

EAST HADDAM PLANNING AND ZONING COMMISSION

APPLICATION FOR PRELIMINARY
SUBDIVISION/RESUBDIVISION REVIEW

TITLE FOR SUBDIVISION/RESUBDIVISION _____

APPLICANT'S NAME: _____

ADDRESS: _____ PHONE: _____

OWNER'S NAME: _____

ADDRESS: _____

ASSESSOR'S MAP # _____ LOT # _____ ZONE/DISTRICT _____

STREET: _____ ACREAGE _____ # OF LOTS _____

SURVEYOR: _____ PHONE _____

ADDRESS _____

ENGINEER: _____ PHONE _____

ADDRESS: _____

SOIL SCIENTIST: _____ PHONE _____

ADDRESS: _____

LANDSCAPE ARCHITECT: _____ PHONE _____

ADDRESS: _____

ENVIRONMENTAL CONSULTANT: _____ PHONE _____

ADDRESS: _____

DATE: _____

APPLICANT / OWNER SIGNATURE

AGENT SIGNATURE

Date Received: _____

Date of Preliminary Hearing _____

APPLICATION REQUIREMENTS/POLICIES

_____ a) Application. The Subdivider, hereinafter sometimes called the Applicant, may present to the Commission a request for the consideration of the Preliminary Layouts. Six (6) paper prints of each of the Preliminary Layouts (Conventional versus Conservation), in accordance with Section 3.03.h of these Regulations, shall be submitted with the request.

_____ b) Technical Reports. The Applicant shall obtain from a licensed professional engineer a written report or reports as to the general feasibility of the following: The proposed water supply, and the proposed drainage plan and sewage disposal in the area to be subdivided, and shall deliver said report(s) to the Commission. The Applicant shall demonstrate where the proposed development fits within the watershed, ie. regional, subregional, and local drainage basins. The applicant shall cause to be performed, at his expense, such tests as the appropriate Town officer or officers may request. The Commission may request such other report(s) as are deemed advisable.

_____ c) Check by Commission. At the time of the filing of a request for the consideration of the Preliminary Layouts, the Commission or its designee shall check such request and layouts and when the information contained in said request is substantially complete in accordance with this Section of these Regulations, the matter shall be placed on the agenda for a regular public meeting of the Commission. The applicant's agents shall certify that the information contained in the request and layouts is true and correct and meets the requirements of these Regulations and any other applicable town or state regulations. Whenever desirable, the Commission and/or its representative(s) may examine the site of the proposed subdivision with the applicant or his authorized representative(s), prior to said meeting, and the applicant, by making a request under this Section, shall be deemed to consent to such site examination.

_____ d) Notice of the Meeting with the Commission. The Commission shall notify the applicant, prior to said meeting, of the date, time and place of the meeting of the Commission at which the Preliminary Layouts are to be considered and the applicant, or his fully authorized representative, should attend said meeting unless he has notified the Commission at least one day prior to said meeting of his inability to attend. All Preliminary Layout and reviews require the property to be posted with notice of such meeting. The requirements of such notification are explained in Section 4.20 General Requirements

_____ e) Consideration of the Preliminary Layouts. The Preliminary Layouts will be considered at a regular public meeting of the Commission at which it is on the agenda. The Commission may hold a public hearing on any such request, and even in the absence of a public hearing, may, in its sole discretion, permit persons to be heard and written communications received at such meeting. The purpose of entering information from the public is to gather certain information such as environmental, historical, and archeological factors that may assist the Commission and applicant in the decision making process.

_____ f) The Commission shall have the right to recommend the subdivision method (Conventional or Conservation) based on the information provided in the preliminary layouts provided by the applicant and from comments generated from other Commissions, Boards, Agencies, and the public.

_____ g) Effect of Consideration of Preliminary Layouts. The purpose of the consideration of the Preliminary Layouts is to provide preliminary guidance to the Applicant, and to identify areas

of concern or further study, so as to minimize delay, expense and inconvenience to the public, the Applicant, and the Commission upon the future receipt, if any, of a formal application for subdivision. Neither the applicant nor the Commission shall be in any way bound by any statement made during such Preliminary Layout consideration, nor shall the statement of any Commission member be deemed to be an indication of pre-judgment or prejudice, it being acknowledged by the applicant that the Commission's responses, like the request itself, are preliminary and subject to further change and refinement. There shall be no vote or other formal action on any request for Preliminary Layout consideration, other than referrals to other municipal, State, or Federal agencies for review and comment if deemed advisable by the Commission.

_____ h) Preliminary Layouts submitted to the Commission should be drawings or prints of drawings produced by a landscape architect, engineer, or surveyor at a scale of one inch equals forty feet (1"=40') or one hundred (100') feet on sheets twenty-four by thirty-six inches (24"x36") in size. It is recommended that on complex projects that, at the minimum, the services of an landscape architect, engineer, surveyor, and biologist be contracted as part of the project team for presentation. The Preliminary Layout shall contain the following information:

_____ i). Names of owners of record and proposed subdivider, proposed subdivision name and identifying title, location of subdivision, approximate north arrow and scale and date of drawing.

_____ ii). Location and approximate dimensions of all existing property lines of the subdivision including assessor's map and lot numbers.

_____ iii). All pertinent features, such as existing structures, stonewalls, foundations, easements, wetlands, watercourses, swampland and wooded areas, and proposed Conservation Areas properly labeled.

_____ iv). Approximate contours of the existing surface of land, with intervals adequate to indicate drainage and grades.

_____ v). Proposed lot lines with approximate dimensions and area of all proposed lots

_____ vi). Location and approximate dimensions and area of all property proposed to be set aside for open space, playground or park use.

_____ vii). A reference map to the scale of one inch equals one thousand feet (1"=1000') showing the proposed subdivision and tie-in to the nearest street intersection. If the application submitted covers only a part of the applicant's holdings, a map which may appear on the same sheet, drawn on a scale no less than one inch equals two hundred feet (1"=200') showing an outline of the plotted area with its proposed road system and an indication of a proposed future road system and lot layout for the remaining portion of the tract.

_____ viii). A set of maps demonstrating how the four step conservation development process of Section 3.02 was used. (See below)

_____ ix). Where the subdivider anticipates that the Subdivision will be developed in phases, such phases should be delineated on the Preliminary Layout.

_____ x). Mapping and a narrative describing the use of the four step development process for a Conventional and Conservation Plan. (See next page)

_____ xi). Maps indicating where the development exists in relationship with the watershed, ie regional, subregional, and local basins.

_____ Consideration of Conservation Plan and use of the four step development process.

i) The applicant shall use the four step process to create the proposed Conventional and Conservation Subdivisions. This process shall be demonstrated with a site plan and detailed narrative. The design process identifies historical, cultural and natural resources, potential open space corridors, views and vistas, sensitive wildlife areas, Conservation Areas, and other areas that should not be adversely impacted by development.

Step One: Identifying Conservation Areas

Conservation Areas limited to regulatory jurisdiction such as wetland and floodplains; and Conservation Areas including those unprotected elements of the natural landscape such as steep slopes (20% or greater), mature or productive forestland, potential contiguous open space or connective green belts, prime farmland, land that protects critical or threatened species or communities of special concern as identified by the Department of Environmental Protection, areas that have recreation value as recommended in the Recreation and/or Open Space Plan component of the Plan of Development; wildlife habitats, and cultural features such as historic and archeological sites; and scenic views and vistas. This phase will require the property boundary to be located, the wetland areas delineated, and the services of professionals such as a biologist and/or a landscape architect to determine the potential Conservation Area.

Step Two: Locating Developable House Sites

The second step involves locating approximate house sites on suitable soils outside of the Conservation Areas. Random soil testing throughout the property in a grid of approximately 200 feet apart will give a general indication of the areas suitable for development.

Step Three: Aligning Streets and Driveways

The third step consists of tracing a logical alignment for the location of streets to serve the house sites, which street pattern is in harmony with the natural topography to minimize cuts and fills.

Step Four: Drawing in the Lot Lines

The final step is to draw in the lot lines.

EAST HADDAM PLANNING AND ZONING COMMISSION

SUBDIVISION APPLICATION
SUBDIVISION/RESUBDIVISION REVIEW

TITLE FOR SUBDIVISION/RESUBDIVISION _____

APPLICANT'S NAME: _____
ADDRESS: _____ PHONE: _____

OWNER'S NAME: _____
ADDRESS: _____

ASSESSOR'S MAP # _____ LOT # _____ ZONE/DISTRICT _____
STREET: _____ ACREAGE _____ # OF LOTS _____

SURVEYOR: _____ PHONE _____
ADDRESS _____

ENGINEER: _____ PHONE _____
ADDRESS: _____

SOIL SCIENTIST: _____ PHONE _____
ADDRESS: _____

LANDSCAPE ARCHITECT: _____ PHONE _____
ADDRESS: _____

ENVIRONMENTAL CONSULTANT: _____ PHONE _____
ADDRESS: _____

DATE: _____

APPLICANT / OWNER SIGNATURE

Date Received: _____
Date Accepted Complete by PZC _____
Date of Hearing _____
Date of Decision _____
Bond Amount _____

Address every section even if it does not apply.
Please refer to the East Haddam Subdivision Regulations to insure your application is complete.

APPLICATION REQUIREMENTS/POLICIES

a) Filing of Final Subdivision Application. Any Applicant seeking Subdivision approval shall file in the office of the Commission the following (in duplicate, unless otherwise noted). If the Applicant does not participate in the preliminary application process, the applicant shall submit full sets of a Conservation and Conventional Subdivision Plan. The Commission shall have the right to choose the subdivision method (Conventional or Conservation) based on the information provided by the applicant and from comments generated from other Commissions, Boards, Agencies, and the public:

- _____ i). An application on forms provided by the Commission, signed by the applicant and also the owner of the land to be subdivided or his authorized agent;
- _____ ii). A non-refundable application fee, in the form of a check made payable to the Town of East Haddam per the Town Fee Ordinance;
- _____ iii). Ten (10) prints of a Final Subdivision Plan conforming to these Regulations;
- _____ iv). Ten (10) prints of a Plan and Profile drawings for each street conforming to these Regulations. (Scale: 1" = 40' horizontal, 1" =4' vertical);
- _____ v). Three copies of a Hydraulic Study and Stormwater Control Plan conforming to these Regulations;
- _____ vi). Ten (10) prints of an Erosion and Sediment Control Plan, in accordance with the 2002 Connecticut Guidelines for Soil and Erosion Control as amended. The plan shall relate only to proposed improvements.
- _____ vii). Ten (10) prints of a Final Subdivision Plan conforming to these Regulations reduce to 11" x 17" for distribution to the Commission and public;
- _____ viii). A final report from the Sanitarian indicating that each and every lot proposed on the Final Subdivision Plan meets the sanitary requirements as defined in Section 4.04; or, if the applicant proposes to utilize a community sewerage system, as defined in the Connecticut General Statutes Section 7-245, a report from the East Haddam Water Pollution Control Authority indicating that all requirements of the Connecticut General Statutes Section 7-246f have been satisfied;
- _____ ix). A report from, and evidence of approval by, the Inland Wetlands and Watercourses Commission of any permits required pursuant to the East Haddam Inland Wetlands and Watercourses Regulations for the Final Subdivision Plan as submitted; and, in addition, written evidence of a preliminary review of the proposed activities depicted on the Final Subdivision Plan by the U.S. Army Corps of Engineers or Department of Environmental Protection where required by applicable law.

_____ x) In accordance with Section 8-25a of the Connecticut General Statutes, as amended by Public Act 84-330, any subdivision providing water by means of a "water company", as that term is defined in Connecticut General Statutes Section 16-262m(a), shall provide to the Commission a certified copy of a resolution from the Board of Selectmen agreeing that the Town of East Haddam through the East Haddam Water Pollution Control shall be responsible for the ownership and operation of the subject water company as required by the Department of Public Utility Control Regulations (DPUC) and that a Certificate of Public Convenience and Necessity is issued by the DPUC.

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

_____ xii) Each sheet of the Final Subdivision Plans shall contain a printed signature box as follows;

Approved by the East Haddam Planning and Zoning Commission

Chairman/Secretary _____ **Date:** _____

Expiration Date: _____

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

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

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

_____ xvi) The name, address, responsible loan officer of the holder, and volume and page of recording, of any mortgage deed secured by the property to be subdivided.

- _____ xvii) A parcel history map, depicting the tract as of the effective date of the adoption of subdivision regulations for the Town of East Haddam (September 5, 1961). Such map shall be at a scale of 1" = 200', more or less, and shall indicate all divisions of the property, or any property of which was formerly a part, since the said effective date of subdivision regulation in East Haddam and a table containing the dates of such divisions and the grantors and grantees of any parcels or approved subdivisions so created.

- _____ xviii) In accordance with C.G.S. §8-3i, in any subdivision application for any property which is within the watershed of a water company, as defined in C.G.S. The Commission shall schedule a public hearing as provided by Statute on any application for Final Subdivision. Any such public hearing shall commence no later than sixty-five (65) days following the Date of Receipt of the application, and shall be completed no later than thirty-five (35) days following its commencement. Upon written approval by the applicant, said time limitation may be extended by the Commission one or more times, provided the total period of any such extension or extensions shall not exceed 65 days in total. All final subdivision applications require the property to be posted to notice of such meeting. The requirements of such notification are explained in Section 4.20 General Requirements.

- _____ xix) It is the burden of the applicant to submit a complete application, and to demonstrate compliance with all criteria and requirement of these Regulations and, accordingly, the applicant may submit such additional reports or information as may be required to satisfy that burden. Any application found to be incomplete may be denied by the Commission without prejudice to a future complete application.

- _____ xx) The filing of an application with the Commission shall be deemed to constitute permission by the applicant for the Commission or its agents to enter onto the subject property for the purpose of inspections and tests; and, if the Commission designates a formal site walk, such permission shall allow the general public, in company with the Commission only, to inspect such property.

- _____ b) Technical Approvals or Reports.

Please list

3.05 PLAN FOR RECORD SUBDIVISION - MAP CRITERIA

a. **The record subdivision map shall be prepared with an accuracy meeting the standards for a "Class A-2 Transit Survey". The map(s) shall be a clear and legible print at a scale of one inch equals forty feet (1"=40') feet on sheets twenty-four by thirty-six inches (24"x36"). When more than one (1) sheet is required an index sheet of the same size sheet showing the entire subdivision shall be submitted with the Plan. The Plan, which may composed of multiple sheets or sets of sheets, shall show the following information:**

_____ i). Name and address of the owner of the land to be subdivided; name and address of the applicant if different from the owner;

_____ ii). The title of the subdivision, which shall not duplicate the title of any previous subdivision in the Town of East Haddam.

_____ iii). Date of Map

_____ iv). Graphic and word scale

_____ v). North arrow with reference to true, grid, magnetic north or relationship to other map shall be noted. (If magnetic north, the date of the magnetic reading shall be noted.)

_____ vi). Zones and Districts which subdivision lies in, total acreage, number of lots.

_____ vii). Name, license number, and embossed seal or official stamp of State of Connecticut Land Surveyor and/or Registered Civil Engineer Name, license number, signature box for Soil Scientist if any.

_____ viii). The plan shall contain the following statement: "The Subdivision Regulations of the East Haddam Planning and Zoning Commission are a part of this plan, and approval of this plan is contingent on completion of all the requirements of said Subdivision Regulations."

_____ ix) A signature Box containing the following words:

Approved by the East Haddam Planning and Zoning Commission

Date: _____ Chairman/Secretary _____

Expiration Date: _____

b. Subdivision Plan: at 1" = 40' scale on sheets 24" x 36"

_____ i). Existing and proposed property and street lines - Proposed street names. Proposed road(s), names which shall not duplicate or be readily confused with already existing names unless an extension thereof.

_____ ii). Adjoining property lines for a distance of 200'; and the names of all adjacent subdivisions and/or property owners. Assessor's Map and Lot numbers included. Location and dimensions of all existing property lines of the subdivision with reference to monuments, pipes, drill holes, foundations or other points of reference of a fixed or semi-permanent nature, utility poles and numbers.

_____ iii). Existing and proposed easements and right-of-way either on or off site, including those for utilities, sewers, and drainage.

_____ iv). Layout of lots and lot numbers, dimensions of all lot lines, acres and square footage of all lots, building set back lines, location of any monuments or markers to be placed at corners or angles of all lots. Dimensions on all lines shall be to the hundredth of a foot with bearings or deflection angles on all straight lines and the central angle, tangent distance, and radius of all arcs.

_____ v). A-2 certification and Licensed Surveyor Seal, with ties to a known coordinate system.

_____ vi). A general location map showing the location of the subdivision area in relation to existing roads in the Town at a scale not less than 1" = 1000'.

_____ vii). All permanent features, such as existing structures, stone walls, fences, watercourses, ponds, swampland, wooded areas, specimen trees of greater than 12" measured at DBH (especially along existing streets), exposed ledge, areas designated for conservation, proposed buffer areas, and land to be set aside for playground, park or open space use.

_____ viii). Topography is to be Class T-2 standards and not interpolated from CGS quadrangle maps. Contours (existing and proposed) are to be at two feet intervals for lots to be subdivided and shall cover the entire lot unless a waiver is requested and granted.

_____ ix). Layout of lots and lot numbers. The proposed lot number and assigned street number shall be the same when creating new streets. All lots shall have street numbers assigned in accordance with the following system: Heading north - odd numbers are assigned to the west, while the east side shall have the even numbers; heading south - odd numbers are assigned to the west, while the east side shall have the even numbers; heading east - odd numbers are assigned to the south, while the north side shall have the even numbers; heading west - odd numbers are assigned to the south, while the north side shall have the even numbers.

_____ x). Soil type or types to include FEMA 100 year Flood Zones, wetlands and streambelt areas as taken from field data and the detailed soil map of East Haddam by Middlesex County Soil and Water Conservation district;

- _____ xi). Soil types and inland wetlands and watercourses, as defined in the Inland Wetlands and Watercourses Regulations, delineated by a certified soils scientist; Flood Zones, in accordance with the most current Federal Flood Insurance Rate Map; and regulated areas as defined by in the Inland Wetlands and Watercourses Regulations
- _____ xii). Areas with 20% or more slope delineated.
- _____ xiii). Proposed driveway grades over 8% labeled or noted.
- _____ xiv). Proposed land uses, including location of buildings, buffer strips, fences, signs, etc.
- _____ xv). Proposed limits of clearing and grading, stock pile sites.
- _____ xvi). Storm water drainage and dry wells location, if any.
- _____ xvii). Proposed on site sanitary arrangements. This must include a report on soil conditions, based on drainage, deep test holes, and seepage testing made in accordance with the recommendations of the State Public Health Code as amended. The criteria for septic system design and reports is further explained in Section 4.04.
- _____ xviii). Certification by Town Sanitarian per Section 4.04 of the Subdivision Regulations including test pit data and signature box as described in Section 4.04
- _____ xix). Any additional data necessary, together with the aforesaid said data, to enable a licensed surveyor to determine the location of every street line, lot line, boundary line, and to reproduce such lines upon the ground to the A-2 Standard of Accuracy.
- _____ xx). Certificate under seal of (I) a Connecticut licensed professional engineer as to the adequacy of proposed Public Improvements, suitability of water supply, and waste disposal, and (ii) a Connecticut licensed land surveyor that both the survey and the map conform to the standards of survey and map accuracy respectively of Class A-2 as defined in the "Recommended Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 24, 1992, or as the same may be amended from time to time; or any successor agency authorized to define standards of accuracy in surveys.
- _____ xxi). The location of any signs to be used for identification or sale of lots, in accordance with Section 12 Sign Regulations of the East Haddam Zoning Regulations.
- _____ xxii). Where the subdivisions are proposed to be developed in phases, such phases shall be clearly delineated on the Final Subdivision Plan.
- _____ xxiii). The Minimum Building Land Area as described in Section 4.06 shall be delineated on each lot. The plans shall include all soil investigation results.

c. **Construction Plan and Profiles** _

When new roads or improvements of existing roads are involved in a subdivision, the Final Subdivision Plan shall be accompanied by complete Plan-Profiles of each such road drawn on a sheet, which shall be twenty-four by thirty-six inches (24" x 36") in size. The horizontal scale shall be a horizontal scale of one inch equals forty feet (1" = 40') and the vertical scale shall be one inch equals four feet (1" = 4'). The plan shall conform to Section 5 of the Subdivision Regulations. Such Plan-Profiles shall show:

- _____ i) Layout of street with centerline horizontal geometry in stations coordinated with the profile.
- _____ ii) Paved roadways, proposed signs, street trees, landscaped areas, guide rails, pavement striping, curbs, swales, sidewalks, bikepaths, street lighting, partial driveways, easements, partial lot lines, lot numbers, utilities with all invert and top of frame elevations.
- _____ iii) Lengths, slopes and types of pipe materials.
- _____ iv) Typical cross section of roadway.
- _____ v) Profile of roadway showing existing and finished grades, all tangent grades, and all vertical curve information.
- _____ vi) All catch basins and man holes and connecting pipes.
- _____ vii) By proper notation, location and elevations of bench marks, based on U.S.C.&G.S. datum. Provide at least one bench mark per plan profile sheet.
- _____ viii) Grades expressed as percentages.
- _____ ix) Data showing disposition of surface water, including, but not limited to, catch basins, plunge pools, swales, retention/detention basins, porous pavement, and the like; water and sanitary sewer pipes (if any), including sufficient data to permit checking of drainage designs; and the location of all associated easements or rights of way in favor of the Town or any public utility.
- _____ x) Typical cross-section of each road indicating location, dimensions and materials of proposed paved improvements and utilities.
- _____ xi) Location of street name, speed limit, stop, dead end, and other street signs..
- _____ xii) Certificate under seal of a Connecticut licensed professional engineer as to the adequacy of proposed public Improvements and that the Plan-Profiles are substantially correct.
- _____ xiii) Drainage system shall conform to Section 4.02.

SECTION 4.0 GENERAL REQUIREMENTS

4.01 SOIL EROSION AND SEDIMENT CONTROL PLAN FOR LAND DEVELOPMENT

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

The Soil Erosion and Sediment Control Plan (E&S Plan) is an integral part of the Subdivision Plan. For the purposes of review, certification, bonding and enforcement, the E&S Plan narrative and drawings should be developed so they can be separated from the overall site plan, as needed to facilitate their use. On small, non complex subdivisions of four lots or less, the E&S plan need not be separate if clarity of information is maintained.

The Commission, or its duly authorized representative, shall review these plans as submitted and shall take necessary steps to insure compliance by the developer with these plans as finally approved.

b) E&S Plan Checklist All Plans shall contain the information requested in the E&S checklist provided in the 2002 Guidelines for Soil Erosion and Sediment Control found in Chapter 3 and list underneath.

1. Narrative

- ___ 1.1 Purpose and description of project.
- ___ 1.2 Estimates of the total area of the project site and the total area of the site that is expected to be disturbed by construction activities.
- ___ 1.3 Identification of site-specific erosion or sediment control concerns and issues.
- ___ 1.4 The phases of development if more than one phase is planned.
- ___ 1.5 The planned start and completion dates for each phase of the project.
- ___ 1.6 Either provide or identify where in the E&S plan the following information is found:
 - ___ 1.6.1 the design criteria, construction details and maintenance program for the erosion and sediment control measures to be used.
 - ___ 1.6.2 the sequence of major operations within each phase, such as installation of erosion control measures, clearing, grubbing, excavation, grading, drainage and utility installation, temporary stabilization, removal of temporary erosion control measures
 - ___ 1.6.3 the time (in days) required for the major operations identified in the sequence
- ___ 1.7 Identify other possible local, state and federal permits required.
- ___ 1.8 Identify the conservation practices to be used.
- ___ 1.9 A listing of all other documents to be considered part of the E&S plan (e.g. reports of hydraulic and hydrologic computations, boring logs, test pit logs, soil reports, etc.)

2. Support Documents (as may be needed to support Engineering Designs)

___ 2.1 Hydraulic calculations

___ 2.1.1 Size and locations of existing and planned channels or waterways with design calculations and construction details.

___ 2.1.2 Existing peak flows with calculations

___ 2.1.3 Planned peak flows with calculations

___ 2.1.4 Changes in peak flows

___ 2.1.5 Off-site effects of increased peak flows or volumes

___ 2.1.6 Design calculations and construction details for engineered measures used to control off-site erosion caused by the project

___ 2.1.7 Design calculations and construction details for engineered measures used to control erosion below culverts and storm sewer outlets

___ 2.1.8 Design calculation and construction details for engineered measures used to control groundwater, i.e. seeps, high water table, etc.

___ 2.2 Boring logs, test pit logs, soils reports, etc.

___ 3.0 Site Drawing(s) Checklist

___ 3.1 Jurisdictional Features Required on All Maps or Drawings

___ 3.1.1 North arrow

___ 3.1.2 Scale (including graphical scale)

___ 3.1.3 A title block containing the name of the project, the author of the map or drawing, the owner of record for the project, date of drawing creation and any revision dates

___ 3.1.4 Property lines

___ 3.1.5 Legend identifying the symbols used

___ 3.1.6 For plans containing E&S measures which require an engineered design, the signature and seal of a professional engineer licensed to practice in Connecticut

___ 3.2 Site Locus Map

___ 3.2.1 Scale (1"= 1000' recommended)

___ 3.2.2 Project location (show property boundaries and at least the area that is within 1000 feet of the property boundaries)

___ 3.2.3 Roads, streets/buildings

___ 3.2.4 Major drainage ways (at least named watercourses)

___ 3.2.5 Identification of any public drinking water supply watershed area

___ 3.3 Topography, Natural Features and Regulatory Boundaries

___ 3.3.1 Existing contours (2 foot intervals)

___ 3.3.2 Planned grades and elevations

___ 3.3.4 Limits of cuts and/or fills

___ 3.3.5 Soils, bedrock

___ 3.3.6 Seeps, springs

___ 3.3.7 Inland wetlands boundaries

- _____ 3.3.8 FEMA identified floodplains, floodways and State established stream channel encroachment lines
- _____ 3.3.9 Streams, lakes, ponds, drainage ways, dams
- _____ 3.3.10 Existing vegetation
- _____ 3.3.11 Tidal wetland boundaries and coastal resource limits (e.g. mean high water, shellfish beds, submerged aquatic vegetation)
- _____ 3.3.12 Public water supply watershed, well heads or aquifer boundaries (when available)

- _____ 3.4 Drainage Patterns
 - _____ 3.4.1 Existing and planned drainage patterns (including off-site areas)
 - _____ 3.4.2 Size of drainage areas
 - _____ 3.4.3 Size and location of culverts and storm sewers (existing and planned)
 - _____ 3.4.4 Size and location of existing and planned channels or waterways
 - _____ 3.4.5 Major land uses of surrounding areas

- _____ 3.5 Road and Utility Systems
 - _____ 3.5.1 Planned and existing roads and buildings with their location and elevations
 - _____ 3.5.2 Access roads: temporary and permanent
 - _____ 3.5.3 Location of existing and planned septic systems
 - _____ 3.5.4 Location and size of existing and planned sanitary sewers
 - _____ 3.5.5 Location of other existing and planned utilities, telephone, electric, gas, drinking water wells, etc.

- _____ 3.6 Clearing, Grading, Vegetation Stabilization
 - _____ 3.6.1 Areas to be cleared, and sequence of clearing
 - _____ 3.6.2 Disposal of cleared material (off-site and on-site)
 - _____ 3.6.3 Areas to be excavated or graded, and sequence of grading or excavation
 - _____ 3.6.4 Areas and acreage to be stabilized with vegetation (Temporary and/or permanent)
 - _____ 3.6.5 Planned vegetation with details of plants, seed, mulch, fertilizer, planting dates, etc.

- _____ 4. Erosion & Sediment Control Drawings
 - _____ 4.1 Location of E&S measure on site plan drawing with appropriate symbols
 - _____ 4.2 Construction drawings and specifications for measures
 - _____ 4.3 Maintenance requirements of measures during construction of project
 - _____ 4.4 Person [name and 24-hour telephone number] responsible for maintenance during construction of project and statement that such information shall be updated within 24 hours of any change and designation.

____ 4.5 Maintenance requirements of permanent measures after project completion

____ 4.6 Handling of emergency situations (e.g. severe flooding, rains or other environmental problems).

____ 4.7 If not provided in the narrative, the information listed in checklist paragraph 1.6 (see narrative heading)

____ c. The estimated costs of measures required to control soil erosion and sedimentation, as specified in the certified plan shall be submitted as part of the application. Measures to be taken to control erosion and sedimentation shall be described and provided for in the construction agreement and the estimated cost of accomplishing such measures shall be covered in a Bond or other assurances acceptable to the Commission.

4.02 STORMWATER MANAGEMENT

4.02.4 Stormwater Management Plan Requirements

The stormwater management plan shall include:

a. Calculations: Hydrologic and hydraulic design calculations for the pre-development and post-development conditions for the design storms specified in the DEP Stormwater Design Manual (i.e., 2, 10, 25 & 100-yr storm). Such calculations shall include, at a minimum:

- ___ i. Description of the design storm frequency, intensity and duration,
- ___ ii. Time of concentration and travel time.
- ___ iii. Soil Curve Numbers or runoff coefficients.
- ___ iv. Peak runoff rates and total runoff volumes for each watershed area.
- ___ v. Infiltration rates, where applicable, as determined by field testing of hydraulic conductivity.
- ___ vi. Culvert capacities.
- ___ vii. Flow velocities.
- ___ viii. Data on the increase in rate and volume of runoff for the design storms referenced in the DEP Stormwater Design Manual.
- ___ ix. Water surface elevations showing methodologies used and supporting calculations.
- ___ x. Stage-discharge curves, outlet rating curves and inflow and outflow hydrographs for storage facilities (e.g., stormwater ponds and wetlands).
- ___ xi. Hydrologic and hydraulic analysis for all structural components of stormwater system (e.g., storm drains, open channels, swales, management practices, etc.) for applicable design storms including final analysis of potential downstream effects of project, where necessary.
- ___ xii. Documentation of sources for all computation methods and field test results.

___ b. Soils Information: If a stormwater management control measure depends on the hydrologic properties of soils (e.g., infiltration basins), then a soils report must be submitted. The soils report must be based upon on-site boring logs or soil pit profiles. The number and location of required soil borings or soil sites must be determined based on what is needed to determine the suitability and distribution of soil types present at the location of the control measure. If infiltration is to be part of the stormwater management plan, then field testing of hydraulic conductivity is required.

___ c. Maintenance and Repair Plan: The design and planning of all stormwater management facilities shall include detailed maintenance and repair procedures to ensure their continued function. These plans will identify the parts or components of a stormwater management facility that need to be maintained and the equipment and skills or training necessary.

___ d. Landscaping plan: The applicant must present a detailed plan for planting of vegetation at the site after construction is finished.

___ e. Maps and plans: The applicant must depict the stormwater management on the supplemental plans (scale of 1" = 40' or greater detail). Such plans must illustrate, in addition to the mapping requirements cited in Section 3, at a minimum:

- ___ i. Perennial and intermittent streams.
- ___ ii. Location and boundaries of resource protection areas such as wetlands, lakes, ponds, and other setbacks (e.g., stream buffers, drinking water well setbacks, septic setbacks)
- ___ iii. Location of existing and proposed conveyance systems such as grass channels, swales, and storm drains.
- ___ iv. Flow paths.
- ___ v. Location of floodplain and floodway limits.
- ___ vi. Location and dimensions of proposed channel modifications, such as bridge or culvert crossings.
- ___ vii. Location, size, maintenance access, and limits of disturbance of proposed structural stormwater management practices.
- ___ viii. Representative cross-section and profile drawings and details of structural stormwater management practices and conveyances (i.e., storm drains, open channels, swales, etc.) which include existing and proposed structural elevations (e.g., invert of pipes, manholes, etc.) and design water surface elevations.
- ___ ix. Structural details of outlet structures, embankments, spillways, stilling basins, grade control structures, conveyance channels, etc.

4.04 CERTIFICATION BY TOWN SANITARIAN

Test pits and percolation tests shall be performed in accordance with Section 19-13-B103e(d) Site Investigation, of the Connecticut Public Health Code (as amended), and inspected by the Town Sanitarian. The location of test pits and percolation tests shall be in accordance with Section 19-13-B103e(e) (as amended).

All test pit data shall be shown on all subdivision/resubdivision maps and filed and recorded. The data shall be certified by the Town Sanitarian.

A signature box shall contain the following words:

CERTIFICATION BY THE TOWN SANITARIAN.

I HERE-BY CERTIFY THAT ALL LOTS ON THIS MAP MAY HAVE SEPTIC SYSTEMS

AND WELLS AT LOCATIONS SHOWN. THE FOLLOWING LOTS, IF ANY, SHALL HAVE

ENGINEERED DESIGNED SYSTEMS _____.

DISTRICT SANITARIAN _____ DATE _____.

____ 4.06 MINIMUM BUILDABLE LAND REQUIREMENTS
Scope of Requirement

No proposed plan of a new Subdivision in any district except the R1/2, C/B/IG, and C3 districts shall hereafter be approved unless the proposed lots equal or exceed the minimum size, width, and criteria requirements set forth in the various districts of these Regulations except as may otherwise be specifically provided in a Conservation Subdivision. Each proposed lot shall include an area of minimum buildable land which complies with all of the criteria as defined in the section below. Lots constructed in the past that have not met these requirements have demonstrated undesirable effects such as unnecessary and excessive blasting, flooded basements, ground water management problems, stormwater management issues, questionable long term septic viability, ground water contamination, and erosion control problems. Additional testing in the field may be required as directed by the Town of East Haddam representative to verify compliance with the Minimum Buildable Land Area.

Minimum Criteria of Buildable Land Each lot shall meet the following criteria:

- (a) In the R2 and R4 Districts an area of at least 3/4 acre (32,670 square feet) shall be delineated, having at least four sides with the shortest side being no less than 130 linear feet. The shape of such an area shall generally resemble a rectangle, pentagon or other like geometric figure. In the R & R1 District an area of at least 2/3 acre (28,750 square feet) shall be delineated, having at least four sides with the shortest side being no less than 115 linear feet. The shape of such an area shall generally resemble a rectangle, pentagon or other like geometric figure. (Hereinafter the "MBL Area")
- (b) Within the MBL Area, naturally occurring topography not exceeding twenty percent (20%) slope in grade, as measured in 40 foot increments throughout the MBL Area. Topography exceeding 20% slope shall only be permitted to comprise 20% of the MBL Area. Areas exceeding twenty percent (20%) slope shall be shaded on the proposed plans.
- (c) Lots where testing indicates that there is less than twenty four inches (24") of naturally occurring soil to ground water shall not to be included in the MBL Area.
- (d) Ledge rock no higher than four (4) feet below the natural ground surface as observed during soil testing shall not be included in the MBL Area..
- (e) No Inland or Tidal Wetlands or Watercourses, determined by a professional soils scientist, who is certified by the Society of Soils Scientists of Southern New England or Regulated Areas as defined by the East Haddam Inland Wetlands and Watercourses Commission, shall be contained in the MBL Area.
- (f) No MBL Area shall contain areas of vehicular travel easements, right of ways, utilities, drainage easement areas, restrictive cutting easements or conservation easements used a in lieu of Stormwater Management, and other easements for public or private facilities.

_____ 4.07 INLAND WETLANDS AND WATERCOURSES COMMISSION

No application for Subdivision shall be deemed complete without the submission of a certified copy of the motion for approval or report as issued by the East Haddam Inland Wetlands and Watercourses Commission. Any plans submitted to the Planning and Zoning Commission shall conform, in all relevant respects, to those plans submitted to the Inland Wetlands and Watercourses Commission as the same were approved, or modified and approved, by said Commission.

_____ 4.08 PASSIVE SOLAR ENERGY TECHNIQUES

_____ 4.09 OPEN SPACES AND RECREATIONAL AREAS

_____ 4.10 STREAMBELT RESERVATIONS

The applicant shall delineate a streambelt along any watercourses passing through the property to be subdivided. The streambelt shall be established in accordance with the publication of the "Streambelt Map", dated April 1973, and on file at the Town Clerks Office and the Zoning Office.

_____ 4.11 GROUNDWATER MANAGEMENT PLAN

_____ 4.12 FIELD REVIEW BY COMMISSION

The Commission may request that all proposed roadway centerline, lot lines, house sites, septic areas, wetland borders and locations of all major drainage facilities be staked in the field by the developer's engineer or surveyor to permit the Commission to view the proposed locations. The centerline shall be staked every one hundred (100) feet and the stakes shall show the roadway station.

N/A 4.13 REQUIREMENT OF AFFORDABLE HOUSING Reserve

_____ 4.14 TREES, SOIL REMOVAL AND ROADS

_____ 4.15 PEDESTRIAN WALKWAYS / BIKEWAYS

_____ 4.16 SITES OF HISTORICAL, CULTURAL, AND ARCHEOLOGICAL SIGNIFICANCE

_____ 4.17 STONE WALLS AND FOUNDATIONS

_____ 4.18 RURAL, RESIDENTIAL, & AGRICULTURAL BUFFER AREAS

_____ 4.19 FIRE PROTECTION

_____ 4.20 **PUBLIC NOTICE**

a) Notice to Adjoining Owner The applicant shall notify all owner(s) of parcel(s) (as recorded on the last completed Grand List of the Town of East Haddam) within a distance of one hundred (100) feet from any boundary of said parcel(s) effected. Notification shall be in writing, certified mail return receipts requested, not less than fourteen (14) days prior to said hearing. No notice shall be required for the continuation of a public hearing once it has been open.

b) Posting of Sign No less than ten (10) days prior to the opening of any public hearing, the applicant shall post a sign on the property which is the subject of any application for subdivision. The face of the sign shall be provided with the following information in the following format;

NOTICE OF PUBLIC HEARING

SUBDIVISION APPLICATION

DATE OF HEARING

TIME

LOCATION

EAST HADDAM PLANNING & ZONING COMMISSION APP. #

It shall be the obligation of the Applicant to post such sign on the property in a location which is plainly visible from the nearest public street (or streets where applicable), and to maintain the sign until the opening of the public hearing. The sign shall be four (4) feet by four (4) feet in size. Lettering shall be clearly visible from the street. No sign need be posted for the continuation of a public hearing once it has opened. Signs are to be removed within seven days after the closing of the public hearing.

SECTION 7 - WAIVER

The Commission recognizes that each parcel of property is unique in location, dimensions, orientation, topography, etc., and the various factors in the design of subdivisions are variable with relation to each other and to the above characteristics of the property. Therefore, in accordance with Connecticut General Statutes Section 8-26, the Commission may modify or waive, subject to appropriate conditions, such requirements as is in its judgment of the special circumstances and conditions, that are not requisite to the interest of public health, safety and general welfare. Please review Section 7 Waiver of the Subdivision regulations.

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