

TOWN OF GREENLAND, NH



SUBDIVISION REGULATIONS

[Adopted July 10, 1987]

[Amended 02.07.2008, 12.14.2014, 02.23.2015, 03.19.2015, 04.16]

Table of Contents – Subdivision Regulations

Record of Amendments..... 1-3

Section I – General Provisions 4-8

 1.1 – Authority..... 4

 1.2 – Title 4

 1.3 – Jurisdiction..... 4

 1.4 – Purposes 4-5

 1.5 – Definitions 5-8

Section II – Procedures for Subdivision Approval 9-17

 2.1 – General Requirements..... 9

 2.2 – Preliminary Consultation 9-11

 2.3 – Formal Application Preview Process 11-17

 2.3.9 – *Addendum B – Phasing and Cluster Guidelines*..... 16-17

 2.4 – Minor Subdivision Approval 17

 2.5 – Plats for Recording Purposes Only 17

Section III – Data Required for Submission of a Subdivision 18-23

 3.1 - General 18

 3.2 – Professional Standards 18

 3.3 – Required Exhibits 18-23

Section IV – General Principles and Design & Construction Standards..... 24-42

 4.1 – Overview 24

 4.2 – General Principles..... 24

 4.3 – Determination of Soil Type..... 25

 4.4 – Design Standards 25-35

 4.5 – Construction Standards 35-40

 4.6 – Parking Requirements 40-42

Section V – Waiver Procedure 43

Section VI – Amendments 43

Section VII – Interpretation, Conflict, Separability 43

 7.1 – Interpretation 43

 7.2 – Conflict..... 43

 7.3 – Separability 43

Section VIII – Effective Date 44

Addendum A – Road Design and Construction Specifications 45-51

 Design Criteria Necessary..... 45

 First Public Hearing..... 45-46

 Private Road 46

 Construction Specifications 46

 Paving Asphalt Finish..... 47

 As Built Construction Plans..... 47

 Table I – Roadway Design Criteria..... 48

 Figure A – Typical Road Section..... 49

 Figure B – Typical Detail Paved “Bubble” Turn-Around 50

 Figure C – Typical Detail Reverse “P” Turn-Around..... 51

Addendum C – Storm Water Management & Erosion Control Plan Specifications 52-53

 Design Standards 52

 Completed Application Requirements 52-53

 Responsibility for Installation/Construction..... 53

Table of Contents – Subdivision Regulations

Addendum C – Storm Water Management & Erosion Control (continued)

Maintenance.....	54
Plan Approval and Review	54
Inspection	54
Other Required Permits.....	54
<i>Certified Copy</i>	55
<i>Inspection Report for Road Construction</i>	56
<i>Comprehensive Application</i>	57-67

RECORD OF AMENDMENTS

These Subdivision Regulations were adopted on July 10, 1987. Subsequent amendments are as follows:

MARCH 19, 2015	
3.3.2.1	Added to Site Plan Review & Subdivision Regs: Special Flood Hazard Areas
FEBRUARY 19, 2015	
2.3.6 e	Amended
DECEMBER 04, 2014	
3.3.4 c	Amended: Added Rainfall Estimates
3.3.4 n	Amended Graded of Streets
3.3.4 p	Amended Minimum Stopping Distances
4.4.7	Amended Performance and Maintenance Security
4.4.8 c	Amended Installation of Underground Utilities
4.4.10 d	Amended Base Course (Second Base Course)
4.4.10 h	Amended Curbing
Addendum A, I, C	Amended Contour Sheet
Addendum A, II	Amended First Public Hearing
Addendum A, II, M	Amended Pipe Structures
Addendum A, II, Q	Amended Under Drains
Addendum A, III, B	Amended Construction Instruction
Addendum A, IV, A, 5	Amended
Addendum A, IV, 7	Amended
Addendum A, IV, B	Amended
Addendum A, IV, B, 7	Amended
Addendum A, V, A	Amended
Addendum A, VI, H, 1	Amended
Table 1	Amended: Pavement Width, Local Res.
Table 1	Amended: Minimum Profile Grade (Elsewhere)—All
Table 1	Amended: Maximum Grade Within 75' of Intersection
Table 1	Amended: Minimum Stopping Sight Distance
MARCH 13, 2007; DECEMBER 19, 2006	
1.5.27	Amend "Street"
4.4.1	Amend Lot Configuration
4.4.1.1	Add Backlot Subdivision
4.6	Add Parking Requirements
JUNE 21, 2007	
1.5.12	Amend Frontage Definition
4.4.1 b	Amend Backlot Subdivision
Typical Section B	Amended
Typical Section C	Amended
Inspection Report for Road Construction	Amend Compact Gravel Base Course
OCTOBER 24, 2007	
Comprehensive Planning Board Application	Added to Subdivision and Site Plan Regulations

MAY 14 & 15, 2006	
1.5.1	Amend Abutter Definition
2.2	Amend Preliminary Consultation
2.3.2	Add Paragraph “D”, Exhibits Required at Time of Submission
2.3.24	Amend Paragraphs 2 & 3, Public Hearing and Notice
4.4.2	Amend Paragraphs 2 & 3, Under “a” Streets
End of Section	Add Applications
DECEMBER 19, 2006; MARCH 13, 2007	
1.5.27	Amend “Street”
4.4.1	Amend Lot Configuration
4.4.1.1	Add Backlot Subdivision
4.6	Add Parking Requirements
JANUARY 20, 2005	
1.5.8	Deed Definition
1.5.30	Warranty Deed
1.5.31	Wetlands Definitions
2.2.2	Documents
2.3.1	Submission Period
2.3.2 b	Exhibits Required at Time of Submission
2.3.6	Fees and Charges
2.3.6 d	Rockingham County Costs
2.3.6 e	Municipal Review Costs
3.2	Professional Standards
3.3.1	Change to Existing Conditions Plan
3.3.1 b	Existing Conditions Plan
3.3.1 d	Existing Conditions Plan
3.3.1 f	Existing Conditions Plan
3.3.4 k	Other Required Exhibits
4.3.1	Relationship Between Federal, State and Local Regulations
4.4.1	Lot Configuration
4.4.2.1	Street Names
4.4.5	Driveways
4.4.7	Performance and Maintenance Security
4.5.1 d	Base Course
4.5.1 e	Street Paving
Addendum A V B	Paving Asphalt Finish
Addendum A V C	Paving Asphalt Finish
Table 1	Road Design Criteria
APRIL 21, 2005	
Figure A	Typical Road Section
Application	Clarify Date of Submission
JANUARY 24, 2002	
Addendum A	Remove Figure ‘E’ – TYPICAL DETAIL “T” TURN AROUND (HAMMERHEAD CONFIGURATION); renumber remaining sections
MARCH 12, 2002	
4.4.10	On-Site Sewage Disposal Systems – Amend Paragraph “A”

JANUARY 18, 2001	
5.17	Fire Protection Cistern Requirements
OCTOBER 19, 2000	
IV, 4.4.5	Driveways
SEPTEMBER 30, 1999	
IV, A. III	Addendum A
IV, A. V	Addendum A
IV, B. 1	Addendum A
V, B	Addendum A
4.5.3	Add Inspections
AUGUST 21, 1997	
Revision to entire format and contents of subdivision regulations	
JULY 19, 1990	
IV.A	B.3, and B.8 (Plan Requirements)
V.E	Start of Road Construction
V.I	Minimum Street Radius
V.K	Utilities
V.R	Contiguous, Non-Wetland Soil
MAY 19, 1989	
VI.12	Flood Plain Delineation
JULY 08, 1988	
<i>Section</i>	<i>Description</i>
III.B.2.c	Application Fee
V.M	Septic System Requirements
V.O	Minimum Area for Non-Wetland Soil

SECTION I - GENERAL PROVISIONS

1.1 AUTHORITY

These regulations are adopted in accordance with the provisions of RSA 672 through 677 inclusive of the Revised Statutes Annotated as originally authorized by the Town Meeting.

1.2 TITLE

The regulations shall be known and may be cited as the "Subdivision Regulations, Town of Greenland, New Hampshire".

1.3 JURISDICTION

The provisions of these Regulations shall apply to all land within the boundaries of the Town of Greenland.

1.3.1 Subdivisions

No land shall be subdivided or lots conveyed or sold within the corporate limits of the municipality until:

- A) The Planning Board has given final approval of the subdivision plan after a public hearing and after the Chairperson of the Board has affixed his/her signature on the approved plan.
- B) The applicant has complied with all of these regulations including the posting of appropriate performance and/or guaranty bonds.
- C) The approved plan is filed with the Rockingham County Registry of Deeds.

1.3.2 Permits

No building or other permit shall be issued for any parcel or plat until an approved subdivision plan is presented to the Building Inspector by the applicant.

1.4 PURPOSES

The Regulations are adopted for the following purposes:

- A) To protect and provide for the public health, safety, and general welfare of the municipality.
- B) To guide the future growth and development of the municipality, in accordance with the Master Plan.
- C) To provide for adequate light, air, and privacy; to secure safety from fire, flood, and other danger; and to prevent overcrowding of the land and undue congestion of the population.
- D) To protect and conserve the value of land throughout the municipality and the value of buildings and improvements upon the land; and to minimize the conflicts among the uses of land and buildings.
- E) To provide adequate and efficient transportation, water, sewerage, schools, parks, playgrounds, recreation, and other public requirements and facilities.

- F) To provide for suitably located streets and/or access ways of sufficient width to accommodate existing and prospective traffic; to afford access for fire fighting equipment to buildings; and to be coordinated so as to compose a convenient and safe circulation system.
- G) To establish reasonable standards of design and procedures for subdivisions in order to further the orderly layout and use of land; and to insure proper legal descriptions and monumenting of subdivided land.
- H) To insure that public facilities are available and will have a sufficient capacity to serve proposed subdivisions.
- I) To prevent the pollution of air, streams, and ponds; to assure the adequacy of drainage facilities; to safeguard the water table; and to encourage the wise use and management of natural resources throughout the municipality in order to preserve the integrity, stability, and beauty of the community and the value of the land.
- J) To provide for open spaces through the most efficient design and layout of the land, while preserving the density of land as established in the Zoning Ordinance of the municipality.

1.5 DEFINITIONS

In general, words and terms used in these Regulations shall have their customary dictionary meanings or the same meanings as corresponding words and terms as defined in the Zoning Ordinance of the Town of Greenland. More specifically, certain words and terms are defined as follows:

- 1.5.1 Abutter:** As defined by RSA 672:3, this term shall mean any person whose property is located in New Hampshire and adjoins or is directly across the street or stream from the land under consideration by the local land use board. For purposes of receiving testimony only, and not for purposes of notification, the term "abutter" shall include any person who is able to demonstrate that his land will be directly affected by the proposal under consideration. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a condominium or other collective form of ownership, the term abutter means the officers of the collective or association, as defined in RSA 356-B:3, XXIII, and the owners of the individual condominium units. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a manufactured housing park form of ownership as defined in RSA 205-A:1, II, the term "abutter" includes the manufactured housing park owner and the tenants who own manufactured housing which adjoins or is directly across the street or stream from the land under consideration by the local land use board. (Amended 2006)
- 1.5.2 Applicant:** The person seeking approval of the subdivision whose name appears on the application form. Consent shall be required from the legal owner of the premises, if the owner is not the applicant.
- 1.5.3 Board:** The Planning Board of the Town of Greenland.
- 1.5.4 Bond:** Any form of security including a cash deposit, surety bond, collateral, property, or instrument of credit in an amount and form satisfactory to the Planning Board and the Board of Selectmen.
- 1.5.5 Community Wastewater System:** A non-municipal wastewater collection, treatment, and disposal system that serves an average of at least twenty-five (25) daily year-round or that has at least fifteen (15) service connections.

- 1.5.6** Community Water Supply: A non-municipal water supply system that serves an average of at least twenty-five (25) individuals daily year-round, or that has at least fifteen (15) service connections.
- 1.5.7** Cul-de-Sac: A local street with only one outlet and having an appropriate terminal for the safe and convenient reversal of traffic movement.
- 1.5.8** Deed: Unless otherwise specified by the Planning Board the term “Deed” in these Regulations shall refer to a Warranty Deed (see 1.5.30). (Added 2005)
- 1.5.9** Dead-end Street: A local street with only one outlet, with or without a "looped" roadway.
- 1.5.10** Dwelling Unit: One (1) or more rooms, including cooking facilities and sanitary facilities in a dwelling structure, designed as a unit for occupancy by not more than one (1) family for living and sleeping purposes.
- 1.5.11** Town Engineer: The duly designated engineer of the Town of Greenland; if there is no such official, the consultant assigned by the Greenland Planning Board.
- 1.5.12** Frontage: The length of the lot bordering on and providing access to a Class V (or better) highway but excluding limited or restricted access highways, or a street, as defined and as used in Title LXIV, Planning and Zoning, of the Revised Statutes Annotated, shown on a plat approved by the Planning Board. Footage requirements specified in Article IV, Dimensional Requirements, of this Ordinance shall be contiguous. In the case of corner lots, frontage and front lot lines shall mean the dimensions and lines on both intersecting streets. (Adopted 1995, Amended 2007)
- 1.5.13** Lot: A tract, plot, or portion of a subdivision or other parcel of land intended as a unit for the purpose, whether immediate or future, of transfer of ownership or for building development.
- 1.5.14** Master Plan: Any part or element of the overall plan for development of the Town adopted by the Planning Board, according to State law.
- 1.5.15** Minor Subdivision: A division of a lot, tract, or parcel of land which would create not more than three lots for building development purposes and which does not require the installation of any new public streets or proposals which do not involve the creation of lots for building development purposes.
- 1.5.16** Municipal Wastewater System: A wastewater collection, treatment, and disposal system that serves an average of at least twenty-five (25) individuals daily year-round or that has at least fifteen (15) service connections and that is owned and operated by a municipal or regional government.
- 1.5.17** Municipal Water Supply: A water supply system that serves an average of at least twenty-five (25) individuals daily year-round or that has at least fifteen (15) service connections and that is owned and operated by a municipal or regional government.
- 1.5.18** Person: Includes a firm, association, organization, partnership, trust, company, or corporation, as well as an individual.

- 1.5.19 Plan:** A plat or site plan on which required information is drawn for the purpose of review and approval by the Planning Board.
- 1.5.20 Plat:** The final map, drawing, or chart on which the subdivider's plan of the subdivision is presented to the Greenland Planning Board for approval and which, if approved, shall be submitted to the Registry of Deeds of Rockingham County for recording.
- 1.5.21 Professional Engineer:** A person qualified and dutifully licensed as a registered professional in the State of New Hampshire.
- 1.5.22 Qualified Soil Scientist:** A person qualified in soils classification who is recommended or approved by the Rockingham County Conservation District Board of Supervisors and who is licensed as a soil scientist in the State of New Hampshire.
- 1.5.23 Reserve Strip:** Any area of land which is intended for future public use for street construction or pedestrian ways.
- 1.5.24 Re-subdivision:** The division of an existing subdivision or any change of lot size or configuration therein or the relocation of any street or lot in a subdivision.
- 1.5.25 Slope:** The average steepness of the land surface under consideration. For the purpose of determining lot size categories, slope shall be determined by slope factors used by the U.S. Soil Conservation Service Soil Survey (National Cooperative Soil Survey) soils classification (where A = 0-3%; B = 3-8%; C = 8-15%; D = 15-25%; and E = 25%).
- 1.5.26 Soil Type:** As defined by the U.S. Soil Conservation Service, United States Department of Agriculture. For the purpose of this Regulation, soil type shall be determined by a soil scientist designated as qualified by the Rockingham County Conservation District.
- 1.5.27 Street:** Includes the following: (Amended 2007)
- A) Any highway, road or right-of-way which the State of New Hampshire or County of Rockingham has any obligation to maintain;
 - B) Any highway, road or right-of-way dedicated to and accepted by the Town of Greenland;
 - C) Any highway, road or right-of-way whether or not formally accepted by the Town, which by traveled use or other appropriate circumstances has become a Town road by the Town's recognition of a duty to regularly maintain such highway or right-of-way;
- Shall not include:
- A) Any existing public highway, road or right-of-way which shall have been discontinued as an open highway, or made subject to gates and bars, or which shall not have been maintained and repaired by the Town in suitable condition for travel thereon for five (5) successive years or more.
- 1.5.28 Subdivider:** A subdivider is an individual or any legal entity or agent therefore that undertakes the activities governed by these Regulations. The term shall also include the terms "builder"

and "developer" even though the persons so designated may be involved in successive stages of the subdivision.

1.5.29 Subdivision: The division of a lot, tract, or parcel of land into two or more lots, plats, sites, or other divisions of land for the purpose, whether immediate or future, of sale, rent, lease, condominium conveyance, or building development. It includes re-subdivision, and when appropriate to the context, relates to the process of subdividing or to the land or territory subdivided. The division of a parcel of land held in common and subsequently divided into parts among the several owners shall be deemed a subdivision under this chapter.

1.5.30 Warranty Deed: A deed in substance following the form appended to this section shall, when duly executed and delivered, have the force and effect of a deed in fee simple to the grantee, heirs, successors and assigns, to his and their own use, with covenant on the part of the grantor, for himself, his heirs, executors and administrators, that, at the time of the delivery of such deed, he was lawfully seized in fee simple of the granted premises, that the said premises were free from all encumbrances, except as stated, that he had good right to sell and convey the same to the grantee, his heirs, successors and assigns, and that he will, and his heirs, executors, and administrators shall, warrant and defend the same to the grantee and his heirs, successors and assigns, against the lawful claims and demands of all persons (RSA 477:27). (Added 2005)

1.5.31 Wetlands: Wetlands means an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal conditions does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

The location of wetland boundary in any particular case must be determined through onsite inspection by a New Hampshire certified wetland scientist.

Areas considered with the same protections as wetlands shall include poorly and very poorly drained soils, and the borders of tidal marshes of the Winnicut River and Great Bay. Said borders are hereby defined as those areas adjacent to the Winnicut River and Great Bay with elevations of eight (8) feet or less above mean sea level (National Geodetic Vertical Datum of 1929). (Amended 2005)

SECTION II - PROCEDURES FOR SUBDIVISION APPROVAL

2.1 GENERAL REQUIREMENTS

2.1.1 Subdivision Plats

Approval by the Planning Board is required before the land may be divided and sold, leased or otherwise conveyed or offered by sale, lease, or conveyance, including condominium conveyance.

2.1.2 Subdivision Permits and Site Plans

- A) In all cases where any amendment of any such subdivision plat is proposed, the applicant must also secure the approval of the amendment from the Planning Board.
- B) No building permit may be issued for the construction or alteration of any building or structure within the purview of these Regulations until an approved subdivision plat or amendments thereto have been secured by the applicant and presented to the Building Inspector. The Planning Board shall certify on each subdivision plat or amendments thereto whether or not the plat meets the requirements of these regulations and other regulations and ordinances of the Town of Greenland.
- C) In cases where the applicant intends to seek relief from the Zoning Ordinance, the applicant should coordinate with the Planning Board, the Building Inspector/Zoning Officer, the Planning Consultant and/or the Zoning Board of Adjustment on determining the needs of the applicant and in the scheduling of hearings before the necessary Boards. The Planning Board is available to provide guidance and formulate findings as needed, prior to any hearing before the Zoning Board of Adjustment.

2.2 PRELIMINARY CONSULTATION (Amended 2006)

The Board requires the applicant to submit materials for a Preliminary Conceptual Consultation Review or a Preliminary Design Review. In accordance with RSA 674: 4, time limits for acting on a submitted application shall not commence until a formal application is submitted and the appropriate preliminary review phase has been completed. An individual who anticipates submitting a formal application for subdivision approval is required to consult with the Planning Board prior to submission of the formal application and supporting documentation.

2.2.1 Purposes of the Consultation

The purpose of the consultation is to familiarize the Planning Board with the basic concept of the proposed subdivision.

The consultation is further designed to acquaint the potential applicant with the formal application process and particular information that the Board may request, to suggest methods for resolving possible problems in the development, design and layout, and to make the potential applicant aware of the recommendations in the Master Plan (if applicable) to the property in question.

2.2.2 Preliminary Conceptual Consultation

The Board requires the applicant to submit to a Preliminary Conceptual Consultation when the proposed subdivision will not require a new public or private road. The Board and the applicant will discuss proposals in conceptual form only and in general terms, such as desirability of types of development and proposals under the master plan.

- A) The Board may not discuss road layouts, specific parcels of land, or specific designs.
- B) Such discussion may occur without the necessity of giving formal public notice, but such discussions may occur only at formal meetings of the Board.
- C) It shall be the Board's practice to hear such discussions during the monthly meeting reserved for public hearings, and not during the monthly meeting reserved for work sessions.
- D) Such consultation shall not bind either the applicant or Board. Statements made by Planning Board members shall not be the basis for disqualifying said members or invalidating any action taken.

2.2.3 Preliminary Design Review (Notice Required)

The Board requires the applicant to submit to a Preliminary Design Review when a proposed subdivision will require a new public or private road. The Board and the applicant will engage in non-binding discussions beyond conceptual and general discussions which involve more specific design and engineering details.

- A) The design review phase may proceed only after identification of and notice to abutters, holders of conservation, preservation, or agricultural preservation restrictions, and the general public. Such discussion may occur only at formal meetings of the Board.
- B) The applicant shall be required to cover the costs of notice to such parties and review and processing by the Town's Planning Consultant and Administrative Assistant to the Planning Board through reasonable fees as determined by the Planning Board.
- C) Such consultation shall not bind either the applicant or Board. Statements made by Planning Board members shall not bind either the applicant or Board, and shall not be the basis for disqualifying said members or invalidating any action taken.

2.2.3.1 Documents Required for Preliminary Design Review

In order to facilitate discussion, the potential applicant is required to prepare a base map of the property to be subdivided. The base map should be drawn to scale and should be drawn in ink. The proposed subdivision should be drawn on the base map. Dimensions may be approximate. The data may be tentative, but all information shall be sufficiently clear to illustrate all conditions and the proposed subdivision and/or development of the property.

The following information or data is requested to be submitted for Preliminary Design Review by the Planning Board:

- A) General description of existing conditions on the site including characteristics of the land, topography, vegetation, and similar features.
- B) General description of available community facilities and utilities.
- C) General description of the lots to be created, including their size and dimensions, and a general use plan for the subdivision.
- D) A topographic map (print, thereof) of the site showing in sketch form the proposed layout of streets, lots, and other features in relation to existing conditions and/or the location of other site development features. Wetlands shall also be delineated on this topographic map.

2.2.4 Limits of the Review

- A) The Planning Board shall conduct the Preliminary Consultation at a regularly scheduled meeting of the Board.
- B) The applicant will make a presentation defining the general scope and concept of the subdivision and/or development and how the land will be divided and/or used.
- C) Any documents presented to the Board will be made a part of the record for future reference purposes.
- D) Neither the applicant nor the Planning Board shall be bound by the discussions. However, the Planning Board shall be entitled to make recommendations with respect to the material presented to assist the applicant in preparing a formal application that will meet the development standards of the Town as expressed in these regulations and in other ordinances and/or regulations. The Planning Board shall enter into the minutes and shall communicate to the applicant in writing any suggestions, recommendations, or other factors that the Board finds prudent and necessary.

2.3 FORMAL APPLICATION REVIEW PROCESS

Whether or not a Preliminary Consultation has been conducted, an applicant shall prepare and submit an application for subdivision approval in accordance with and to the standards set forth in these regulations.

This formal review process is designed to afford the Planning Board, the applicant, abutters, and parties in interest a clearly delineated method for examining the proposed subdivision plan thus allowing the Planning Board to make a timely and informed decision on the proposal.

2.3.1 Submission Period

An application for subdivision approval shall be submitted to the Town Office, c/o Chairperson of the Planning Board, at least twenty-one (21) full days in advance of a regularly scheduled Planning Board meeting (this being the Wednesday three weeks prior to the regularly scheduled Planning Board meeting on the third Thursday of the month). The application form and the supporting exhibits required are set forth in Section 2.3.2 of these regulations. (Amended 2005)

2.3.2 Exhibits Required at Time of Submission

The applicant shall submit the following information when a formal application is made for subdivision approval. The Planning Board shall not determine whether or not the application is complete until it reviews all of the documents at its next regularly scheduled meeting.

- A) A completed form entitled: "Comprehensive Application - Subdivision of Land." Forms may be obtained from the Town Office or on the Town website (greenland-nh.com).
- B) A list of the names and addresses of all abutters obtained from the Town records. Three (3) sets of computer generated or typed mailing labels, with the abutter's names and addresses, will be submitted as part of the application. (Amended 2005)
- C) Five complete sets of black line or blue line prints of all subdivision plat plans drawn to scale (except in the case of a very large subdivision, generally a scale of not more than 50 feet to the inch), prepared under the supervision of and stamped by a registered land surveyor licensed to practice in New Hampshire; roadway, drainage and all utility plans prepared and stamped by a professional engineer licensed to practice in New Hampshire.

The information to be contained in and standards to be followed for the preparation of these plans are set forth in Section 3 of these regulations.

- D) Ten (10) sets of 11" x 17" complete plans suitable for Board Member review. (2006, 2015)
- E) Data on test pits and percolation tests including: location of test pits, percolation test date and rate, certification of test witness, and outline of area reserved for leach fields.
- F) Any supporting documentation necessary to explain the proposal to the Planning Board, abutters, and the general public.

2.3.3 Planning Board Responsibilities in Initial Processing

The Planning Board will accept the exhibit materials specified in Section 2.3.2 and determine its completeness at its next regularly scheduled meeting.

- A) The Board, at least ten days in advance of the meeting, shall mail notice to the applicant and abutters stating that an application for subdivision approval has been filed. The notice will contain the following:
 - 1. Name and address of the applicant.
 - 2. The location of the proposed subdivision proposal.
 - 3. A general description of the proposed project.
- B) The Planning Board will also post the information contained in Section 2.3.3 (a) in the Town Offices.
- C) At the regularly scheduled meeting the Planning Board will:
 - 1. Review the application for completeness and determine its acceptability for further processing.

2. Advise the applicant of additional information that may be needed to process or evaluate the application. At that time, if a waiver from these regulations is desired by the applicant, a written waiver request needs to be submitted to the Board.
 3. Advise the applicant of the administrative fees, notice fees, and other reasonable charges that may be required for the application. The applicant shall pay these fees at the meeting, unless alternative arrangements are allowed by the Board. If the fees are not paid, the Board may discontinue further consideration of the application.
 4. Set the date for a public hearing on the application.
 5. Determine the need for special investigative studies and advise the applicant of the time and the need for financial support from the applicant.
 6. Notify the applicant verbally at the meeting and confirm in writing if the application is formally accepted for evaluation. The date of the formal acceptance shall be used for calculating the time period for decision by the Board.
- D) The Planning Board will begin formal consideration of the application within 30 days of this regularly scheduled meeting providing that the application is determined to be complete in full compliance with these regulations. If not complete, the Planning Board will advise the applicant of what information is needed to complete the application package and when it will next be considered by the Board.
- E) The Planning Board will arrange with the applicant for an inspection of the site by the Board, a committee or a member of the Board, or a Town employee appointed for said purpose by the Chairperson (if determined by the Board to be necessary or desirable). Abutters shall be notified at the hearing of such inspection and shall be permitted to attend.

2.3.4 Public Hearing and Notice

The Planning Board, before taking action on a subdivision plat, shall hold at least one public hearing thereon. The Planning Board shall take testimony from the applicant, abutters, and parties in interest to the proposal either in person or in writing.

The applicant and abutters shall be notified of the public hearing and the time and place of such hearing by certified mail, not less than ten (10) days before the date fixed for the hearing. These ten (10) days do not include the day of publication or the day of the public hearing. (Amended 2006)

In addition, notice to the general public of the public hearing shall be posted in the Town Offices and U.S. Postal Office in Greenland at least ten (10) days before the date fixed for the hearing. These ten (10) days do not include the day of publication or the day of the public hearing. (Amended 2006)

The notice to the applicant, abutters, and general public shall contain the information as specified in Section 2.3.3 (a) 1, 2, and 3.

2.3.5 Concurrent and Joint Hearings

The Planning Board may hold a hearing on a subdivision plat or for a site plan in conjunction with each other if both are required for a project. A hearing for either by the Planning Board may be held at the same time and place that a hearing for a special exception or variance is held for the project by the Board of Adjustment, provided that such a hearing is mutually agreed upon in advance by the Boards.

2.3.6 Fees and Charges

The applicant shall pay the following fees and charges as are applicable. Administrative Costs (a) and Notice Costs (b) will be paid with a single check made out to the Town of Greenland. (Amended 2005)

- A) Administrative Costs: See Fee Schedule Worksheet following applicable application.
- B) Notice Costs: The applicant shall pay abutter notice and per applicant for the costs of all notice requirements including reproduction costs and any publication and/or posting costs. See Fee Schedule Worksheet following applicable application. (Amended 4/15/99, and Amended 2002)
- C) Special Investigative Costs: The Planning Board may require the applicant to pay reasonable costs of special investigative studies which may be necessary for the Planning Board to evaluate properly the impact of a proposed subdivision.
- D) Rockingham County Costs: The applicant shall prepare two checks payable to the Rockingham County Registry of Deeds for submission to Rockingham County after the subdivision has been approved. The amounts shall be determined by Rockingham County at the time of submission. Checks and mylar shall be submitted to the Code Enforcement Officer. It will be the responsibility of the Town to record all approved plans. (Amended 2005)
- E) Municipal Review Costs (Amended 2005, 2015): The Board will require the applicant to pay the cost of having duly appointed agents of the municipality review a submitted plan. The Board shall require the applicant to set up an escrow account for the paying of these costs. The cost of such review shall be determined by the Planning Board or its designated agent. Such costs may be encountered in the following instances:
 - 1. Witnessing of test pits by an agent designated by the Planning Board.
 - 2. Review of roadway design, drainage and storm water management, and erosion and sediment control plans by an agent appointed by the Planning Board.
 - 3. Periodic construction inspections and/or tests, including but not limited to: soil compaction tests, sieve tests, and other applicable or required construction related reviews undertaken by the Planning Board's engineer or agent.
 - 4. In accordance with RSA 676:4 I,(g), the Board shall also require an applicant to reimburse the Town for expenses incurred by the Circuit Rider/Planner, including but not limited to time spent for technical review of plans, meetings with the applicant subsequent to application, and other reasonable expenses directly accountable to the particular application. The rate shall reflect the current hourly rate charged for this service; however, no fee shall be charged for time spent in meetings during contracted office hours or the first 2 hours of review of an application submitted to the Board. The amount of this fee will vary according to the particular aspects of any application. The Circuit Rider/Planner shall provide a detailed accounting of the time spent reviewing an application to the Town for purposes of proper billing to the appropriate escrow account. The collection and disbursement of such funds shall adhere to RSA 676:4-b (Third Party Review and Inspection), including the applicant's ability to obtain copies of all documentation relative to charges, documentation of all inspections and the prompt reporting of any defects found during inspections.

2.3.7 Time for Approval/Disapproval

The Board shall act to approve or disapprove a subdivision plan within sixty-five (65) days of the formal acceptance as determined in Section 2.3.3 (c) (6).

In the event that defects found in the subdivision can be remedied, the disapproval shall be "without prejudice" and a revised application may be submitted at any time. If a revised application is submitted after a vote of disapproval, it shall be treated as a new application and shall follow the same procedures spelled out in these regulations.

The Planning Board may apply to the Board of Selectmen for an extension not to exceed ninety (90) days before acting to approve or disapprove an application. The applicant may waive the requirement for Planning Board action within the time periods specified and consent to such extension as may be mutually agreeable.

Upon failure of the Planning Board to approve or disapprove within ninety (90) days (or within additional days, if granted by the Selectmen), the applicant may obtain from the Selectmen an order directing the Planning Board to act within fifteen (15) days.

Failure of the Planning Board to act upon such order shall constitute grounds for action in the Superior Court in accordance with RSA 676:4.

2.3.8 Decision of the Board

After the public hearing(s) at which testimony is presented by the applicant, abutters, and parties in interest, the Planning Board shall issue a decision on the application. The decision may be any one of the following:

- A) Conditional Approval - The Planning Board may grant conditional approval which shall become final upon certification to the Board that the applicant has satisfied the conditions imposed. Plans receiving conditional approval shall not be signed and recorded until the conditions imposed are met. Unless another timeframe has been approved by the Board, applicants shall comply with such conditions within ninety (90) days from the date of receiving conditional approval from the Board. Unless an extension is granted by the Board, plan approval shall lapse.
- B) Approval with Conditions - The Planning Board may attach reasonable conditions to an approval in order to ensure that the public interest is upheld. Such conditions may include, but are not limited to the following:
 - 1. The posting of a performance guarantee in an amount and under conditions satisfactory to the Planning Board.
 - 2. The execution of a written agreement stating the nature, conditions and time for performance of the approved application.
 - 3. The phasing of the subdivision approval providing that the portions approved and portions to be approved subsequently are clearly delineated on the documents to be filed with the Rockingham County Registry of Deeds.
 - 4. Payment of all outstanding consultant fees and bills.
 - 5. Any other conditions that the Planning Board finds necessary to secure the public interest.

- C) Disapproval without Prejudice - If the Planning Board finds that certain administrative/procedural requirements have not been met, but could be met with additional time, the Planning Board may disapprove the application without prejudice.

If such a finding is made, the Planning Board shall advise the applicant in writing what is necessary to correct the administrative/ procedural defect.

- D) Disapproval - If the Planning Board finds that the application does not meet the standards of these regulations, or fails to comply with other local or State laws, or will have an adverse impact on surrounding areas or the community, the Board may disapprove the application. In the event of disapproval, the grounds for disapproval shall be specified in the records of the Board and communicated to the applicant in writing.

2.3.9 Phasing

To insure that the rate of growth of the Town does not unreasonably interfere with the Town's capacity for planned, orderly, and sensible expansion of its services to accommodate such growth, the Planning Board at its sole discretion may require phasing of development projects, as provided in RSA 674:21.

- A) For any development project (single family, multi-family, cluster, or mixed) or more than eight family dwelling units, the Planning Board may require phasing for a period of up to five years. For a project larger than 50 units, the Planning Board is entitled to negotiate a longer period of phasing time, based on the size of the project and the potential impact on the Town and Town services.
- B) In order to insure equitable phasing, no developer shall circumvent the purposes of phasing by dividing a parcel of land into separate subdivision or separate forms or names of ownership.
- C) The phasing process will be at the subdivision or beginning part of the construction process. Once a phasing plan is approved by the Planning Board with dates of allowed construction in each phase, the approved plan displaying the phasing plan shall be signed by the Planning Board Chairman and filed with the Rockingham County Registry of Deeds. See Addendum B (Item "D" below). Any subdivision which proposes the use of temporary loop or cul-de-sac roads will be required to eliminate the temporary road construction upon progression to the next phase. If not already conveyed, the area of temporary cul-de-sac or looped road will revert to the abutting lot owner.

D) **ADDENDUM B:** Phasing and Cluster Guidelines

PHASING: The following phasing table is a guideline for developers in preparing for Planning Board action in reviewing subdivision proposals. The Planning Board, at its sole discretion, may modify these phasing requirements in either direction, if Town services are not reasonably abreast of the pace of development. Phasing program will be described on the mylar submitted to the Registry of Deeds.

Single and Two-Family Conventional Subdivision

Basic phasing program - maximum of ten (10) dwelling units per year (see table on next page)

QTY (Dwelling Units)	PHASING YEARS					
	1 st	2 nd	3 rd	4 th	5 th	6 th
10	10					
20	10	10				
30	10	10	10			
40	10	10	10	10		
50-75	Divide total number of units by six (6)					
75-100	Divide total number of units by seven (7)					
Over 100	Divide total number of units by eight (8)					

2.4 MINOR SUBDIVISION APPROVAL

Proposals involving minor subdivisions which create not more than three lots for building development purposes and which do not require the installation of any new public streets or proposals which do not involve the creation of lots for building development purposes may be submitted, reviewed and approved at one or more Board meetings subject to the following conditions.

2.4.1 Submission and Notice

An application for minor subdivision approval shall be submitted in the same manner as prescribed in Section 2.3.1 of these regulations.

Notice of such minor subdivision request will be given in the manner prescribed in Section 2.3.3 (a) and (b) of these regulations.

2.4.2 Public Hearing

A public hearing, with notice as provided in Section 2.3.4, shall be held if requested by the applicant or abutters anytime prior to approval or disapproval, or if the Planning Board determines to hold such public hearing.

2.4.3 Decision of the Board

With the exception of the expedited review procedures described above, the Board shall follow the same decision-making procedures specified for a regular subdivision and the applicant shall supply the same information (if applicable) prescribed therein.

2.5 PLATS FOR RECORDING PURPOSES ONLY

An owner of a lot of record, established before the granting of platting jurisdiction to the Planning Board, may present a surveyed plat of such lot at any regularly scheduled meeting of the Planning Board for signature by the Board.

The owner shall present a deed to the Board showing ownership and a description of the lot. The plat shall have the phrase "No Jurisdiction Taken" affixed thereon, together with a line for the signature of the Planning Board Chairperson immediately thereunder. The Planning Board may, at their discretion, sign the plat at the meeting or at a time certain after any needed investigative studies are completed.

SECTION III - DATA REQUIRED FOR SUBMISSION OF A SUBDIVISION

3.1 GENERAL

An applicant for subdivision approval shall submit the data, plans, exhibits, and/or documents, if applicable, as required by these regulations.

3.1.1 Application

The applicant shall submit a completed form indicating "Subdivision of Land".

3.1.2 Identifying Information

All plans shall contain the following information:

- A) Names, addresses, and telephone numbers of the owner, applicant, agent and/or engineer, architect, and/or land surveyor involved in the project
- B) Name of the project
- C) Location of the land/site together with the names and addresses of all owners of record of abutting properties
- D) Title, date, North arrow, and scale
- E) Tax map reference
- F) Zoning District

3.1.3 Sheet Size

All plans shall be presented only on the following sheet size: 22" x 34". The Planning Board requests that only one sheet size be used for the preparation of all plans.

3.2 PROFESSIONAL STANDARDS

Subdivision Plat Plans shall be stamped by a Licensed Land Surveyor. Plans of roadways, utilities, bridges and culverts, drainage and other construction plans shall be prepared and stamped by a Registered Professional Engineer in the State of New Hampshire. In specific cases, the Board may waive these requirements, at the sole discretion of the Planning Board. Subdivision Plans also require the stamp of a New Hampshire Certified Wetland Scientist, to verify the existence and location of wetlands, or lack of wetlands, unless granted a waiver from the Board. (Amended 2005)

3.3 REQUIRED EXHIBITS

The applicant or his/her agent shall submit the following exhibits.

3.3.1 Existing Conditions Plan (Amended 2005)

The purpose of this plan is to provide general information on the site, its existing conditions, and to provide the base data from which the subdivision will be designed. It may be prepared in ink and drawn to a convenient scale of not more than forty feet to the inch (except for the vicinity sketch) and shall show the following:

- A) A vicinity sketch, drawn to a scale not to exceed 1" = 1000', showing the location of the land/site in relation to the surrounding public street system and other pertinent locational features.
- B) A sketch of the site showing existing natural features including watercourses and waterbodies, wetlands, poorly and very poorly drained soils, tree lines, and other significant vegetative cover, topographic features, and any other features which are significant to the site design process. (Amended 2005)
- C) Existing contours at intervals not exceeding two feet with spot elevations provided when the grade is less than five percent
- D) Surveyed exterior property lines showing their bearings and distances and showing monument locations. The area in square feet or acres shall also be shown, for each parcel. (Amended 2005)
- E) The lines of existing abutting streets.
- F) The location, elevation, and layout of existing catch basins and other surface drainage features.
- G) The location and size of all utilities serving the land or site.
- H) All other features which would fully explain the existing conditions and future development of the land.

3.3.2 Subdivision Plan

The purpose of this plan is to illustrate the layout of the subdivision lots, rights-of-way, and other uses of land within the subdivision. It shall be prepared in ink on reproducible mylar, be suitable for filing with the Registry of Deeds, be prepared at a scale of not more than forty feet to the inch, and shall show the following:

- A) The location and dimensions of all boundary lines of the property to be expressed in feet and decimals of a foot.
- B) The location and width of all existing and proposed streets and easements, alleys, and other public ways, and easement and proposed street rights-of-ways and building set-back lines.
- C) The locations, dimensions, and areas of all proposed or existing lots, and the location and setback dimensions of existing structures within 100' of parcel to be subdivided. All septic disposal systems and wells within 200' of the site shall be shown.

2. All public utilities and facilities such as water, gas, electrical and water systems are located and constructed to minimize or eliminate flood damage; and
3. Adequate drainage is provided so as to reduce exposure to flood hazards.

3.3.3 Construction Plan

The purpose of this plan is to provide detailed information and layout of the improvements that will be constructed as part of the subdivision. For subdivision, information shall be provided in accordance with paragraphs (A) through (E). Plans shall be drawn in ink at a scale of no more than forty (40) feet to the inch and shall contain:

- A) Profiles showing existing and proposed elevations along center lines of all roads. Where a proposed road intersects an existing road or roads, the elevation along the center line of the existing road or roads within three hundred (300) feet of the intersection shall be shown. Radii of all curves, lengths of tangents, and central angles on all streets.
- B) Plans and profiles showing the locations and typical cross-section of street pavements including proposed grading, curbs and gutters, sidewalks, drainage easements, rights-of-way, manholes, and catch basins; the locations of street trees, street lighting standards, and street signs; the location, size and invert elevations of existing and proposed sanitary sewers, stormwater drains, and fire hydrants, showing connection to any existing or proposed utility systems; and exact location and size of all water, gas, or other underground utilities or structures.
- C) Location, size, elevation, and other appropriate description of any existing facilities or utilities, including, but not limited to, existing streets, septic disposal facilities, sewers, drains, water mains, wells, easements, waterbodies, streams, and other pertinent features, such as surface drainage areas, swamps, railroads, buildings, at the point of connection to proposed facilities and utilities within the subdivision. The water elevations of adjoining water bodies at the date of the survey, and the approximate high and low water elevations of such water bodies. Tidal areas and buffers required under the Shoreland Protection Act shall also be shown.
- D) Topography at the same scale as the sketch plat with a contour interval of two (2) feet, referred to sea-level datum. All datum provided shall be latest applicable U.S. Coast and Geodetic Survey datum and should be so noted on the plat.
- E) All specifications and references required by the local government's construction standards and specifications, including site-grading plan for the entire subdivision.

3.3.4 Other Required Exhibits

In order for the Planning Board to evaluate the subdivision proposal, the applicant is expected to supply, or the Planning Board may specifically require, the following information as appropriate.

- A) Draft of any protective covenants where the applicant proposes to regulate land use in the development or otherwise protect the proposed development.
- B) Warranty deeds conveying to the Town: streets, rights-of-way, and any sites for public use in fee simple, free from all encumbrances.

- C) Calculations specifying the quantity of stormwater run-off and a statement from the applicant's engineer certifying the adequacy of the proposed drainage facilities to handle such run-off. The drainage design for the property shall be prepared using Soil Conservation Service TR 20 or TR 55 as applicable. The 2, 10 and 25-year storm frequencies shall be provided. Rainfall estimates shall be based on NHDES Alteration of Terrain program accepted practices. (Amended 2014)
- D) Calculations on the type and quantity of sanitary waste generated and a statement from the engineer or licensed designer certifying that the proposed facilities will adequately handle the projected effluent.
- E) Itemized estimates on the costs of construction for the project, as proposed and approved. Said construction estimates shall be prepared, stamped and signed by a Licensed Professional Engineer licensed to practice by the State of New Hampshire. For security purposes, said estimates shall include a contingency for the project construction of a minimum of 10%. The Planning Board shall have the right to have this construction estimate reviewed and approved by an independent licensed professional engineer at the applicant's expense.
- F) Proposed Security for the Subdivision Construction. The applicant shall submit written documentation on the type of security being proposed for the construction of the project. Any legal documents shall be reviewed and approved by Town Counsel at the applicant's expense.
- G) Traffic Impact Analysis: All proposed commercial, industrial or residential development shall be reviewed by the Board to ascertain that adequate provisions have been made by the owner or his/her authorized agent for traffic safety. To facilitate this review, the Board may require the developer to provide a traffic impact analysis when deemed necessary by the Board due to the size, location or traffic-generating characteristic of the development. The traffic impact analysis shall address each of the following:
 1. Traffic circulation and access, including adequacy of adjacent streets and intersections, entrances and exits, traffic flow, sight distances, accident statistics, curb cuts, turning lanes, and existing or recommended traffic signalization.
 2. Pedestrian safety and access.
 3. Off-street parking and loading.
 4. Emergency vehicle access.
 5. Off-site improvements necessitated and to be constructed by the developer.
- H) Any other specific studies, requested by the Planning Board, reasonably required to evaluate the applicant's proposal.

The Planning Board may retain the services of a qualified consultant(s) to prepare and review any of the above specific studies, including the traffic analysis, and to ensure that adequate provisions are made in the development plan to reduce or eliminate any adverse impacts. The Board may further require, pursuant to RSA 676:4(g), that the developer reimburse the Town for reasonable costs of this review. No plan shall be approved until such fees, if applicable, are paid in full.

- I) All necessary State and local permits.
- J) Written comments and/or sign-off from the applicable Town of Greenland departments and/or Commissions. Comments and/or approvals shall be provided from the Police Chief, Fire Chief,

Acting or Actual Town Engineer and any other municipal Board or Commission. The Board shall submit a written request to the Town Administrator for the use of the Town Engineer or, in the event the Town Engineer is unable to complete the requested work, another licensed professional engineer shall be appointed to complete the requested review.

- K) After a subdivision plan has been approved by the Board, the applicant is required to submit a CAD drawing of the roads and parcels, in electronic format, to the Town of Greenland for the purpose of updating the Town's tax maps. (Added 2005)

SECTION IV - GENERAL PRINCIPLES AND DESIGN AND CONSTRUCTION STANDARDS FOR SUBDIVISIONS

4.1 OVERVIEW

An applicant shall use the following general principles and design and construction standards when designing and laying out a subdivision development within the Town of Greenland. These principles and requirements shall be construed as the minimum requirements. The Planning Board may require higher standards in individual cases or may waive certain requirements for good cause in accordance with the procedure established in Section 5.1 of these Regulations.

4.2 GENERAL PRINCIPLES

An applicant shall observe the following general principles of land subdivision and development:

4.2.1 Conformity to Master Plan and Official Map

The subdivision plan shall be in harmony and consistent with the Master Plan and/or Official Map of the Town.

4.2.2 Character of Land

All land to be subdivided shall be, in the judgment of the Board, of such a character that it can be used for building purposes without danger to public health, safety, or the environment. Land subject to periodic flooding, poor drainage or other hazardous conditions, shall not ordinarily be subdivided. Land with inadequate capacity for sanitary sewage disposal shall not be subdivided unless connected to an approved public sewerage disposal system.

4.2.3 Conformity to Other Laws

Plans for the subdivision of land shall conform with all regulations of the Board, the Zoning Ordinance, and other applicable by-laws, ordinances, regulations, and statutes of the local, State and federal governments.

4.2.4 Preservation of Natural Features

Insofar as possible, the subdivision plan shall preserve such natural features as wetlands, watercourses, steep slopes, large or unique trees and/or habitats, and scenic views. The street and lot layout shall bear a logical relationship and be adapted to the topography of the property. Extensive grading and filling should be avoided as far as possible.

4.2.5 Self-Imposed Restrictions

If the owner places restrictions on any land in the subdivision and/or development greater than those required by these regulations or the Zoning Ordinance, such restrictions or reference thereto may be required to be indicated on the subdivision plat, or the Planning Board may require that restrictive covenants be recorded with the Registry of Deeds in form approved by the Town Counsel.

4.3 DETERMINATION OF SOIL TYPE

- A) Tests for determining soils information for use in this Section shall be performed by a qualified soil scientist using on-site inspections. A report and plan shall be prepared by the qualified soil scientist and filed with the Planning Board.
- B) Soil data using the standards of High Intensity Soil Maps of New Hampshire shall be provided as part of the subdivision plan at the scale and dimensions required. Any cover letters or explanatory data provided by the qualified soil scientist shall also be submitted.
- C) Such tests shall be performed with the advice and under the direction of the Planning Board or its designated agent.
- D) All costs of performing such investigations shall be borne by the subdivider.

4.3.1 Relationship between Federal, State and Local Regulations

Where Federal, State and local regulations are applicable, the most stringent regulation shall apply. If the Federal or State regulations address an issue not included in the local regulation or if the local regulation addresses an issue not included in the Federal or State regulations, that regulation shall automatically apply. (Amended 2005)

4.4 DESIGN STANDARDS

The following design standards shall be observed in the layout of a subdivision and/or development of a site:

4.4.1 Lot Configuration

- A) Lot arrangement. In laying out lots, the subdivider shall make a maximum effort to have the lot configuration conform to the natural contours of the site. New subdivision plans shall not include backlots. (Amended 2005 and 2007)
- B) Backlot Subdivisions in the Residential Zones:
 - 1. At its option the Planning Board may permit residential subdivisions for single and two-family homes only, of “backlots” in accordance with the Greenland Subdivision Regulation, Section 4.4.1.1.
 - 2. Both lots must conform to the density, soil type, setbacks, and other appropriate subdivision or zoning regulations pertaining to this district, except with regard to frontage and access to an approved road,
 - 3. At its option, the Planning Board is empowered to require the dedication to the Town, of a 50 foot strip of land passing from the approved road to the rear of the property in question, to ensure future access to back lands alongside or to the rear of any subdivision proposed under this backlot regulation.

4.4.1.1 A Conditional Use Permit may be granted by the Planning Board for the creation of a backlot subdivision of an existing lot of record as of March 13, 2007, provided that all the following conditions are found to exist: (Added 2007)

- A) Prior to the subdivision, the existing lot shall:
 - 1. Have a minimum of 5 acres of gross area;
 - 2. Have a minimum of 220 feet of frontage on a Town accepted road or a state highway where a driveway access permit may be granted;
- B) The subdivision will create one backlot only;
- C) The resulting backlot shall be accessed through a strip of land with a maximum width of 20 feet; owned in fee simple by the backlot, at the point of intersection with the town road or state highway;
- D) All lots resulting from the backlot subdivision shall comply with all provisions of the zoning ordinance, and applicable subdivision or site plan review regulations with the exception of road frontage on the backlot.

4.4.2 Streets

A) Platting of Streets: Insofar as the Master Plan or Official Map does not indicate the size, location, direction and extent of a street, and subject to the regulations hereinafter specified regarding definite minimum widths, the arrangements of streets in a subdivision shall provide for the continuation of the principal street existing in the adjoining subdivisions, or of their proper projection when adjoining property is not subdivided, and shall be of a width at least as great as that of such existing streets but no less than a fifty (50) foot right-of-way. Where, in the opinion of the Board, topographical conditions make such continuance or conformity impractical, the Board may permit dead-end streets as described below.

- 1. **Dead-end Streets**: Unless restricted by soils, topography, or parcel size, all turn-arounds for dead-end streets shall contain one or two legal-sized lots.

If significant site restrictions exist, the Planning Board may permit a "bubble" turn-around at the closed end of the street. The roadway area within the turn-around must be paved; however, the remaining land within the turn-around need not be (see Figures B and C). The turnaround shall have a minimum radius for the outside curbs of at least sixty (60) feet, and a street property line radius of seventy-three (73) feet. (The design specifications for the turn-arounds, described in this paragraph, are contained in Figures B and C appended to these Regulations).

- 2. **Maximum Length**: The maximum length of road leading to a turnaround shall be one thousand (1000) feet, measured from the edge of the existing traveled way to the throat of the cul-de-sac. The Planning Board may require the dedication of an easement of twenty (20) to sixty (60) feet in width from the turn-around to the next adjoining street to provide for utilities. No water lines serving the street shall be dead-ended, where feasible. Slope easements for fill areas may be required. For turnarounds requiring fill, the slope beyond the six-foot shoulder shall be 5:1. (Amended 2006)

3. Multiple Turnarounds: The minimum distance between any two turnarounds shall be one thousand (1000) feet measured from the throat to the throat of the turnarounds. (Amended 2006)

B) Future Subdivision: Where the plat submitted covers only a part of the subdivider's tract, a sketch of the prospective future street system of the unsubmitted part shall be furnished and the street system of the part submitted shall be considered in the light of the adjustments and connections with the street system of the part not submitted.

Where a tract is subdivided into lots of an acre or more, the Board may require an arrangement of lots and streets such as to permit a later re-subdivision in conformity with the street requirements specified in these regulations.

C) Street Rights-of-Way: The minimum right-of-way for streets shall be as shown on the street right-of-way cross sections, Section 4.5.4.

D) Access: There shall be no reserve strips controlling access to streets, except where the control of such strips is definitely placed with the Town under conditions approved by the Board. The subdividing of the land shall be such as to provide each lot, by means of either public street or way or permanent easement, with satisfactory access to an existing public street or highway.

E) Street Intersection Angles: A street shall intersect another as nearly to a ninety degree angle as possible.

F) Offset Intersections: The minimum centerline offset of adjacent intersections shall be as follows:

<i>SIDE STREET CASES</i>	<i>OFFSET</i>
Local – Local	125'
Local – Collector	150'
Collector – Collector	200'

G) Merging Streets: New streets which merge into existing streets may be at an angle of less than sixty (60) degrees, provided there is an adequate amount of a nearly parallel approach to the existing street, by the new street.

H) Street Deflections and Vertical Alignment: When connecting street lines deflect from each other at any one point by more than ten (10) degrees, they shall be connected by a curve with a radius adequate to insure a sight distance of not less than two hundred (200) feet and of such greater radii as the Planning Board shall determine for special cases. Vertical alignment of streets shall be subject to approval by the Town.

I) Marginal Access Streets: Where a subdivision abuts or contains an existing arterial street, the Planning Board may require marginal access streets, reverse frontage with screen planting contained in a non-access reservation along the rear property line, deep lots with rear service alleys, or such other treatment as may be necessary for adequate protection of residential properties and to afford separation of through and local traffic.

J) Rounding Street Corners: Wherever necessary to permit the construction of curbs having a minimum radius of twenty-five (25) feet at corners without curtailing the sidewalk to less than normal width, the property line at such corners shall be rounded or otherwise set back sufficiently

to permit such construction. Normally, the radius on the property line shall be not less than twenty five (25) feet. Larger radii may be required by the Board, when, in its opinion, such design is advisable.

- K) Street Name Signs: At all intersections street signs shall be provided and installed by the developer in conformity with the specifications of the Town.

Until such time as each street is accepted by the Town as a public way, the sign posts at the intersections of such street with any other street shall have affixed thereto a sign designating such street as a private way.

- L) Street Names: Street names of all proposed streets shall be subject to approval by the Planning Board or Board of Selectmen. No proposed street name shall duplicate the names of existing streets irrespective of the use of the suffix "street", "avenue", "boulevard", "drive", or "court". The continuation of an existing street shall have the same name. (Amended 2005)

- M) Street Numbers: Street numbers shall be obtained from the Board of Selectmen/Town Administrator. Such assigned numbers must be posted on the lot and visible from the road.

- N) Grade of Streets: Street grades shall not exceed eight percent (8%) for all streets nor be less than two percent (2%). (Amended 2014)

- O) Grass Strips: All areas between the exterior street lines which are not occupied by approved sidewalks shall be rolled, loamed and seeded in accordance with the specifications of the Town.

- P) Minimum stopping sight distances for Town roads shall conform to the following table. (Amended 2014)

Road Travel Speed (mph)	Stopping Sight Distance (ft)
20	125
25	150
30	200
35	250
40	300
45	375
50	450
55	525

Sight distance is measured as the height of the eye at 3.5 feet and the height of object at 0.5 feet.

4.4.3 Curbing

The Planning Board, at its discretion, may require the installation granite or other curbing (either vertical or sloped) on division streets in order to channel surface water, to control vehicular traffic, to separate vehicular from pedestrian areas and/or to enhance the quality of the subdivision. Curbing shall meet standards set forth by the Town.

4.4.4 Sidewalks

The applicant may be required by the Planning Board to install asphalt sidewalk of a minimum of five (5) feet in width on one side of each street/ access drive in a subdivision.

4.4.5 Driveways

All permits required for driveways and other accesses onto a State highway shall be obtained from the New Hampshire Department of Transportation prior to final approval of the subdivision. Any permits required for driveways onto local streets or roads approved by the Planning board shall be obtained from the Town. The Planning Board shall attempt to assure that the location of all driveways and accesses do not endanger safety or impede reasonable traffic flow. (Amended 2000, 2002)

No driveway shall access more than two (2) single-family or duplex units. Dual access "looped" driveways may be required if deemed necessary by the Planning Board. (Amended 2005)

4.4.6 Community Water Service/Hydrants

Newly proposed community water systems, as defined by RSA 485:1, shall be designed by professional engineer licensed in New Hampshire. Site selection of community wells shall conform to the applicable New Hampshire Code of Administrative rules entitled, "Site Selection of Wells for Community Water Systems". Each system shall be designed to handle the expected flows for present and future development within the subdivision. The number and location of all fire hydrants associated with fire ponds shall be determined by the Fire Department.

Newly proposed major groundwater users (defined by the State as public water systems using 20,000 gallons per day or more) shall submit a detailed water supply study as part of their application. Said study shall, at a minimum, address the requirements outlined in the above referenced administrative rules for siting community water systems. Said study shall be prepared by a professional engineer, hydrologist, hydro geologist or other groundwater professional.

Newly proposed major groundwater users which plan on utilizing a Greenland aquifer (see boundaries of the Town's Aquifer Protection District) as a supply source shall address the following additional items as part of their detailed water supply study:

- The water system's overall impact on the aquifer's production capability in respect to other potential users of the aquifer as a public water supply;
- The potential for de-watering adjacent wetlands;
- Potential affects on the surrounding water table;
- Potential changes to the base flows of adjacent watercourses; and,
- Potential affects on wells located on abutting properties.

4.4.7 Performance and Maintenance Security

A road construction security and inspection agreement must be reviewed by the Town Engineer and approved by the Board of Selectmen before the mylar is signed. The amount of the performance surety must be paid to the Town of Greenland in the form of a bank check, bond, passbook, cash or ~~the~~ letter of credit prior to the issuance of any building permits for the site, in lieu of the completion of street work and other required improvements (e.g., community water supply, sewerage, etc.). The performance surety will be in a form and amount sufficient to cover the construction and installation costs of such improvements. (Amended 2014)

Upon completion and acceptance of said street(s) and improvements, all but 10% of the security shall be released to the developer. Said 10% balance shall be retained for one (1) year after the date of such completion and acceptance to insure the continued and proper operation and integrity of the streets, drainage, and all other facilities and improvements.

Prior to Town acceptance of a road an "as-built" plan, showing road drainage and any changes or additions subsequent to Planning Board approval, shall be submitted to the Selectmen and/or their agent. The "as-built" plan shall be stamped by a licensed land surveyor and a registered professional engineer. In addition, prior to Town acceptance of a road a deed for the road right-of-way shall be conveyed to the Town. The road shall become Town property upon the Town filing said deed at the Register of Deeds. (Amended 2005)

4.4.8 Installation of Utilities

- A) The applicant in all subdivision developments shall install all electric, telephone, and other utility distribution lines per specifications of the public utilities companies involved, and there shall be provided by the developer such easements as are required for transformer units. Both the landscaping and the location of such transformer areas shall be as approved by the Planning Board and detailed plans for all transmission or utility lines within the subdivision shall be supplied to the Planning Board prior to installation.
- B) Indicator tape shall be installed in all residential, commercial, and industrial areas over all underground utility mains and services when such undergrounding is provided. Metallic tape shall be utilized over non-metallic materials.
- C) The Planning Board shall require the installation of underground utilities unless waived by the Planning Board for good cause. (Amended 2014)

4.4.9 On-Site Water Supply

The provision of on-site water supply shall conform to Water Supply and Pollution Control Division criteria and be subject to approval by the Board. It shall be the responsibility of the subdivider to provide adequate information to prove the area of each lot is adequate to permit the installation and operation of both individual on-site water supply and sewage disposal systems.

4.4.10 On-Site Sewage Disposal Systems

- A) Design: No subdivision will be approved where it creates a lot that will not meet the minimum standards imposed by the Water Supply and Pollution Control Division of the NH Department of Environmental Services.

Septic systems must be constructed and installed according to the most recent edition of the Subdivision and Individual Sewage Disposal System Design Rules (as published by the Water Supply and Pollution Control Division) in effect at the time of state septic design approval.

Septic systems designed for 2,500 gallons per day (gpd) or more shall be designed by a septic system designer licensed in New Hampshire and a professional engineer licensed in New Hampshire. For septic systems under 2,500 gpd, the system shall be designed by a septic system designer licensed in New Hampshire.

The Board may require a " groundwater mounding analysis" for septic systems designed for 2,500 gpd or more. The Board may require the applicant to pay for a design review of the proposed system by a licensed system designer or a professional engineer designated by the Board.

The Town of Greenland, in an effort to improve water quality, makes the following more stringent requirements: (Amended 2002 and 2002)

1. The Town requires eighteen (18) inches of natural permeable soil above the seasonal high water table (SHWT).
 2. Five (5) feet of natural soil above bedrock or any impermeable substratum.
 3. Fill material when needed to raise the bottom of the leaching area above the SHWT or impermeable substratum shall be medium to coarse textured sand (0.5 to 0.1 mm) with a Uniformity Co-efficient (as determined by a sieve analysis) greater than four (4).
- B) Test Pits and Septic Reserve Areas: Each proposed lot shall have at least two (2) test pits, separated by at least fifty (50) feet. The septic reserve area must be able to accommodate a replacement leach field equal in area to the original. All proposed septic reserve areas, and test pits, shall be shown on the plan. The Planning Board requires that a Board-appointed agent verify any test pit(s). Approval for each lot's test pits shall be obtained from the NH Water Supply and Pollution Control Division and Town of Greenland Ordinances, prior to the Board's final approval of the subdivision plan. Each newly created lot shall accommodate its own sewage.
- C) Hydro Geologic Study: A hydro geologic study may be required for all projects that: have one or more septic systems designed for a total on-site septic loading of 2,500 gpd or more; and are located within the Town's Aquifer Protection District.

A hydro geologic study shall be performed by a professional engineer, hydrologist, hydro geologist or other groundwater professional. All water testing is to be performed at an EPA approved laboratory. Using an accepted rain water dilution model, a hydro geologic study will address:

1. A hydro geologic mapping of groundwater flow within the site;
2. Existing background water quality;
3. The location of abutting water supply wells and septic systems;
4. The location and capacity of the proposed septic system(s); and

5. Estimates of the transport of contaminants from the septic system(s) and of the constituent concentrations (i.e. nitrates) at the property boundary and at abutting water supplies.

The proposed septic system(s) shall not create groundwater degradation beyond the limits of the property line in excess of EPA water quality criteria for domestic supplies, as amended. Systems which violate these tenets shall be rejected. No well shall be drilled within 100 feet of the subsurface plume on the site, and septic systems shall be located outside of the protective radii of any well(s).

4.4.11 Open Space

- A) Natural Features: The subdivision and development shall, whenever possible, preserve in their natural condition important natural features. The Planning Board may request an advisory opinion from the Conservation Commission in the determination of the value of natural features and the boundaries of such natural systems. Such areas include watercourses, wetland areas, steep slopes, large or unique trees, groves, or special habitats. Natural features that provide buffers between lots, or sections, of a subdivision should be preserved to enhance privacy and aesthetic value.
- B) Buffer Strips: The Planning Board may require the designation of buffer strips of at least fifty feet width around surface water, wetlands, or other natural features which may be adversely affected by erosion or stormwater runoff. The Board may require a vegetative buffer to provide screening where non-residential developments abut a residential zone.
- C) Parks: The Board may require the dedication or reservation of such open space within the subdivision for park, playground or other recreational or open space purposes, for the residents of the subdivision.

The Board shall also require of the developer that he/she supply and plant such trees and shrubbery as are deemed compatible to the environmental design of the neighborhood. It shall also be stipulated by covenant upon the plan that such open spaces shall not contain signs other than street directional or place-name signs. Upon approval of the final plans and plantings, if the park is dedicated for public use, the maintenance of said landscaped areas shall be the responsibility of the community. If the park is solely for subdivision use, the maintenance of said landscaped areas shall be the responsibility of the residents of the subdivision.

- D) Tree Planting: The planting of shade trees within all subdivision layouts where residential, commercial, or industrial development is to take place may be required of the developer who shall supply planting plans to the Board. The planting plans of shade trees within proposed or accepted rights-of-way must be submitted to the Conservation Commission and receive its approval before planting.

4.4.12 Flood Hazard Areas

Subdivisions involving land designated as flood hazard areas shall be reviewed to determine whether such proposals will be reasonably safe from flooding and shall meet the following requirements.

- A) Permits: The Planning Board shall review the proposed development to assure that all necessary permits have been received from those government agencies from which approval is required by

federal or State law including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C 1334.

- B) Minimization of Flood Damage: Sufficient evidence (construction drawings, grading and land treatment plans) shall be submitted so as to allow the Planning Board to determine that:
1. All such proposals are consistent with the need to minimize flood damage;
 2. All public utilities and facilities, such as sewer, gas, electrical and water systems are located, and constructed to minimize or eliminate flood damage;
 3. Adequate drainage is provided so as to reduce exposure to flood hazards; and
 4. New and replacement water and sewer systems (including on-site systems) are located, designed, and constructed to minimize infiltration and avoid impairment.
- C) Elevation and Flood-Proofing Records: The applicant shall obtain and maintain records of elevations and flood-proofing levels for all new or substantially improved structures, whether or not such structures contain a basement.
- D) Alteration of Watercourses: The State Wetlands Board shall be notified prior to any alteration or relocation of a watercourse and copies of such notifications shall be submitted to the National Flood Insurance Program. The flood carrying capacity shall be maintained within the altered or relocated portion of any watercourse.
- E) Floodplain Delineation: The base flood elevation (100-year flood) shall be delineated on all plats.

4.4.13 Stormwater Management and Erosion Control

The purpose of this regulation is to control runoff as well as erosion and sedimentation resulting from development. Subdivision and site plans shall include plans for managing stormwater and controlling erosion and sedimentation as provided by the following:

A) Definitions

Best Management Practice (BMP): A proven and accepted structural, non-structural or vegetative measure, the application of which reduces erosion, sedimentation, or peak storm discharge.

Critical Areas: Disturbed areas of any size within 50 feet of a water-course, waterbody, poorly drained soil or very poorly drained soil; disturbed areas exceeding 2,000 square feet in highly erodible soils; or, disturbed areas containing slope lengths exceeding 25 feet on slopes greater than 15 percent.
Disturbed Area: An area where the natural vegetation has been removed exposing the underlying soil.

Highly Erodible Soils: Any soil with an erodibility class (K factor) greater than or equal to .43 in any layer as found in Table 3-1 of the "Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas of New Hampshire".

B) Where Required

The applicant shall submit a stormwater management and erosion control plan to the Planning Board for any tract of land being developed or subdivided, where one or more of the following conditions are proposed:

1. A cumulative disturbed area exceeding 20,000 square feet.
2. Construction of a street or road.
3. A subdivision of three or more building lots or dwelling units.
4. Disturbed critical areas.

C) Waivers

The Planning Board may waive the requirement for all or part of a storm-water management and erosion control plan if it determines that a plan is unnecessary because of the size, character, or natural conditions of a site. All requests for waivers shall be made in writing by the applicant with supporting technical documentation to demonstrate minimal environmental impact.

At a minimum, all plans shall depict the following:

1. Critical areas within the site.
2. Areas to be disturbed during development.
3. Stormwater management and erosion control BMPs.

The applicant shall also submit a narrative section which discusses each BMP, its purpose, construction sequence and schedule of installation.

A description of the design standards, plan requirements, and other relevant criteria for stormwater management and erosion control plans can be found in Addendum C of these regulations.

4.4.14 Easements

- A) Utilities: Except where alleys of not less than twenty (20) feet are provided for the purpose, the Board may require easements not exceeding twenty five (25) feet on each side of all rear lot lines, and on side lot lines where necessary or, in the Board's opinion, advisable, for poles, wires, conduits, storm and sanitary sewers, gas, water and heat mains or other utilities. Easements of the same or greater width may be required along the lines of or across lots where necessary for the extension of existing or planned utilities, or for passage of Town equipment.

If in the opinion of the Board, the most suitable and reasonable locations for any of the utilities (such as sewers, storm drains, water and gas pipes and electric pole lines and conduits, which are likely to be required within a subdivision, either for the service thereof or for service for areas in the surrounding territory) do not lie wholly in the streets, including alleys if any, shown on the plat, the Board may require, insofar as reasonable, provision to be made for the location of such utilities on routes elsewhere than within said streets, either by the dedication of public easements for the same as part of the plat or by the filing of supplementary instruments which will adequately protect the public interest in the proper location of said utilities.

- B) Drainage: Where a subdivision is traversed by a watercourse, drainage way, channel or stream, the Planning Board may require a storm water easement or drainage right-of-way of at least twenty five (25) feet in width.

4.4.15 Monuments

Granite monuments shall be placed at all street intersections, points of radius of curvature, and every 1000 feet in a straight line right-of-way. Granite monuments shall be used at property corners and shall be installed prior to the issuance of any building permits. One half inch diameter iron rods/pipes, with licensed land surveyor license on the monument, may be installed at non-frontage property corners.

4.4.16 Benchmarks

As part of the subdivision plan a permanent reinforced concrete marker may be required by the Planning Board, and if so required, it shall be placed at the edge of each road boundary at their terminus of the subdivision as reference for all locations and elevations and every twenty-five hundred (2,500) feet within the subdivision or at other locations specified by the Town.

4.4.17 House Numbers and Street Names

All structures and dwellings (but not accessory buildings) shall be numbered by the developer in a method acceptable to the Planning Board, with special regard for accurate identification by fire and police personnel. The Planning Board has veto power over proposed street names.

4.5 CONSTRUCTION STANDARDS

4.5.1 Streets

The laying out and construction of all streets within subdivisions shall be in conformity with those ordinances of the Town pertaining to such development and in addition shall meet the following construction and material specifications. Where not specified below, street construction shall follow the practices outlined in the latest edition of the State of New Hampshire Standard Specifications for Road and Bridge Construction. Streets shall conform to the cross-sections attached to this section.

- A) Clearing: The entire area of each roadway shall be cleared and cleaned of all stumps, brush, roots, boulders, like material and all trees not intended for preservation, and will not be used for fill. Ledge occurring anywhere in the full cross-section of the roadway must be cleared to a minimum depth of twenty-four (24) inches below the finished surface. Ledge occurring in pipe trenches must be cleared so as to have a gravel cushion of at least one (1) foot below and on both sides of the pipe.
- B) Excavation: All loam, soft clay, and other yielding material shall be removed or stripped from the roadway area to a depth of no less than twenty four (24) inches below the finished grade, and/or to a depth that may be required by the Town. If the underlying base materials are found to be unacceptable, as determined by the Town-appointed engineer/inspector, additional construction materials may need to be removed and/or geotextile material may be required to be installed.
- C) Rough Grade and Preparation of Sub-Grade: The excavated area shall be back-filled to the sub-grade and shoulder elevation with suitable backfill, rough graded and compacted to sub-grade and shoulder elevations. The sub-grade shall be shaped to a true surface conforming to the proposed cross-section of the road and thoroughly compacted before applying the gravel.

- D) Base Course: The base course shall include the travel way and two (2) feet beyond the shoulder areas. The base course shall consist of twelve (12) inches of bank run gravel meeting the requirements of item number 304.2 of the NHDOT Standard Specification for Road & Bridge Construction, latest addition.

The second base course shall be six inches (6") of crushed gravel, as per NHDOT Item 304.3. The Town may determine that the ground conditions warrant greater depth for either course; the Town may also require six (6) inches under drain if the site conditions warrant. (Amended 2005, 2014)

The base course shall not be constructed during freezing weather or on a wet or frozen sub-grade. Blading and rolling shall be required to provide a smooth, even and uniformly compacted course true to cross-section and grade. A minimum slope of the finished base course shall be one quarter (1/4) inch per foot or as may be required on curves or on super elevations. At all times during construction, the sub-grade and all ditches shall be constructed and maintained so that the road bed will be effectively drained to prevent erosion. All compaction shall be at ninety-five percent (95%) density in accordance with A.A.S.H.O. T99, Method C.

- E) Street Paving: Street paving shall be accomplished by placing a minimum of two (2) courses of hot asphalt concrete which shall be placed with a self-propelled spreader and in accordance with the specifications and conditions stated in the State of New Hampshire Department of Transportation Standard Specifications for Road and Bridge Construction, adopted and approved, latest edition. The pavement base course shall be two and a half (2.5) inches of Type B pavement. The final wearing course shall be applied one (1) year after the base course has been installed or as approved by the Town's Road Inspector. The wearing course shall be one and a half (1.5) inches of Type F pavement. (Amended 2005)

If a significant time interval occurs between the successive passes of the paving machine, the contractor must use a joint heater to insure a better bond. No paving shall be done between November 1 and April 15 unless provided with a letter of approval by the Town Road Inspector. In all cases, the temperature of the day must be forty (40) degrees and rising before asphaltic concrete mixture (Type 1) can be applied. (Amended 2005)

- F) Side Slopes: Side slopes shall not exceed the following ratio of vertical rise to horizontal length, without retaining walls or other special considerations. Erosion control measures will be required until permanent growth is established.

4' high slopeUse 4:1
 4' to 10'Use 3:1 (guard rail is required)
 Over 10' Use 2:1 (steam beam and wood post guard rail is required)

- G) Approval and Specifications: All material shall be secured from sources approved by the Town. Samples of all materials to be used in the project shall be submitted to the Town upon request.

All materials shall conform to the latest edition of the State of New Hampshire Department of Transportation Standard Specifications for Road and Bridge Construction or to Town requirements if more stringent.

- H) Curbing: Vertical granite curbs, where required by the Planning Board, shall conform to the Construction and Installation Standards of the State of New Hampshire Department of

Transportation standard specifications. Curb shall be bedded on and surrounded by a minimum 6" layer of flowable fill (concrete). Complete compaction shall occur in all areas and under the entire length of curb. (Amended 2014)

- I) Sidewalks: The sub-base for a sidewalk, when required by the Planning Board, shall be at least twelve (12) inches of bank-run gravel, thoroughly compacted. All stones larger than three (3) inches in diameter shall be removed. Bituminous concrete shall be laid in two (2) courses; namely base course and top course. Base course shall consist of one inch of binder after rolling. In no case shall the surface be laid until the sub-base has been inspected and approved. Concrete sidewalks shall not be less than four (4) inches in thickness reinforced by 6 x 6 - 6° of wire mesh, placed on the same base.
- J) Inspection and Methods: The Town shall regularly be notified to inspect all road and utility construction and materials used.
- K) Guard Rails: Steel, or another material approved by the Town, shall be used for the rail portion of guard rail construction.

4.5.2 Street Cross Sections

The required standards for the construction of streets are shown on the charts in Addendum A. For developments which would require arterial streets (r.o.w. of 80' x 100'), the Town shall prescribe standards consistent with the State of New Hampshire Department of Transportation design standards.

4.5.3 Fire Protection Cistern Requirements (Added 01.18.2001, Amended 2002 and 2006)

A) Applicability

1. In the interest of public safety, all new subdivisions that will contain six (6) or more single family homes or four (4) or more duplexes shall be required to provide fire protection. Fire protection shall be either an underground water cistern or residential sprinklers in each dwelling **unit**. Fire protection will not be required if pressurized water mains with hydrants are available and each dwelling unit in the new subdivision will be located within 500 feet of hose-run, measured along the road, from a pressurized hydrant. The hydrant water pressure must meet NFPA standards.
2. If an approved subdivision with fewer than six (6) single family homes or four (4) duplexes is re-subdivided under a separate application that results in an aggregate subdivision that contain six (6) or more single family homes or four (4) or more duplexes within a ten-year period shall subject the additional lots or units to the fire protection requirements in 4.5.3 A 1.
3. Commercial development of any size in a non-hydrant zone may be required to have a cistern, **AS REQUIRED BY THE FIRE CHIEF**.

B) General Provisions

1. The Fire Chief must approve the design of the cistern. The entire cistern is to be rated for highway H-20 loading, unless specifically exempted by the Fire Chief. All cistern construction plans must be prepared by a Structural Professional Engineer, licensed in NH, and submitted in

advance to the Fire Chief. The plans must show the Professional Engineer's stamp, signature, and date signed.

2. Any changes in the approved plans of the cistern must be submitted, in writing, to the Fire Chief with the reasons for the changes. If need be, the Fire Chief may send the changes to the Town's Professional Engineer for this approval. The cost shall be borne by the applicant.
3. Each site will have unique conditions that will require investigation and analysis by a registered professional engineer to finalize the design. The Planning Board reserves the right to have an independent engineering review of the design and construction observation at the expense of the applicant.
4. The cistern is to be located no more than 500-foot hose run from the access driveway of the furthest residential dwelling.
5. The cistern must be located directly adjacent to a Town maintained road.

C) Tank Specifications

1. The Town of Greenland expects the design of a cistern to be trouble-free and last a minimum of 50 years.
2. The capacity of the cistern and the number of cistern units will be determined by the Fire Chief.
3. The cistern base must be designed so that the cistern will not float when empty.
4. The cistern is to be an underground, reinforced fiberglass tank. Alternative materials to construct the cistern may be permitted or required and must be approved by the fire chief and Town Engineer. Applicant will provide certification after installation of hydrostatic testing or any cisterns. As built plans showing the cistern location(s) will be provided to the fire chief and Building Department. (Amended 2006)
5. Bedding for the cistern shall be 12 inches minimum of 3/4" to 1/2" crushed, washed stone and compacted. No fill shall be used under the stone.
6. Cast-in-place concrete shall achieve 28-day strength of 3,000 psi. It should be placed with a maximum 4" slump, and vibrated in a workman-like manner.
7. Concrete to be mixed, placed and cured without the use of calcium chloride. Winter placement and curing must follow the accepted ACI codes.
8. Perimeter of cistern at floor/wall joint to be sealed with 8" PVC waterstop for reinforced concrete tanks.
9. Wall-tie holes and the joint at the floor/wall shall be water plugged. The outside walls shall be waterproofed with an acceptable material.
10. Backfill for the cistern shall be screened gravel with no stones larger than 3" and shall be compacted to 95% ASTM #1557. Backfill over cistern shall be either:
 - a. 4' of fill or;
 - b. The top and highest 2' sides of cistern insulated with vermin-resistant foam insulation, and 2' of fill.
11. The cistern shall be provided with an acceptable standard sized manhole with an approved locking mechanism. The lock and keys will be furnished to the Fire Department by the developer.

D) Pipe Specifications

1. The final discharge from the dry hydrant shall be 6" National Standard type thread and shall be capped.
2. The suction pipe riser shall be 8" steel, Schedule 40. Any suction pipe, which is underground, can be Schedule 40 PVC. The suction pipe is to be attached to a 4' x 4' x ½" anti-vortex plate, 6" off the bottom of the cistern. Any underground pipe shall be supported at the elbow of the suction riser with concrete; concrete shall be at least at the level of the frost line. This suction piping system should be capable of delivering 1,000 gpm for three-quarters of the cistern capacity.
3. Vent pipe shall be 8" Schedule 40 steel or PVC with bug screen. The end of the pipe shall be a minimum 36" above ground.
4. Fill pipe riser shall be 8" steel, Schedule 40, with a 4 ½" Storz connection with chained cap, and shall be a minimum 36" above ground.
5. All piping shall be ASTM Schedule 40: PVC pipe must have glued joints.

E) Siting Requirements

1. The cistern system shall include a dry hydrant connection located so that a Fire Department pumper truck may be able to connect to the dry hydrant with one ten-foot length of suction hose at any time of the year without blocking any street, road, driveway, or other access way to a building.
2. The actual location of the pipes shall be perpendicular to the roadway and shown on the plans submitted for approval.
3. Suction pipe connection shall be 24" above the finish line.
4. Vertical distance between bottom of suction pipe (in the cistern) and pumper connection (dry hydrant) must not exceed 14 vertical feet of tanks lower than the roadway.
5. The suction connection must be protected by 2 posts; 4" minimum diameter and 8' long embedded in the ground 4'. Location of post specified by the Fire Chief.
6. Ground area around cistern that has been disturbed by the construction work must be loamed and seeded so that the area will not wash out during periods of rain.

F) Testing and Acceptance

1. The entire cistern shall be completed and inspected prior to any backfilling. Inspections by the Fire Chief or his designee shall be required.
2. All construction, backfill, and grading material to be in accordance with proper construction practices and acceptable to the Planning Board and the fire chief or their designated agent.

3. The installer is responsible for completely filling the cistern for testing by the fire chief.

4.5.4 Inspections (Added 09.1999, Amended 2002)

- A) The subdivider shall notify the Town Engineer, the Planning Board Chair, and the Road Agent prior to the commencement of any road construction activity and at each stage of its construction. Approval or disapproval of any segment by the Town Engineer and the Highway Agent shall be in writing, with a copy to the Selectmen, and shall constitute a recommendation relative to whether or not the Town shall accept the street concerned.
- B) The following inspection schedule shall be abided by during construction of roads. The inspections shall be performed and documented for each item by a registered Professional Engineer retained by the Town at the expense of the developer.
 1. Review of design engineer's layout and wetlands marking.
 2. Inspection of clearing, grubbing and erosion control measurers.
 3. Inspection of fill placement. In-place compaction testing of fill is required every 200 linear feet or as directed by the Town Engineer.
 4. Inspection of drainage piping and buried utilities. Full time inspection is required, including the trench backfilling.
 5. Inspection of sub-grade and slope work.
 6. Inspection of gravel grade. Compaction testing of the gravel coarse is required every 200 linear feet of roadway.
 7. Inspection of crushed gravel grade. Compaction testing of the crushed gravel coarse is required every 200 linear feet of roadway.
 8. Inspection of final ditch work, slope work, landscaping and erosion control measurers.
 9. Inspection of headwall construction.
 10. Inspection of binder coarse paving. Full-time inspection will be performed during the paving. After the binder coarse pavement and all work required prior to that point has been completed, the Developer can request, in writing, a reduction of the roadway bond to the Selectmen. The exact amount of the bond reduction is to be determined by the Selectmen.
 11. Inspection of the wearing coarse pavement. Full-time inspection is required.
 12. Remaining work inspection by developer and Town Engineer.
 13. Final walk through inspection by the Town Engineer, Board of Selectmen, and Road Agent.
 14. Follow-up inspection.

4.6 PARKING REQUIREMENTS (Added 2007)

4.6.1 Off Street Parking

On and after the effective date of these regulations, all new structures and developments as well as additions to or changes in use or intensification of use in existing structures shall be provided with off-street parking spaces in accordance with the following specifications in Section 5.2.

4.6.2 Required Spaces

Table follows on next page.

Type of Use	Minimum Number of Required Spaces
a) Residential Units	Two (2) spaces per dwelling unit (Amended 1999*)
b) Residence/Home Occupation	Two (2) spaces per dwelling unit and one (1) per employee (Amended 1999*)
c) Overnight and Day Camps	One (1) space per unit plus one (1) space per employee on the largest shift
d) Bed and Breakfast, Established Inns, Motels, Hotels	One (1) space per unit plus one (1) space per employee on the largest shift
e) Municipal Buildings	One (1) space per 300 sq ft of gross floor area
f) Non-Profit, Charitable Organizations	One (1) space per 500 sq ft of gross floor area
g) Churches, Places of Assembly	One (1) space per four (4) seats, per maximum seating capacity
h) Public or Private Schools	One (1) space per 500 sq ft of gross floor area other than classrooms plus one (1) for each teaching station
i) Hospitals, Clinics	One (1) space per 500 sq ft of gross floor area
j) Retail Sales/Service	One (1) space per 200 sq ft of gross floor area (Amended 1999*)
k) Business and Professional Offices	One (1) parking space for each 300 sq ft for gross floor area
l) Restaurants, Theaters, Auditorium and Places of Assembly with Fixed Seats	One (1) parking space for each four (4) seats based on a maximum seating capacity, plus one (1) additional space for each two (2) employees on shift of largest employment
m) Bowling Alleys, Skating Rinks and Other Places of Public Assembly Where Capacity Cannot be Measured by Seats	One (1) space per 500 sq ft gross floor area
n) Nursery Schools and Daycare Centers	One (1) space for each five (5) children at maximum capacity
o) Automobile Service Stations	One (1) space for each gas pump island, plus two (2) spaces for each working bay, plus one (1) parking space for each employee at the largest shift
p) Industrial Establishments, Including Manufacturing, Research and Testing Laboratories	One (1) space per two (2) employees in the largest shift
q) Wholesale Establishments, Warehouses and Storage Buildings	One (1) space per 3,000 sq ft of gross floor area
r) Golf Courses Including Clubhouses and Other Customary Accessory Structures and Uses (Adopted 1998*)	Two (2) parking spaces per hole, plus one (1) parking space for each four (4) seats of seating capacity, plus one (1) space for each two (2) employees on the shift with largest employment (Adopted 1998*)

4.6.3 Parking Specifications

4.6.3.1 Size: Each required parking space shall be not less than 10 feet wide and shall have a minimum area of two hundred (200) square feet, exclusive of drives or aisles.

4.6.3.2 Travel Lanes: Travel lanes shall not be less than: 22 feet wide for 90 degree angle parking; 18 feet wide for 60 degree angle parking; and 12 feet wide for 45 degree (and less) angle parking. (Revised 1991)

4.6.3.3 Surface All parking areas and access drives and aisles shall be surfaced with bituminous binder, concrete, asphalt, compacted, or crushed stone placed in order to prevent erosion and raising of dust. If paved, the lots shall be striped to delineate parking spaces. All striping must be maintained. (Amended 2004)

4.6.3.4 Landscaping: All parking lots shall have at least ten percent (10%) of the lot area landscaped with trees, shrubs, and similar plant materials.

4.6.3.5 Islands: The use of landscaped islands to control traffic flow shall be encouraged.

SECTION V - WAIVER PROCEDURE

5.1 WAIVER PROCEDURE

When a proposed subdivision plat is submitted for approval, the applicant may request in writing to waive specific requirements of these regulations as they pertain to the subdivision plan. The applicant shall present reasons in writing why the waiver is needed.

In exceptional circumstances, the Planning Board may grant a waiver, if it deems that the requested waiver will not have the effect of nullifying the intent and purposes of these Regulations or on the public good. The Board will weigh the number of requested waivers, the severity of each waiver and any benefits provided by the applicant to off-set the waivers requested. The Board shall not approve waivers unless it shall make findings based upon the evidence presented to it in each specific case.

SECTION VI - AMENDMENTS

6.1 AMENDMENTS

The Planning Board may, from time to time, amend these regulations. Such amendments shall only take effect after a public hearing on the proposed changes(s) has been held. The Chairperson or Clerk of the Planning Board shall transmit copies of any regulations, revisions, or amendments thereto, certified by a majority of the Planning Board members, to the Registry of Deeds of Rockingham County, the Town Clerk, and the Board of Selectmen.

SECTION VII - INTERPRETATION, CONFLICT, SEPARABILITY

7.1 INTERPRETATION

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

7.2 CONFLICT

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

7.3 SEPARABILITY

If any part or provision of these regulations or application thereof to any person or circumstances is adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part, provision, or application directly involved in all controversy in which such judgment shall have been rendered and shall not affect or impair the validity of the remainder of these regulations or the application thereof to other persons or circumstances.

SECTION VIII - EFFECTIVE DATE

8.1 EFFECTIVE DATE

These regulations are effective as of February 3, 1987, on which day they were filed with the Greenland Town Clerk and the Board of Selectmen. Subsequent amendments shall become effective upon the date of filing with the Greenland Town Clerk.

ADDENDUM A TO SUBDIVISION REGULATIONS
ROAD DESIGN AND CONSTRUCTION SPECIFICATIONS

CHECKLIST FOR PRELIMINARY HEARING

I. Design Criteria Necessary

- A. Preliminary design of subdivision
- B. Plot plan, scale, and designer
- C. Contour Sheet (2' intervals) (Amended 2014)
- D. Soils data, name of soil scientist, test pits location and acres (square feet)
- E. Preliminary road location and grades
- F. Preliminary drainage
- G. Bench mark, T.P.'s, elevation, and descriptions (NGVD-Datum)
- H. 50' Front Setback

II. First Public Hearing: (Design checked by the designated Town agent before hearing) Final Design of Project/Subdivision (Amended 2014)

- A. Final design of roadway, "profile" (Scale: 1" = 4' vertical; 1" = 40' horizontal.)
- B. Contour sheet (2' intervals)
- C. Cross sections of road at 50' intervals and at all drainage structures, intersections, and dead-end turnarounds
- D. Final centerline staked on the ground, with finish grades shown on the grade stakes
- E. Profile of road drainage ditches left and right plotted separately on profile paper (Scale: 1" = 4' vertical, 1" = 40' horizontal.)
- F. Complete runoff calculations using the SCS TR 55 method or equivalent (See Section 4.5.2 for storm frequencies)
- G. Finish grades of road profile
- H. Easements plotted on plan "25" foot width
- I. Typical section of roadway shown on plan, including utilities, sewer and water
- J. Sight distance at intersection along road (See Table #1)
- K. Maximum back slopes 3:1 cuts, 4:1 fills, 5:1 cul-de-sac turn-around fills
- L. Benchmark and T.P.'s (shown on plan described with elevation)
- M. All pipe structures under roadway will be R.C.P. class III with mortar joints or rubber ring gaskets or smooth wall HDPE pipe, frame and grate catch base covers. (Amended 2014)
- N. Sewer pipe (S.D.R.) 35 P.V.C. laid in a stone envelope 6" all around pipe. Pipe locations shown on design with elevations (see typical section with utilities).
- O. Road surface to be asphalt 2.5" rolled of base binder, 1.5" rolled of finish coat. (Amended 2006)
- P. Hand auger soil borings along centerline (100' stations) of roadway to denote depth to solid ground. This aids in setting finish grade of road also rough estimate of gravel necessary.
- Q. Under drains may be required by a designated Town agent. The use of fabric may be necessary; also more gravel may be necessary through wet areas. With ledge or any other field problems, the designated Town agent may require field design changes. (Amended 2014)

R. All utilities shown on design. See typical section for water and sewer utilities.

III. Private Road

- A. Use same design and specifications as for Town Roads (see typical section).
- B. Construction inspection to be done by a designated Town agent same as for Town Roads. See Section 6.1 of Site Plan Review Regulations. (Amended 2014)
- C. Must be bonded.

The Town has adopted New Hampshire State Highway and Bridges specifications. For any specifications not covered in these regulations, refer to New Hampshire specifications of roads.

IV. Construction Specifications

A. Subgrade

- 1. Subgrade shaped and compacted full width, ditch cut and shaped.
- 2. Grade stakes in place every 50'.
- 3. Subgrade and finish grade centerline elevations should be marked in the field for review and approval by the construction inspector. (Amended 1999)
- 4. Subgrade properly graded and crowned with grader.
- 5. The Developers Geotechnical testing company shall provide to the designated Town agent a written certification that all organic material has been removed from the roadway. This shall be completed by inspection of the subgrade prior to placement of any fill, by proof rolling with a minimum of a ten ton vibratory roller making five passes over the subgrade. Any areas, which demonstrate weaving, shall be considered unsuitable. (Amended 1999, 2002, 2014)
- 6. No gravel (until subgrade inspected and approved).
- 7. Use of construction fabric may be required at unstable/wet locations. This determination shall be made by the designated Town agent. (Amended 2014)

B. Gravel to be approved by the designated Town agent (Amended 2014)

- 1. Bank run gravel put in eight-inch (8") lifts. (Amended 1999)
- 2. Grade stakes in place every 50'.
- 3. Compaction test, sieve analysis, and as built cross sections for each lift.
- 4. No processed gravel until bank run inspected and approved.
- 5. Processed gravel same procedure as bank run gravel.
- 6. Compactor on project for sub-grade bank run and finished processed gravel.
- 7. R.C.P. pipe: All bells to be laid up stream. (Amended 2014)
- 8. Driveway culverts will be (A.C.C.M.P. or R.C.P.) 18" RCP diameter min., length 30'; permits must be acquired from the Building Inspector. (Amended 2014)
- 9. Erosion control measures during construction.
- 10. Loam and seeding: 4" of loam conservation mix for slopes is the recommended seeding.

V. Paving Asphalt Finish

- A. Before any paving of roadway a letter of approval by the designated Town agent stating that the sub surface is ready and weather is acceptable. This letter will be given to the prime contractor and also to the subdivider of the project. (Amended 2014)
- B. 2.5" of binder (rolled). (Amended 1999, 2005)
- C. 1.5" finish coat (rolled). (Amended 2005)
- D. Paving: As built, cross sections on binder and also on final coat surface.
- E. Maintenance bond will be held for one year after completion and Town acceptance.

VI. As-Built Construction Plans

- A. Must be delivered to Town before bonds are released.
- B. Must show all drainage structures (stations), inverts and outlet elevations, utility lines and structures.
- C. Must show road ditches profile.
- D. Must show drainage easements.
- E. Must show any changes from original design.
- F. Must show lot line corner monuments installed: 4" x 5" x 36" stone or concrete
- G. Must indicate Sign Installation
 - 1. Stop signs
 - 2. Road "name" signs
 - 3. Power and telephone
 - 4. Road delineators
- H. Bond Release
 - 1. By Board of Selectmen (Amended 2014)
 - 2. Deed road right-of-way to Town, including all 50' laterals and paper streets for future utilization.

TABLE I - ROADWAY DESIGN CRITERIA

(Amended 2005, 2006, 2014)

Description	Local Res.	Res. Feeder	Indust. Primary	Indust. Secondary
Right-of-Way Width	50'	60'	75'	60'
Wooded Clear	Up to 50'	Up to 60'	80'	80'
Pavement Width	22'	24'	28'	28'
Sidewalk Width	5'	5'	5' *	5" *
Minimum Centerline Radius	150'	150'	300'	300'
Minimum Curb Radius (Intersections)	30'	40'	50'	50'
Minimum Profile Grade (Elsewhere)	2%	2%	2%	2%
Maximum Grade within 75' of Intersection	3%	3%	3%	3%
Minimum Grade (Intersections)	2%	2%	2%	2%
Maximum Profile Grade	8%	6%	5%	8%
Maximum Profile Grade (Cul-de-Sac Turn-Around)	3%	2%	2%	2%
Minimum Stopping Sight Distance	Refer to Section 4.4.2(p) - Chart			
Distance Between Intersections	Refer to Section 4.4.2(e)			
Base Run Gravel Depth	12"	12"	16"	16"
Crushed Gravel Depth	6"	6"	6"	6"
Base Course Depth	2.5"	2.5"	3.5"	3.5"
Wearing Course Depth	1.5"	1.5"	1.5"	1.5"

*One Side Only

Figure A - TYPICAL ROAD SECTION

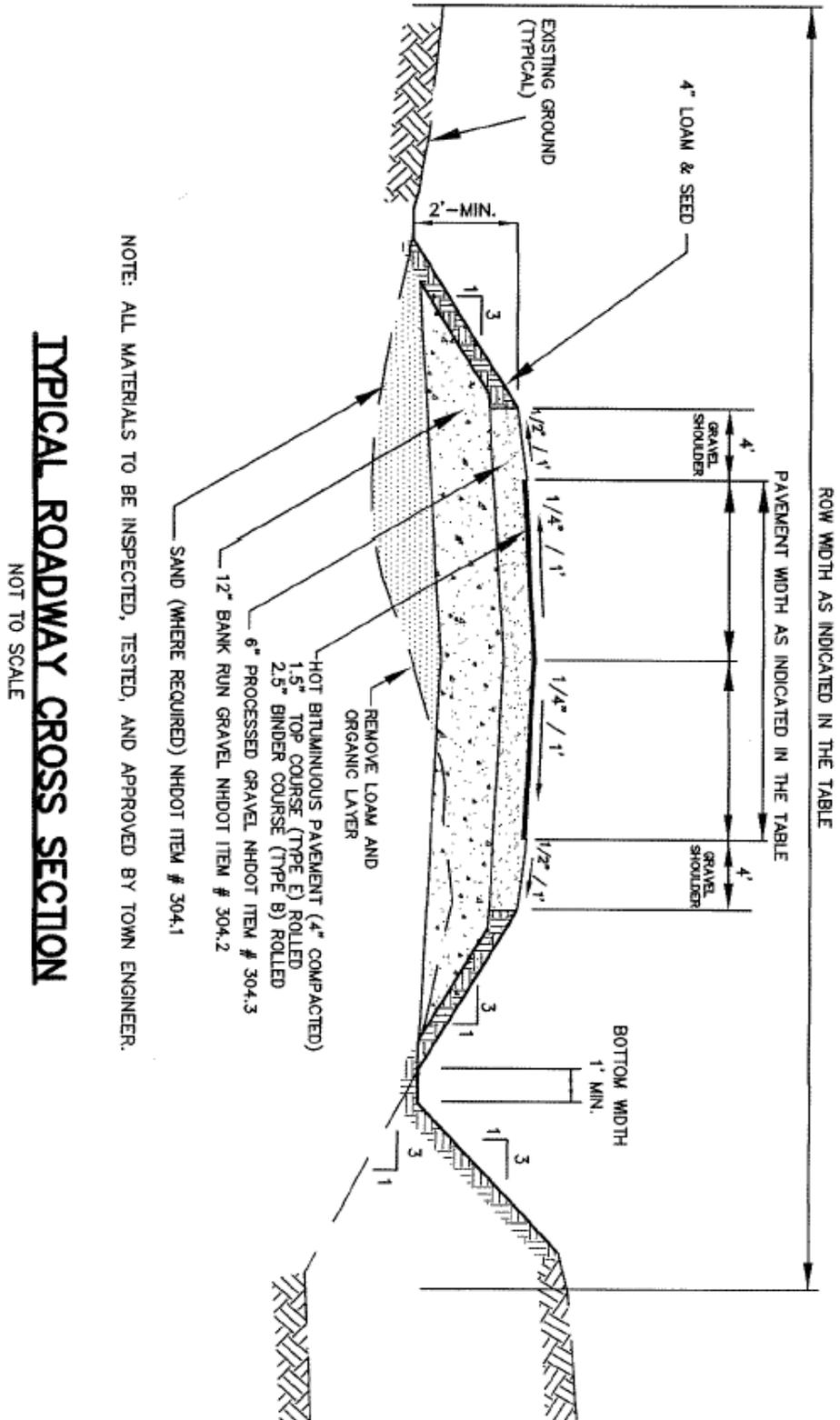


Figure B - TYPICAL DETAIL PAVED "BUBBLE" TURN AROUND

TYPICAL SECTION

(Not to Scale)

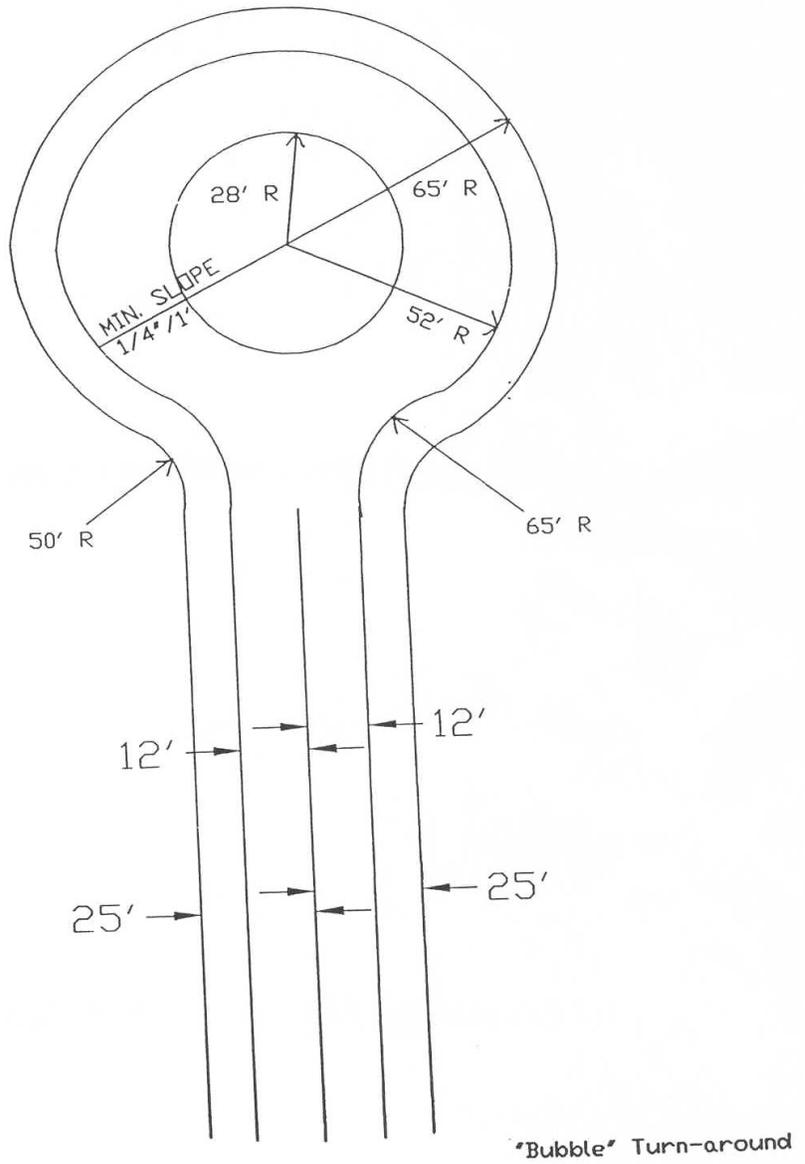
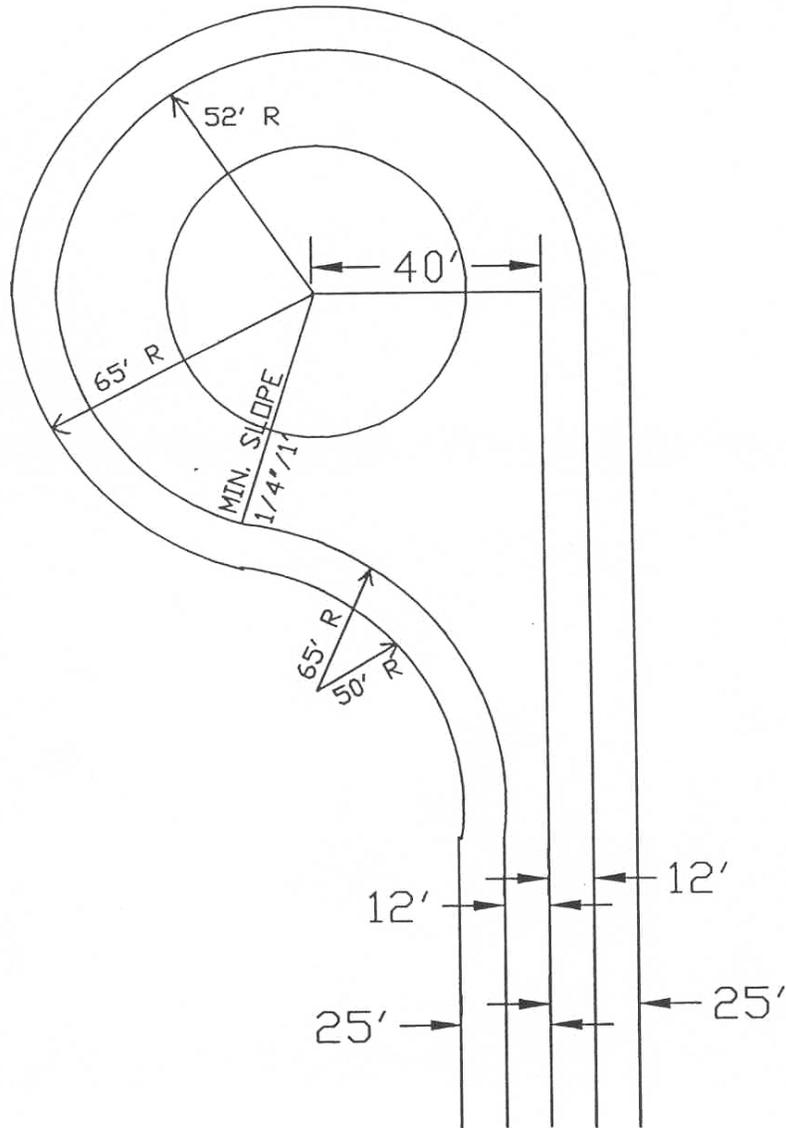


Figure C - TYPICAL DETAIL REVERSE "P" TURN AROUND

TYPICAL SECTION

(Not to Scale)



Reverse "P" Turn-around

ADDENDUM C TO SUBDIVISION REGULATIONS

(Revised 11.1993)

STORM WATER MANAGEMENT AND EROSION CONTROL PLAN SPECIFICATIONS

I. Design Standards

The following standards shall be applied in planning for storm water management and erosion control:

- A) All measures in the plan shall be consistent with the BMPs outlined in the "Storm water Management and Erosion and Sediment Control Handbook for Urban and Developing Areas of New Hampshire" as amended and adopted by the Rockingham County Conservation District.
- B) Whenever practical, natural vegetation shall be retained, protected or supplemented. The stripping of vegetation shall be done in a manner that minimizes soil erosion.
- C) Appropriate control measures shall be installed prior to removal of vegetation.
- D) The area of disturbance shall be kept to a minimum. Disturbed areas remaining idle for more than 30 days shall be stabilized.
- E) Measures shall be taken to control sediment and retain it within the site. Sediment in runoff shall be trapped and retained within the site using approved measures. Watercourses, Water bodies and very poorly drained soils shall be protected from sediment.
- F) Off-site surface water and runoff from undisturbed areas shall be carried non-erosively through the site, or diverted away from disturbed areas when feasible.
- G) Measures shall be taken to control post-development runoff so that it does not exceed pre-development runoff for the 2-year, 10-year, and 25-year, 24-hour storm event.
- H) Priority should be given to preserving natural drainage systems including perennial and intermittent streams, wetlands, swales, and drainage ditches for conveyance of runoff leaving the site.
- I) All temporary erosion control measures shall be removed after final site stabilization. Trapped sediment and other disturbed soil areas resulting from the removal of temporary measures shall be permanently stabilized within 30 days.

II. Completed Application Requirements

The Planning Board shall require each of the following in the final plan unless specifically waived:

A. Existing and proposed conditions:

1. Locus map showing property boundaries
2. North arrow, scale, date
3. Property lines
4. Structures, roads, utility right-of-ways, earth stockpiles, equipment storage, and stump disposal
5. Topographic contours at two-foot intervals
6. Critical areas
7. Watercourses, water bodies, wetlands, drainage patterns, and watershed boundaries
8. Vegetation and soils information
9. Extent of 100-year floodplain boundaries
10. Areas of soil disturbance
11. Areas of cut and fill
12. Easements
13. Location of all storm water management and erosion control BMPs
14. Identification of all permanent control BMPs
15. Tabulated sequence of construction

B. Other Plan Requirements

1. Construction schedule
2. Earth movement schedule
3. Description of temporary and permanent vegetative BMPs including seeding specifications
4. Description of all BMPs with detailed drawings of each
5. A proposed schedule for the inspection and maintenance of all BMPs
6. A narrative section which discusses items (a) through (e) above. The narrative section shall also include the following:
 - a. Design calculations for all temporary and permanent structural control measures
 - b. Calculations showing volume, peak discharge, and velocity of present and future runoff
 - c. Identification of all permanent control measures and responsibility for continued maintenance

III. Responsibility for Installation/Construction

The applicant shall bear final responsibility for the installation, construction, and disposition of all storm water management and erosion control measures required by the provisions of this section. The Planning Board may require a performance surety (in the form of a bond, passbook or cash) to ensure the actual construction and installation of such measures within a period specified by the Board. Site development shall not begin before the storm water management and erosion control plan receives conditional approval. BMPs shall be installed as designed and scheduled as a condition of final approval of the plan.

IV. Maintenance

The applicant shall maintain all BMPs, including devices and plantings as specified in the approved plan, in effective working condition. Responsibility for maintenance by subsequent owners of the property on which permanent measures have been installed shall be included in the deed and shall run with the land. If the owner fails to adequately maintain such measures, the Town shall have the authority to perform required maintenance. The cost of such work shall be born by the owner.

V. Plan Approval and Review

The Planning Board shall indicate its approval of the storm water management and erosion control plan, as filed, if it complies with the requirements and objectives of this regulation. If disapproved, a list of plan deficiencies and the procedure for filing a revised plan will be given to the applicant.

Technical review of any storm water management and erosion control plan prepared under this regulation shall be reviewed by the Rockingham County Conservation District, or any other agent duly appointed by the Planning Board. The expense of said review shall be borne by the applicant.

VI. Inspection

Inspection shall be made during development to ensure compliance with the approved plan and to ensure that control measures are properly installed or performed and maintained. The cost of all municipal site inspections shall be borne by the applicant.

VII. Other Required Permits

In addition to local approval, the following may be required:

- A) RSA 485:17 requires a permit from the NH Water Supply and Pollution Control Division for "...any person proposing to significantly alter the characteristic of the terrain, in such a manner as to impede natural runoff or create an unnatural runoff...".
- B) State regulations require a Site Specific Permit from the WSPCD for any project involving more than 100,000 contiguous square feet of disturbance or 50,000 square feet if such activity occurs in or within 250 feet of the boundary line for and project involving more than 100,000 contiguous square feet of disturbance or 50,000 square feet of such activity occurs in or within 250 feet of the boundary line for public waters or rivers of the forth order or higher (RSA 485-B).



PLANNING BOARD
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CERTIFIED COPY – SUBDIVISION REGULATIONS
Thursday, April 02, 2015

The Planning Board certifies that the Subdivision Regulations, amended March 19, 2015, were approved at the public hearing held Thursday, March 19, 2015.

NAME	POSITION	SIGNATURE
Stu Gerome	Chairman – Planning Board	
Rich Winsor	Vice Chairman – Planning Board	
Scott Baker	Planning Board	
Courtney Homer	Planning Board	
Chip Hussey	Planning Board	
Dave Moore	Planning Board	
John McDevitt	Board of Selectmen’s Rep	
Steve Gerrato	Alternate – Planning Board	



TOWN OF GREENLAND

Greenland, NH 03840

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Inspection Report for Road Construction

This report is to be signed and dated at the completion of each step of road construction by the Town Road Agent or his deputy and the contractor. The road is to be constructed in accordance with the specifications and requirements of the Town.

Name of Applicant	Phone
Address	City, State, Zip
On Site Contact	Cell Phone
Location of Road Construction	
SIGNATURES	
<i>Inspection of Road Subgrade</i>	
Road Inspector	Date
Contractor	Date
<i>Inspection of 18" Compacted Gravel Base Courses</i>	
Road Inspector	Date
Contractor	Date
<i>Inspection of Compacted, Crushed Gravel Base Courses</i>	
Road Inspector	Date
Contractor	Date



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COMPREHENSIVE APPLICATION Guidelines for Processing Applications & Fee Schedule Worksheet

While the Zoning Ordinance and Planning Board Regulations are lengthy, they are designed to deal with different situations from single issue waivers and permits to large scale residential developments and commercial site plans. The Zoning Ordinance and Site Plan Regulations are available online at: www.greenland-nh.com (click on Applications/Forms or Building Inspector).

Not all requirements may be applicable to your application. Although not required, it is recommended applications be discussed informally with the Greenland Planning Board or their representative. The key to receiving a prompt decision is to have all the necessary information to the Planning Board before their public hearing date (the third Thursday of every month). All applications **must** be submitted to the Planning Board at least **21 days** prior to the public hearing at which it will be formally reviewed. In order to be scheduled, your application must be complete. Submission deadlines can be found online at www.greenland-nh.com (click on Applications/Forms or Building Inspector; select Public Hearing Dates/Application Deadlines: Planning Board & ZBA). Revised plans of any type must be in the Town Office **ten (10) days** prior to the public hearing date.

SUBMISSION OF APPLICATION MATERIALS

In accordance with RSA 676:4,I(b): *All materials required to constitute a complete application must be submitted to the Town at least **21 days** prior to the public hearing at which it will be considered for application acceptance.* Revised plans of any type must be in the Town Office **ten (10) days** prior to the hearing date.

1. Applications will not be considered complete unless they are:
 - a. Signed by all property owners of record.
 - b. Accompanied by a list of abutters.
 - c. Accompanied by the appropriate fee(s).
2. Applications for subdivision must adhere to all applicable sections of the Town of Greenland Subdivision Regulations.
3. Applications for site plan review must adhere to all applicable sections of the Town of Greenland Site Plan Review Regulations.
4. Applications will not be considered complete without the following:
 - a. Eleven (11) complete packets; **each must contain**
 1. Project Type and Description (page 2); all other pages **do not need to be copied**—the original only must be submitted.
 2. Waiver requests.
 3. Complete plan sets (11" x 17").
 - b. Five (5) plats prepared by a licensed New Hampshire surveyor (any appropriate engineering drawings must be presented with the application at the public hearing).
 - c. Plans in PDF format must be submitted to the Planning Board Secretary.
 - d. Three (3) sets of computer generated or typed mailing labels of the applicant, representative and abutter's addresses **must** be submitted as part of the application. Label size: 1" (height) x 2.63" (width).



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PROJECT TYPE AND DESCRIPTION

See Application Definitions Below

Please include eleven (11) copies of this page only.

APPLICATION DATE	
PROPERTY ADDRESS	
Application Type	
<input type="checkbox"/> Preliminary Conceptual Consultation	<input type="checkbox"/> Design Review
<input type="checkbox"/> Site Plan Review	<input type="checkbox"/> Subdivision of Land
<input type="checkbox"/> Boundary Line Adjustment	<input type="checkbox"/> Conditional Use Permit
<input type="checkbox"/> Voluntary Merger (RSA 674:39-a)	
Description of Project or Application	
APPLICATION DEFINITIONS	
1.	<i>Preliminary Conceptual Consultation Phase [RSA 676:4(II)(a)]</i> Review of the basic concept of the proposal and suggestions which might be of assistance in resolving problems. Consultation will be non-binding. The Planning Board and applicant may discuss proposals in conceptual form only and in general terms such as desirability of types of development and proposals under the master plan. Discussions may occur without the necessity of giving formal public notice, but may occur only at public hearings of the Planning Board.
2.	<i>Design Review Phase [RSA 676:4(II)(b)]</i> Non-binding discussions beyond conceptual; general discussions involving more specific design and engineering details. Formal public notice must be made; abutters and the general public must be notified.
3.	<i>Site Plan Review [RSA 674:43]</i> Review of site plans for specific types of development to ensure compliance with all appropriate land development regulations and consistency with the Comprehensive Plan. Formal public notice must be made; abutters and the general public must be notified.
4.	<i>Abutters (RSA 672:3)</i> Any person whose property adjoins or is directly across the street or stream. (See the RSA for the complete definition.)



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This form and all required information must be completed and filed a minimum of **21 days** prior to the public hearing at which it is to be heard. Revised plans of any type must be in the Town Office **ten (10) days** prior to the hearing date. Submission deadlines can be found online at www.greenland-nh.com (click on Applications/Forms or Building Inspector select Public Hearing Dates/Application Deadlines: Planning Board & ZBA).

Applicant Information		
<i>Entity of authority to represent an agent and/or landowner before the Planning Board; will be responsible for dissemination of all information to the landowner and/or agent. An applicant is often, but not necessarily, a surveyor, engineer, attorney or real estate professional.</i>		
Name		
Company		
Address		
City/State/Zip		
Phone		
Email		
Property Address		
Map & Lot	Zoning District	
Overlay Districts or Other Regulations Affecting Subject Property		
<input type="checkbox"/> State Highway Permit	<input type="checkbox"/> Shoreland Protection	
<input type="checkbox"/> Scenic Roadway	<input type="checkbox"/> State Subdivision	
<input type="checkbox"/> Current Use Tax	<input type="checkbox"/> Conservation Easement	
<input type="checkbox"/> Aquifer Protection		
<input type="checkbox"/> Conditional Use Permit		
<input type="checkbox"/> Wetlands Conservation Area		
Other (Specify):		
Contact Information		
Owner of Record	Lessee Information (if applicable)	Agent Information
Name	Name	Name
Company	Company	Company
Address	Address	Address
City/State/Zip	City/State/Zip	City/State/Zip
Phone	Phone	Phone
Email	Email	Email

Additional Professionals Authorized to Submit Materials

Professionals who are authorized to submit additional materials on behalf of the application may include, but are not limited to: NH Certified Soil Scientist, Wetlands Scientist, Surveyor, Engineer, Attorney, Real Estate Professional, etc.

Name	Name
Company	Company
Address	Address
City/State/Zip	City/State/Zip
Phone	Phone
Email	Email
Name	Name
Company	Company
Address	Address
City/State/Zip	City/State/Zip
Phone	Phone
Email	Email
Name	Name
Company	Company
Address	Address
City/State/Zip	City/State/Zip
Phone	Phone
Email	Email
Name	Name
Company	Company
Address	Address
City/State/Zip	City/State/Zip
Phone	Phone
Email	Email



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VERIFICATION AND SIGNATURES

The applicant, owner and/or agent certify that this application is correctly completed with all required attachments and documents. Any additional reasonable costs for engineering or professional services incurred by the Planning Board or the Town of Greenland in the final subdivision/site plan review process of this property shall be borne by the following party:

Applicant Owner Agent

Failure to indicate a responsible party for fees and associated costs will result in the denial of the application without a public hearing in accordance with RSA 676:4.

The owner/agent hereby authorizes the Greenland Planning Board and its agents to access the subject land for the purpose of reviewing the subdivision plan or site plan, performing road inspections and any other inspections deemed necessary by the Board or its agents, and to insure conformance of the on-site improvements with the approved plan and all Town of Greenland ordinances and regulations.

The undersigned owner/agent hereby submits to the Greenland Planning Board a completed application package for its approval of said plat. In consideration for approval and the privileges occurring thereto, the owner hereby agrees as applicable:

- To carry out the improvements agreed upon and as shown and intended by said plat, including any work made necessary by unforeseen conditions which become apparent during construction.
- To provide and install standard street signs as approved by the Town for all street intersections.
- To give the Town, on demand, proper deeds for land or right of ways reserved on the plat for streets, drainage or other purposes as agreed upon.
- To save the Town harmless from any obligation it may incur or repairs it may make due to my failure to carry out any of the foregoing provisions.
- To make no changes whatsoever in the Final Plat as approved by the Board unless a revised plan, plat or new application is submitted and approved by the Board.
- To construct improvements or post the Planning Board's Performance Guarantee to insure completion of the improvements shown on the plat and related drawings.
- There are no known violations of the Town of Greenland Zoning Ordinance or Greenland Planning Board Regulations present on the property that have not been disclosed as part of this application.
- To insure proper boundary monumentation at the project's completion in accordance with the Town of Greenland Subdivision Regulations.

Signatures

(Name) _____ of (Company) _____
 is hereby designated as the person authorized to act as my agent in securing any and all permits necessary from the Greenland Planning Board for the development of my property. All communications to the owner may be addressed to the agent or applicant on the agent's behalf.

Applicant Signature	Date
---------------------	------

Owner Signature	Date
-----------------	------



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NAMES AND ADDRESSES OF APPLICANT & ABUTTERS

Include map and lot numbers of all abutters adjacent to the property. The legal definition for an abutter can be found at NH RSA 672:3, as amended; for purposes of notification, all parties in RSA 676:4(1)(d). Please use additional paper if necessary. Mailing labels may also be copied and attached.

Applicant		Representative, if applicable	
<i>Map</i>	<i>Lot</i>	<i>Map</i>	<i>Lot</i>
<i>Name</i>		<i>Name</i>	
<i>Address</i>		<i>Address</i>	
ABUTTERS			
<i>Map</i>	<i>Lot</i>	<i>Map</i>	<i>Lot</i>
<i>Name</i>		<i>Name</i>	
<i>Address</i>		<i>Address</i>	
<i>Map</i>	<i>Lot</i>	<i>Map</i>	<i>Lot</i>
<i>Name</i>		<i>Name</i>	
<i>Address</i>		<i>Address</i>	
<i>Map</i>	<i>Lot</i>	<i>Map</i>	<i>Lot</i>
<i>Name</i>		<i>Name</i>	
<i>Address</i>		<i>Address</i>	
<i>Map</i>	<i>Lot</i>	<i>Map</i>	<i>Lot</i>
<i>Name</i>		<i>Name</i>	
<i>Address</i>		<i>Address</i>	
<i>Map</i>	<i>Lot</i>	<i>Map</i>	<i>Lot</i>
<i>Name</i>		<i>Name</i>	
<i>Address</i>		<i>Address</i>	



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APPLICATION FEES

In accordance with RSA 676:4, I(g): the applicant shall pay the following fees to compensate the Town for its expenses in processing, noticing and reviewing each application; one (1) or more may apply, however, only one (1) notice fee is required.

<input type="checkbox"/> Preliminary Conceptual Consultation			
DESCRIPTION	QTY	COST	TOTAL
Administration	1	\$35	\$35
TOTAL FEES: PRELIMINARY CONCEPTUAL CONSULTATION		\$	
<input type="checkbox"/> Design Review			
DESCRIPTION	QTY	COST	TOTAL
Administration	1	\$35	\$35
Public Notice: per notice		\$85	\$
Abutters: per abutter or other party notified		\$8	\$
TOTAL FEES: DESIGN REVIEW		\$	
*Escrow Account: Plan Review (<i>SEPARATE CHECK</i>)	1	\$400	\$400
<input type="checkbox"/> Site Plan Review			
DESCRIPTION	QTY	COST	TOTAL
Review/Filing Fee: first \$100,000 of construction costs	1	\$150	\$150
Review/Filing Fee: per additional \$1,000; maximum fee: \$2,000		\$5	\$
Public Notice: per notice		\$85	\$
Abutters: per abutter or other party notified		\$8	\$
TOTAL FEES: SITE PLAN REVIEW		\$	
*Escrow Account: Plan Review (<i>SEPARATE CHECK</i>)	1	\$1,000	\$1,000
<input type="checkbox"/> Subdivision of Land			
DESCRIPTION	QTY	COST	TOTAL
Lot Line Adjustment		\$100	\$
Subdivision: first two (2) lots, including existing	1	\$150	\$150
Subdivision: each additional lot		\$75	\$
Public Notice: per notice		\$85	\$
Abutters: per abutter or other party notified		\$8	\$
TOTAL FEES: SUBDIVISION OF LAND		\$	
*Escrow Account: Plan Review (<i>SEPARATE CHECK</i>)	1	\$1,000	\$1000
<input type="checkbox"/> Boundary Line Adjustment			
DESCRIPTION	QTY	COST	TOTAL
Lot Line Adjustment		\$100	\$
Public Notice: per notice		\$85	\$
Abutters: per abutter or other party notified		\$8	\$
TOTAL FEES: BOUNDARY LINE ADJUSTMENT		\$	

Continued on Next Page

<input type="checkbox"/> <i>Conditional Use Permit</i>			
DESCRIPTION	QTY	COST	TOTAL
Administration	1	\$100	\$100
Public Notice: per notice		\$85	\$
Abutters: per abutter or other party notified		\$8	\$
TOTAL FEES: CONDITIONAL USE PERMIT			\$
<input type="checkbox"/> <i>Voluntary Merger</i>			
DESCRIPTION	QTY	COST	TOTAL
Administration		\$75	\$
TOTAL FEES: VOLUNTARY MERGER			\$
ADDITIONAL NOTE			
Other costs incurred by the Board in reviewing the application (engineering, legal, planner review, etc.), as limited in RSA 676:4 and the Town Regulations, will be passed through to the applicant by the Board unless specifically waived. *Exact cost to be determined after review of plans by Town Engineer and Circuit Rider/Planner as provided for in RSA 676:4-b (Third Party Review and Inspection).			
RECORDING FEES			
Per sheet; the applicant shall pay the cost(s) of recording at the Rockingham County Registry of Deeds, with specific amounts as set by the County Registry of Deeds. <i>DUE UPON PRESENTATION OF THE MYLAR FOR SIGNATURE; CHECKS MUST BE MADE PAYABLE TO: ROCKINGHAM COUNTY REGISTRY OF DEEDS **SEE FILING FEES: ROCKINGHAM COUNTRY REGISTRY OF DEEDS**</i>			

OFFICE USE ONLY				
Application Type	Amount Paid	Check Number	Date	Received By
Preliminary Conceptual Consultation	\$			
Design Review	\$			
Site Plan Review	\$			
Subdivision of Land	\$			
Boundary Line Adjustment	\$			
Conditional Use Permit	\$			
Voluntary Merger	\$			
Escrow Account	\$			



PLANNING BOARD
Town of Greenland • Greenland, NH 03840
 575 Portsmouth Avenue • PO Box 100
 Phone: 603.431.7111 • Fax: 603.430.3761
 Website: greenland-nh.com

FILING FEES: ROCKINGHAM COUNTY REGISTRY OF DEEDS
Must be returned with mylar

APPLICANT INFORMATION		
Name		
Company		
Address		
City/State/Zip		
Phone		
Email		
Property Address	Map & Lot	Zoning District

FILING FEES: ROCKINGHAM COUNTY REGISTRY OF DEEDS			
	State LCHIP Fee: per set	\$25	\$
	Plans: per sheet – 17 x 22 (\$14 plus \$2 surcharge)	\$16	\$
	Plans: per sheet – 22 x 34 (\$24 plus \$2 surcharge)	\$26	\$
	Copies: per sheet	\$3	\$
All fees are due upon presentation of the mylar for signature. <u>Separate checks</u>—must include phone number and made payable to: ROCKINGHAM COUNTY REGISTRY OF DEEDS			

OFFICE USE ONLY				
Application Type	Amount Paid	Check Number	Date	Received By
State LCHIP Fee	\$			
Plans: 17 x 22	\$			
Plans: 22 x 34	\$			
Copies	\$			

PLAN NUMBER _____

** NOTE: MYLARS MAY NOT BE LARGER THAN 22 X 34 **

APPLICATION CHECKLIST

Applications shall contain the following information, where applicable, to be considered complete. However, this checklist is intended only as a guide; the Planning Board may require additional information as deemed necessary. All plans shall conform to the applicable requirements of the Zoning Ordinance, Building Regulations, Subdivision and Site Plan Regulations as well as other State, local and federal requirements. All data/information sources should be referred.

Name of Applicant	Date
I. FORMAL APPLICATION	
A. Completed "Application for Subdivision Approval"	
B. State of New Hampshire Subdivision Approval Number	
C. Names and addresses of all abutters, plus three (3) sets of mailing labels per abutter	
D. Administrative fees (see fee schedule in Subdivision Regulations 2.3.6)	
E. High intensity soils information	
F. Data on test pits and percolation tests <ul style="list-style-type: none"> • Location of test pits • Percolation test data and rate • Certification of test witness • Outline of the area reserved for leach fields 	
G. Five (5) complete sets of full size plans, and seven (7) copies of 11x17 plans, stamped by a NH registered land surveyor; NH Registered Wetlands Scientist; roadway, drainage and utility plans stamped by a professional NH engineer. All plans should contain: <ul style="list-style-type: none"> • Names, addresses and telephone number of the owner, applicant, agent/or engineer, architect and/or land surveyor (all professionals working on plan are considered abutters; see II-B) • Name of the project • Names and addresses of all abutters (including those the street or stream) • Date, "North" arrow and scale • Tax Map reference • Location of the site • Planning Board approval block • Septic and well locations • Open space calculation 	
II. SUBDIVISION PLAN (Scale not more than 100' to 1")	
A. Vicinity sketch with surrounding streets	
B. Existing contours at intervals not exceeding 2'	
C. Bearings and distances of surveyed property lines	
D. Existing easements, and natural features including watercourses, waterbodies, etc.	
E. Location of existing buildings, wells, septic systems, water mains, sewers, culverts and drains within 100'	
F. All property to be set aside for park or playground use	

III. CONSTRUCTION PLAN (See Section V, Item E: Road Construction Standards)
A. Profiles showing existing and proposed elevations and grades along centerlines of all roads
B. Plans and cross-sections of street showing facilities (e.g. signs, drainage, etc.) and utilities (e.g. water, electricity, etc.)
C. The proposed locations and types of sidewalks, street lighting, curbs, gutters; character, width and depth of pavement and sub-base
D. Topographic contours
E. Site-grading plan
F. The Town Engineer can agree to minor road plan adjustments in the field. All such agreements are to be reported to the Planning Board. All other changes must be referred to the Planning Board with the proper request and revised plans.
G. For the duration of the roadway construction phase of the project, the applicant shall be required to maintain construction warning signs notifying motorists of construction in progress. This must be coordinated with the Greenland Police Department.
IV. GENERAL
A. Erosion control measures must be in place and maintained throughout the duration of project construction.
B. The Town Engineer, paid for by the applicant , must inspect the installation of erosion and sedimentation control measures, septic or sewer system installations and storm water drainage systems to ensure compliance with the approved plan.
C. Any variance or waivers granted must be keyed to the final plan.
D. The mylar must include a note requiring that street numbers for new houses be assigned by the appropriate Town of Greenland official, and must be visible from the road.
E. No changes to the approved plan(s) can be made without appearing before the Planning Board.
F. Performance bond
G. Potential Planning Board requirements: <ul style="list-style-type: none"> • Stormwater runoff calculations and engineer's certification • Calculation on type and quantity of sanitary waste • Traffic impact analysis • Protective covenants • Deed conveying streets or right-of-ways
H. POLICE CHIEF review and written comments prior to approval.
I. FIRE CHIEF review and written comments prior to approval.
J. No occupancy permit shall be issued until such time as the requirements of the fire protection system have been installed, tested and accepted in accordance with the Site Plan Review Regulations.
K. No occupancy permit shall be issued until the landscaping is inspected by the Building Inspector; landscaping shall be completed according to the plan.

NOTE: For more complete information, it's strongly recommended that the applicant read Greenland's most current issue of Building Regulations, Zoning Ordinance, Subdivision Regulations and Site Plan Regulations.