication or radio signals. Examples of such structures include, without limitations, free standing towers, guy towers, monopoles, and lattice towers.

12.10.03. Siting Preferences

Durham's order of preference for facility locations shall be:

1. On existing structures such as buildings, communications towers and smokestacks;
2. In industrial and commercial districts where the existing topography, vegetation, buildings or other structures provide the greatest amount of screening;
3. On new towers on bare ground with visual mitigation in commercial and industrial districts;
4. On new towers in residential districts where the existing topography, vegetation, buildings or other structures provide the greatest amount of screening;
5. On new towers on ridgetops and permanent vistas.

12.10.04. Special Exception

All wireless communication towers, antenna and facilities shall be subject to the issuance of a special exception in accordance with the following standards and in accordance with Section 13.05. of these regulations.

12.10.05. General Requirements for all Towers, Antenna and Facilities

1. Each application shall submit a detailed site justification report, including a description of the narrowing process that eliminated other potential sites as well as a map showing the extent of planned coverage within the Town of Durham, approved locations of all other telecommunication sites in Durham, or adjoining towns which provide coverage within Durham including the applicant's location and the location and service area of the proposed telecommunication site.
2. The antenna tower shall be designed and constructed to all applicable standards of the American National Standards Institutes, ANSI/EIA-222-E manual, as amended.

3. A soil report complying with Appendix I: Geotechnical Investigations, ANSI/EIA-222-E manual standards, as amended, shall be submitted to verify the design specifications of the foundation for the tower and anchors for the guy wires, if used shall be submitted prior to the issuance of a building permit.
4. Ground landscaping shall be required to soften the appearance of a tower and screen as much of the tower as possible, the fence surrounding the tower and other ground level features such as a building. Any combination of existing vegetation, topography, walls, decorative fences or other features instead of landscaping may be permitted if the same degree of screening as the required landscaping is achieved, as determined by the Commission.
 - a. An evergreen screen shall be required to surround the site. The screen can be either a hedge (planted 3 feet on center maximum) or a row of evergreen trees (planted 10 feet on center maximum). The evergreen screen shall be a minimum height of 6 feet at planting and shall grow to a minimum of 15 feet at maturity.
 - b. Existing vegetation on and around the site shall be preserved to the greatest extent possible.
5. All other uses ancillary to the antenna and associated equipment (including a business office, maintenance depot, vehicle storage, etc.) are prohibited.
6. To minimize the number of antenna or wireless sites in the community in the future, the proposed support structure shall be required to accommodate other users, including other wireless communication companies and particularly local police, fire and ambulance companies, unless it is determined to be technically unfeasible, and any tower approved here under shall be made available under commercially reasonable terms to others, including competing users.
7. A telecommunications site not in use for six months shall be removed by the facility owner. This removal shall occur within ninety days of the end of such six month period commencing upon written notice to the property owner by the Zoning Enforcement Officer. Upon removal, the site shall be restored to its previous appearance and, where appropriate, revegetated.
8. The Commission may require that applicants provide simulations of tower locations and impact. Such simulations may entail the flying of balloons or other devices necessary to visualize the proposed facility.
9. In all cases in which the Commission feels that a peer review of the applicant's service areas, tower sharing, or other technical issues is warranted, the applicant may be required to deposit up to \$25,000 to reimburse the Town for the cost of the peer review. The unused portion of this deposit will be returned to the applicant after a decision is rendered. If funds in excess of \$25,000 are necessary, payment will be made prior to the decision by the Commission on the application.

10. Using technological evidence, the applicant must demonstrate that the proposed location is necessary to satisfy its function in the company's grid system. Specific locations will be evaluated using the following analysis and criteria (not listed in any order of priority).
- . capacity and propagation analyses.
 - . tower height visibility analyses.
 - . antenna separation analyses based on wave length.
 - . analyses of signal strength and signal thresholds necessary for cell hand-off.
 - . environmental analysis of the proposed access road and structures when new construction is necessary (determined by the Commission).
 - . modeling consistent with FCC criteria to document that a prepared facility would be in compliance with federal radio frequency health standards.
 - . availability of suitable structures for antenna mounting.
 - . topography as it relates to line of sight transmission for optimum service efficiency.
 - . leasable lands and willing landlords.
 - . screening potential of existing vegetation, structures and topographic features.
 - . compatibility with adjacent land uses, and preservation of historic views, vistas, buildings and areas.
 - . least number of sites to cover desired area.
 - . greatest coverage consistent with physical requirements.
 - . opportunities to mitigate possible visual impact.
 - . availability of sites not within an established single family community.
 - . preservation of view corridors, vistas.
 - . potential for preservation of pre-existing character of site.
 - . minimal impact on residential areas surrounding commercial or industrial zoned sites.

- . selection of sites which lend themselves to visual mitigation.
- . availability of road access.
- . availability of electric power.
- . availability of land based telephone lines or microwave link capability.

If a tower is proposed the application shall include support materials that show the location of structures in excess of 50' within one quarter mile radius of the site proposed, that the owners of those locations have been contacted and asked for permission to install the antenna on those structures and denied for other than economic reasons. This would include smoke stacks, water towers, tall buildings, antenna or towers of other wireless communications companies, other communication towers (fire, police, etc.) and other tall structures.

12.10.05.01. Standards for Towers

1. Towers not requiring FAA painting/markings shall have either a galvanized finish or be painted a non-contrasting blue, grey, black or such other color as the commission may require to minimize the visibility of the tower.
2. No signs shall be permitted on any tower or antenna.
3. No lights or illumination shall be permitted unless required by the Federal and State agencies.
4. Towers shall be surrounded by a chain link fence or wall not more than eight (8) feet in height. If barbed wire is included in the fence, it shall be within the eight (8) foot height limit.
5. Towers shall have a set back of at least two hundred (200) feet from any off-site dwelling.
6. Towers shall be setback one hundred fifty (150) feet from any street line.
7. A tower supporting an antenna shall be the minimum height necessary to satisfy the technical requirements of the telecommunications facility.
8. Tower in Residential Districts
 - a. Shall be limited to monopoles.
 - b. Satellite and microwave dishes attached to monopoles shall not exceed two (2) feet in diameter and four (4) in number.
 - c. Shall be setback from all property boundaries, one hundred (100) feet or 100% of

the height of the tower, whichever is greater.

9. In commercial and industrial zones;
 - a. Satellite and microwave dishes attached to towers shall not exceed six (6) feet in diameter and four in number.
 - b. Shall comply with the setbacks of the zone in which it is located.

12.10.05.02. Standards for Equipment Buildings

1. Shall not contain more than 750 square feet of gross floor area or be more than twelve (12) feet in height.
2. Shall comply with the setback requirements of a principal building for the zone in which it is located.
3. If located on the roof of a building, shall not occupy more than 15% of the roof area.

12.10.05.03. Standards for Structure or Rooftop Mounted Antennas, with an Equipment Building or Facility

1. Shall be attached to a non-residential structure or building, which building or structure is the principal building or structure on the lot.
2. Shall be of a material or color which matches the exterior of the building or structure.
3. If roof mounted:
 - a. Shall not exceed a height of fifteen (15) feet above the highest part of the structure or building;
 - b. Shall be set back from the roof edge a minimum of ten (10) feet or 10% of the roof depth (measured from the edge facing a public street to the opposite edge of the roof), whichever is greater;
 - c. Satellite and microwave dish antennas shall not exceed six (6) feet (two (2) in residential zones) in diameter and shall be located or screened so as not to be visible from abutting public streets.
4. If facade mounted:
 - a. Shall project not more than two (2) feet beyond the wall or facade of the structure;
 - b. Shall not project more than five (5) feet above the cornice line.

12.11. Ridgelines

12.11.01. Statutory Authorization:

This regulation is adopted pursuant to Section 8-1aa and Section 8-2(c) of the General Statutes.

12.11.02. Purpose:

To restrict development in the Ridgeline Setback Area as defined herein to support the following goals:

1. Preservation of the aesthetic beauty and natural environment of the town;
2. Preservation of the environmentally sensitive land within and adjacent to the ridgeline area;
3. Preservation of the unique flora, fauna and other environmental attributes within and adjacent to the ridgeline area; and
4. Preservation of ridgeline vistas as seen from the town.

12.11.03. Applicability:

1. All development proposals within the Ridgeline Setback Area as defined in Section 12.11.04.08., whether public or private, shall comply with the requirements and purposes of this regulation and other applicable ordinances of the Town.
2. For the purposes of this regulation, development proposals include proposals requiring review and approval of the Planning and Zoning Commission in accordance with any provision of these regulations.

12.11.04. Definitions (for purposes of this Section only):

12.11.04.01. Alteration:

Alteration means a change or rearrangement in the structural parts of a building, the movement of all or any part thereof, or the substantial reconstruction thereof, so as to produce a substantial change in appearance, character, or construction; also means an enlargement, whether by increasing in height, coverage, volume or floor area.

12.11.04.02. Building:

Building means any structure other than (A) a facility as defined in Section 16-50i of the

General Statutes or (B) structures of a relatively slender nature compared to the buildings to which they are associated, including but not limited to chimneys, flagpoles, antennas, utility poles and steeples.

12.11.04.03. Clear Cutting:

Clear Cutting means the harvest of timber in a fashion which removes all, or substantially all, trees down to a two (2") inch diameter, measured at breast height.

12.11.04.04. Development:

Development is defined as the construction, reconstruction, alteration, or expansion of a building.

12.11.04.05. Expansion:

Expansion is defined as any addition to the floor area, or any increase in height, volume, or coverage of an existing building.

12.11.04.06. Grazing:

Grazing means the keeping in an enclosed space of domesticated animals so as to allow or encourage such animals to feed upon natural or cultivated vegetation growing upon the land. As used herein, "domesticated animals" shall include any animals typically maintained in pastures, paddocks, or similar outdoor enclosures, regardless of whether such animals are kept for agricultural, recreational, or any other use or purpose. "Grazing" shall include, but not be limited to, the pasturing of horses, cattle, sheep, goats, llamas, pigs, or other customary farm animals; but shall not include the kenneling of dogs nor the enclosure of mink or other small mammals.

12.11.04.07. Passive Recreation:

Passive Recreation means non-motorized recreation not requiring "development", as defined herein, nor requiring any alteration of the existing topography, nor any activity regulated pursuant to this section. Such passive recreation shall include, but not be limited to, hiking, bicycling, picnicking and birdwatching.

12.11.04.08. Ridgeline Setback Area:

Ridgeline setback area means the area bounded by (A) a line that parallels the ridgeline at a distance of one hundred fifty feet on the more wooded side of the ridge, and (B) the contour line where a ridge of less than fifty per cent is maintained for fifty feet or more on the rockier side of the slope, mapped pursuant to Section 8-2 of the General Statutes, as amended by Section 2 of this act.

12.11.04.09. Selective Timbering:

Selective Timbering means the harvesting of trees for commercial sale of lumber, but of no more than one half (1/2) of the total number of trees of any given diameter, measured to the nearest inch, and measured as the diameter at breast height (d.b.h.; being 4.5' from the ground).

12.11.04.10. Traprock Ridge:

Traprock Ridge means Beseck Mountain, Fowler Mountain, Pistapaug Mountain, and Totoket Mountain.

12.11.04.11. Traprock Ridgeline:

Traprock ridgeline means the line(s) of a traprock ridge created by all points at the top of a fifty per cent slope, which is maintained for a distance of fifty horizontal feet perpendicular to the slope and which consists of surficial basalt geology, identified on the map prepared by Stone et al., United States Geological Survey, entitled "Surficial Materials Map of Connecticut".

12.11.05. General Requirements:

1. The "Traprock Ridgeline" and the "Ridgeline Setback Area", as those terms are defined herein and in Section 8-1aa of the General Statutes, on Beseck Mountain, Fowler Mountain and Pistapaug Mountain and Totoket Mountain are shown on the zoning map which is specifically incorporated herein.
2. Permitted Operations and Uses. Anything in this section to the contrary notwithstanding, the following operations and uses shall be permitted in Ridgeline Setback Areas, as of right, as set forth in Connecticut General Statutes Section 8-2(c) as amended:
 - a. Emergency work necessary to protect life or property;
 - b. Any conforming uses that were in existence and that were approved on or before the effective date of regulations adopted under this section; and
 - c. Selective timbering, grazing of domesticated animals and passive recreation.
3. Activities Requiring Special Exception: Development, underground or above ground utilities, and clear cutting, all as defined in these regulations, shall not be permitted except upon the issuance of a special exception by the Commission in accordance with the procedure set forth in Section 13.05 of these Regulations, and such application shall include a site plan and such other information as to demonstrate compliance with Section 12.11.05. Ridgeline Protection Standards.

12.11.06. Ridgeline Protection Standards:

No building, structure, antenna, satellite dish, tower or other feature shall be visible above the

ridgeline when viewed from a public way. Buildings and landscaping are to be designed and located on the site to blend with the natural terrain and vegetation and to preserve the scenic character of the site, conforming to the following standards:

1. Building Characteristics

- a. Exposed foundation walls shall not extend more than two (2) feet above the proposed finished grade.
- b. Buildings, alterations, additions, or structures shall be located downgrade of the ridgeline.
- c. Building materials shall blend with the natural landscape.

2. Landscaping

- a. Except for quarrying of bedrock approved under Section 12.05. of these regulations (see section 12.05.03.01.04.) removal of native vegetation, especially large timber, shall be minimized and the replacement of vegetation and landscaping shall be compatible with the vegetation of the subject area.
- b. Except for quarrying of bedrock approved under Section 12.05. of these regulations (see section 12.05.03.01.04.) trees may only be removed for location and construction of streets, driveways, septic areas or structures. With approval from the Commission, selective clearing for views may be permitted where the view is obstructed by dense vegetation.
- c. Retaining walls, of natural materials only, may be used to create usable yard space. Retaining walls on the exposed side and downhill portions of a lot which are in view or visible from a public way shall be screened with appropriate landscaping material.
- d. Landscaping and plantings shall be utilized to screen main buildings in open or prominent areas from significant views, both when installed and when mature.

3. Grading

Except for quarrying of bedrock approved under Section 12.05. of these regulations (see section 12.05.03.01.04.) any grading or earth moving operation is to be planned and executed in such a manner that final contours appear to be consistent with the existing terrain, both on and adjacent to the site.

4. Prevention of Erosion and Sedimentation

Except for quarrying of bedrock approved under Section 12.05. of these regulations (see section 12.05.03.01.04.) no area of 100 square feet or more on any parcel shall have existing vegetation clear-stripped or be filled six (6) inches or more so as to destroy existing vegetation unless in

conjunction with agricultural activity or unless necessarily incidental to construction on the premises under a currently valid building permit. No stripped areas which are allowed shall remain through the winter without a temporary cover of winter rye or similar plant material to provide soil control.

5. Utilities

- a. The Commission shall determine whether utilities will be constructed and routed underground and will take into consideration those situations where natural features prevent the underground siting or where safety considerations necessitate above ground construction and routing.
- b. Above ground utilities shall be constructed and routed to minimize detrimental effects on the visual setting.

6. Site Planning

In the building of more than one structure, variable setbacks, multiple orientations and other site planning techniques shall be incorporated in order to avoid the appearance of a solid line of development.

12.11.07. Use Variances Prohibited:

In accordance with Connecticut General Statutes Section 8-6, no variance shall be granted by the Zoning Board of Appeals which would allow any use of land within the Ridgeline Setback Area which would violate this Section.

12.12. Exterior Lighting

12.12.01. Description and Purpose

The intent of this section is to require the preparation of an outdoor lighting design that will minimize or eliminate light pollution, light trespass, glare and too high or too low lighting levels. Illuminated street graphics shall be included in this design. For this purpose of this section the applicable standards and practices set forth in the book entitled; Lighting Handbook, Reference and Application; (Eighth Edition or subsequent editions) published by the Illuminating Engineering Society of North America are hereby incorporated. With the exception of Northeast Utility street lights, all outdoor lighting shall be installed in such a manner as to insure the highest level of energy conservation and cost efficiency.

12.12.02. Uses Subject to this Regulation

1. All uses in the Farm Residential and Main Street Residential Zones requiring a special permit or site plan approval including athletic fields and recreational areas.
2. All uses permitted in the Commercial District.

3. All uses permitted in the Heavy Industrial, Light Industrial and Design Development Districts.
4. Any outdoor lighting retrofit of the uses listed above.

12.12.03. Outdoor Lighting Design

The following information shall be submitted to the Commission:

1. The average level of illumination in footcandles for the site or its appropriate subdivision for its initial and maintained state.
2. The ratio of average illumination to the minimum in footcandles.
3. The candlepower at least on ten degree intervals in the glare zone of a fixture (between sixty and ninety degrees). The amount of up light provided by the fixture as a percentage of its output.
4. Fixture cuts or details for all proposed lighting units and means of mounting.
5. The type and wattage of all lamps to be provided.
6. The mounting height of all fixtures.
7. A statement indicating what has been done to insure maximum energy conservation, cost efficiency, minimal glare, and minimal light trespass.
8. A certification by the design professional that he or she is familiar with applicable standards and practices set forth in the "Lighting Handbook" referenced above.
9. Other relevant data that may be necessary, as determined by the Commission, to meet the purpose of these regulations as set forth in Section 12.12.01.
10. Outdoor lighting designs shall be prepared by a Registered Architect, Electrical Engineer, or those who have passed the Lighting Certification Examination or similar qualification test.

12.12.04. Other Considerations

A computer plot of point by point footcandles on a reasonable spacing will be helpful but not required.

Designers are encouraged to pay strict attention to "Community-Responsive Design" page 711 of the referenced IES handbook.

12.12.05. Maximum Height of Light Structures for Public School Athletic Fields

By special exception, the Commission may approve the installation of up to four lighting structures for public school athletic fields located in a Farm Residential zone at a maximum height not to exceed 80 feet, provided that the applicant, in addition to compliance with Section 12.12.03, demonstrates to the Commission that the increased height will (a) diminish offsite glare, nuisance or intrusion, and (b) improve the conduct of athletic events and the safety of athletes using the field as compared to compliance with the 35 foot height limit for accessory structures stated in Section 05.03.02. The Commission may attach to such special exception conditions to ensure compliance with Section 12.12.03. and this subsection, including but not limited to restrictions on the time of year when such lights may be used, limits on the hours such lights may be on, and identification to the Zoning Enforcement Officer of the person or persons responsible for operation of the system and compliance with the special exception conditions.

12.13. Fences

12.13.01.

In residential districts, fences not exceeding six (6) feet in height are permitted along rear and side yard property lines only and may not extend beyond the front building setback line.

12.13.02.

Within the front building line, fences may not exceed front (4) feet in height and shall not obstruct line-of-sight at intersections or from the lot accessing a public or private road.

12.13.03.

If a fence has a “finished” or more attractive side, (i.e., the side opposite from the horizontal supports to which it is applied), this side must face to the exterior of the lot.

12.13.04.

Fences constructed within five (5) feet of a property line, or on a property line, shall be marked in the field by a professional land surveyor registered in the State of Connecticut to assure that the fence is located on the applicant’s property.

12.13.05.

Fences constructed within the setback lines may not exceed eight (8) feet in height.

12.13.06.

A Zoning Permit shall be obtained for all fences prior to construction except for fences

constructed within the setback lines.