Appendix A

Standards

Section 1: General

A. Character of land for subdivision: land judged by the Board to be unsafe for building development purposes (because of exceptional danger to health or peril from fire, flood, poor drainage, excessive slope, or other hazardous conditions), shall not be platted for residential, commercial or industrial subdivision, nor for other uses that may increase danger to life or property, or aggravate the flood hazard. Land with inadequate characteristics or capacity for sanitary sewage disposal shall not be subdivided for residential, commercial or industrial subdivision purposes unless connected to a municipal sewage system.

B. Premature Subdivision Development: The Board shall not approve scattered or premature subdivision of land or subdivision which would involve danger or injury to health, safety, or prosperity, (by reason of lack of water supply, drainage, transportation, school, fire department, or other public service); nor will the Board approve subdivisions that would necessitate an excessive expenditure of public funds for the supply of such services.

C. Preservation of Existing Features: The subdivider shall identify and take suitable steps as required by the Board to preserve and protect significant existing features such as: trees, scenic points, brooks, streams, rock outcroppings, water bodies, wetlands, other natural resources, and historic landmarks.

D. Reserve Strips: Privately owned reserve strips that control access to any part of the subdivision or to any other parcel of land from any street, or from any land dedicated to public use, or which may be dedicated, shall not be permitted.

E. Driveway Access: Each lot shall have frontage on a public street at the point of access.

Section 2. Subdivision Standards

A. Lots:

1. All lots shown on the plat must conform to the minimum area and dimension requirements of the zoning regulations, a subdivision plat may be designed for cluster or planned unit development, provided all requirements of these and such zoning regulations are met.

2. Where extra width has been dedicated for widening of existing streets, lots shall begin at such extra width line, and all setbacks shall be measured from such line.

B. Sewage Disposal:

Preface

"Safe disposal of all human and domestic wastes is necessary to protect the health of the individual family and the community and to prevent the occurrences of nuisances. To accomplish satisfactory results, such wastes must be disposed of so that:

1. They will not contaminate any drinking water supply.

2. They will not give rise to a public-health hazard by being accessible to insects, rodents, or other possible carriers which may come into contact with food or drinking water.

3. They will not give rise to a public health hazard by being accessible to children.

4. They will not violate laws or regulations governing water pollution or sewage disposal.

5. They will not pollute or contaminate the waters of any bathing beach, shellfish breeding ground, or stream used for public or domestic water supply purposes, or for recreational purposes.

6. They will not give rise to nuisance due to odor or unsightly appearance." (New Hampshire Water Supply & Pollution Control Commission, Guide for the Successful Design of Small Sewage Disposal System, December 1974, p. A-1.)

General

1. Where a subdivision of land creates a lot or site that will not meet the minimum standards and design requirements imposed by the State of New Hampshire Water Supply and Pollution Control Commission, municipal regulations, and the requirements listed below it shall not be approved by the Board (unless the proposed subdivision will be connected to a municipal sewage system). All data shall be submitted to the Planning Board.

2. The use of leach field beds built above natural ground level shall be discouraged for subdivisions containing lots of less than 3 acres, or where lot frontages are less than 300 feet.

Test Pits and Percolation Tests

3. Prior to refilling, all soil test pits shall be inspected by an official representative of the Town of Lyndeborough, duly designated to inspect soil test pits for the purpose of these regulations.

4. The number and location of percolation tests and test pits shall be determined in consultation with the Board. All percolation tests and test pits made shall be logged, recorded, located and dated on the soil plan. The Planning Board may require that a least one test pit be dug on every lot at the location of the proposed leach field.

5. All test pits shall be dug to a depth of ten (10) feet or refusal if ledge. Depth to ledge, clay, hardpan layers, existing and expected seasonal high water table shall be recorded on the soil survey plan.

6. Sufficient test pits shall be dug to insure that an area of twice the design leach field area or four thousand (4000) contiguous square feet (whichever is greater) is present on the proposed lot. Such area must include a sufficient natural soil depth to meet the standards of the New Hampshire Water Supply and Pollution control Commission. This area shall not be used for buildings, wells, or other permanent structures, but shall be reserved for sewage treatment and septic effluent disposal. This area shall be designated on the plat. If such an area is not present, the lot shall be disapproved.

7. Any soil with a percolation rate slower than two inches per hour shall not be used for the disposal of septic tank effluent.

Soils and Slope Specifications

This regulation applies to subdivisions on which an on-site septic tank and leachfield system are to be used for sewage disposal, and/or where wetland identification is required.

In addition to any other town and state sewage disposal requirements for local subdivision and site plan reviews, or wetland zoning compliance, the following regulations shall apply:

1. Definitions

   a. Qualified Soil Scientist – A person qualified in soil evaluation and mapping whose education and experience meet the qualification requirements of the Hillsborough County Conservation District or as licensed by a state of NH Board of Registration for Soil Scientist.

   b. High Intensity Soils Map -A soils map of a parcel of land being considered for development on a perimeter survey, with a scale of one inch (1") not to exceed one hundred feet (100'), where soils are identified and mapped in accordance with the high intensity soils mapping standards as adopted by the Hillsborough County Conservation District or the Rockingham County Conservation District.

2. Ground control shall be marked, by the applicant, both on the site and on the plat map(s). The ground control shall consist of numbered flags, stakes, walls, trees or other easily identifiable points on the property. These points will be well distributed throughout the site at a density of not less than four (4) points per acre. The numbered points must be identified, by number, on the plat plan. The purpose of this requirement is to provide easy identification for all parties required or interested in examining the site.

3. The location of all existing and proposed buildings, accessory building driveways, sewer lines, water lines, and public and private roads and

driveways on the site, and the general location of such features within 100 feet (100') of its boundaries, shall be indicated on the plat plan.

4. High intensity soils (HIS) maps are to be provided for all site plans and for subdivisions. Additionally, applicants may request the Planning Board to waive this requirement, if the Planning Board determines site conditions do not warrant the HIS survey. This determination will be made based on an on-site review by the Planning Board.

5. The HIS maps shall be prepared by a qualified soils scientist who is qualified soils scientist who is qualified by the Hillsborough County Conservation District or as licensed by a State of NH Board of Registration for Soil Scientist.

6. A paper copy of the HIS survey shall be provided to the Planning Board. In addition to the soils information provided by the survey, the map shall have on it the following:

    a. the signature of the qualified soils scientist;
    b. any qualifying notes made by the soils scientist.

7. If a soils classification provided on the HIS map is in dispute, the Planning Board may request an evaluation of the soils designations by the Hillsborough County Conservation District.

8. The 4,000 square foot leachfield area or an area two (2) times the required leachield area (which ever is greater) shall be designated and reserved on each lot.

9. The designated leachfield area must be left open and is not to be used for the siting of any incompatible purpose, including but not limited to a driveway, or structures of any type. Parking areas may be located over the designated leachfield area when chambered systems are to be used.

10. The designated leachfield area shall be set back as required in Section 11 from:

    a. poorly and very poorly drained soils:
    b. naturally deposited soils which have a seasonal high water table less than six (6) inches from the surface;
    c. naturally deposited soils which have an impermeable layer less than two (2) feet to the surface;
    d. naturally deposited soils which have bedrock less than three (3) feet below the surface;
    e. open drainage structures intended to convey water, intermittently or perennially, including but not limited to roadside ditches, culvert openings, diversions and swales.

11. The designated leachfield area is required to be set back from all of the areas specified in Section 10 as follows:
    a. seventy-five (75) feet if the designated leachfield area is entirely located in well-drained soil, without a restrictive layer, or well-

drained soil with a restrictive layer and slopes of less than eight percent (8%).

b. one hundred (100) feet if the designated leachfield area is entirely or partially located in somewhat poorly drained soils, moderately well-drained soil, excessively drained soils, or soils with a restrictive layer and slope of eight percent or greater (>8%)

12. In addition, the designated leachfield area shall be setback one hundred (100) feet from open water bodies and perennial streams.

13. In areas where the HIS survey indicates bedrock at less than three (3) feet from the surface, sufficient tests pits shall be made to ensure that the setback requirements established in Sections 10 and 11 can be met.

14. The designated leachfield area may not be placed on areas with finished slopes greater than twenty-five percent (25%).

15. If the designated leachfield area is located on an area with finished slopes from fifteen to twenty-five percent (15-25%), the septic system muct be designed by a registered professional engineer.

C. <u>Streets:</u>

<u>General</u>

1. All streets shall be constructed, and all bridges, culverts, drainage structures, storm sewers, gutters, drainage ditches, and other improvements (required by the subdivision plat and accompanying documents) shall be installed in conformance with the Town standards.

2. New streets shall be constructed to overcome problems encountered with adverse soil conditions. Different points on a road may require different construction techniques, ie. sandy soil vs. muck vs. high frost potential, etc.

3. No street shall have a name which will duplicate or closely duplicate the names of existing streets. The continuation of an existing street shall have the same name.

<u>Sidewalks and Bicycle Paths</u>

4. Sidewalks, bicycle paths or combination sidewalk/bicycle paths may be required as deemed necessary by the Board.

<u>Existing Streets</u>

5. For subdivisions that require construction of new streets, any existing street which provides either frontage to new lots of access to new streets shall meet the minimum standards established in this section for such streets. Where a subdivision requires undue expenditures by te Town to improve existing streets for conformance with minimum requirements,

the Board may disapprove such subdivision until the Selectmen shall certify that funds for the improvements have been assured by the municipality.

6. the plan of any proposed subdivision shall show all work required to connect and complete the improvements and utilities between the proposed street pattern and any connecting street in an existing subdivision.

7. Where a subdivision abuts an existing street with an inadequate alignment, or right-of-way width, the subdivision plat shall include, in the street dedication, all land needed to meet the standards established by these regulations, and as approved by the Board.

8. Where a proposed subdivision abuts an existing subdivision, the subdivider shall make every attempt to design the street system of the proposed subdivision to connect with dead-end streets of the existing subdivision.

Intersections

9. Streets shall intersect so that the street lines within seventy-five (75) feet of an intersection are at right angles and in no case less than seventy-five (75) degrees.

10. The minimum distance between center line offsets at street jogs shall be one hundred fifty (150) feet.

Dead-End Streets

12. Except where near future connections may be possible, dead-end or cul-de-sac streets shall not, in general, exceed 400 feet in length, and shall be equipped with a turn-around roadway at the closed end with a minimum radius of 75 feet from the center to the outside edge of the right-of-way.

13. The Board may require that the arrangement of streets in the subdivision shall provide for the continuation of principal streets in adjoining subdivisions or for their proper projection when adjoining property is not subdivided, and shall be of a width at least as great as that of such existing connecting streets. The subdivision street system before leaving the confines of Lyndeborough shall connect directly with a pre-existing public way. Such pre-existing public way shall itself, before leaving the confines of Lyndeborough, connect with another public street.

Class VI Roads – Special Conditions

14. The purpose of this section is to allow conditional Planning Board approval of subdivisions located on Class VI highways (as defined by

RSA 230). Said conditional approval shall only be given by the Board when it deems that exempting the subdivider from the requirements of rebuilding of existing Class VI roads to town standards is in the best interest of subdivider, the future owners of the land and the Town.

A true copy of the following conditions shall be placed on the approved plat for all such subdivisions. Additional conditions may be added by the Planning Board as it deems necessary.

"The Planning Board hereby approves this subdivision subject to the following conditions:

a. It shall be the duty of the owner(s) , or his successor(s) in title, of any lot in this subdivision, to reconstruct (in accordance with NH RSA 234) any Class VI highway(s) as shown on this plan prior to being issued by a building permit to undertake construction on said lot.

b. Said road will be reconstructed to Town specifications suitable for layout as a Class V highway and any expense therefore shall be the responsibility of the subdivider of his successor (s) in title for said lot(s).

c. All such roads so constructed shall provide adequate frontage on said road for the lot to be built upon, as required by town ordinances, and all such roads shall connect to existing public streets.

d. It shall be the duty of every seller of this land to so inform the potential buyer of any lot of these restrictions prior to the buyer making any binding commitment to purchase said lot.

e. Any conditions imposed by the Planning Board as a part of subdivision approval shall be made a covenant of the deed(s) conveying all or any part of said subdivision and shall run with the land.

Design Specification – New Streets

15. Subdivision streets shall be designed in accordance with the following subdivision road standards.

a. The roadway shall have a paved width of at least 24 feet with a 4 foot shoulder on each side of the paved section before tapering off at a 4:1 slope to ditch line. In embankment areas where 10 feet or more of fill is required and 2:1 slope is used, the shoulder shall extend 6 feet beyond the edge of the pavement and standard 3-cable guard rail and anchorages shall be installed.

b. The roadway shall be constructed in accordance with the town road standards on file at the Selectmen's Office, and the following specifications:

1) Removal of all loam, mulch, stumps and other improper road foundation material within the limits of the right-of-way. In embankment areas, suitable foundation material shall be placed in 1 foot layers and compacted to form a stable subgrade.

2) Ledge and boulders shall be removed to at least 8 inches below subgrade and replaced with sand or bankrun gravel.

3) Base course gravel shall consist of a minimum of 12 inches of compacted bankrun gravel, free form loam or organic matter. 24% to 70% shall pass a No. 1 sieve and not more than 12% of tehmaterial passing the No. 4 sieve shall pass the No. 200 sieve. No stones or rock fragments will be permitted which cannot be incorporated in a 6 inch layer. The base course shall be compacted and graded to proper shape before the crushed gravel is placed.

4) Finish course gravel shall consist of 4 inches of crushed gravel with the following required grading:

Sieve Size	% By Weight Passing
3″	100
2″	95-100
1″	55-85
No. 4	27-52
No. 200	9-12 passing No. 4

5) Pavements shall consist of 3 inches of hot bituminous pavement. Applied in two courses, a 2-inch base course and a 1-inch wearing course. The pavements shall be applied by an approved paving contractor in accordance with the State of New Hampshire Standard Specifications for Road and Bridge Constructions as approved and Adopted in 1969 and as amended.

6) The grade of the road shall not be more then 8% nor less than 1%.

7) Approved street signs and culvert posts shall be installed as directed by the Board of Selectmen and paid for by the developer.

D. Erosion/Storm Water Control

1. Definitions

a. "Certification" means a signed, written approval by the Planning Board that a soil erosion and sediment control plan complies with the applicable requirements of the regulations.

b. "Planning Board" means the Planning Board of the Town of Lyndeborough.

c. "County Conservation District" means the Hillsborough County Conservation District (hereafter " HCCD").

d. "Development" means any construction or grading activities to improved or unimproved real estate.

e. "Disturbed area" means any area where the ground cover is destroyed or removed leaving the land subject to erosion.

f. "Erosion: means the detachment and movement of soil or rock fragments by water, wind, ice or gravity.

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

h. "Inspection" means the periodic review of sediment and erosion control measures shown on the certified plan.

i. "Sediment" means solid material, either mineral or organic, that is in suspension, is transported, or has been moved from its site of origin by erosion.

j. "Soil" means any unconsolidated mineral or organic material of any origin.

k. "Soil Erosion and Sediment Control Plan" means a scheme that minimizes soil erosion and sedimentation resulting from development and includes, but is not limited to, a map and narrative.

l. An adequate surface storm water drainage system for the entire subdivision area shall be provided. Storm drainage shall be carried to existing water-courses, or connect to existing storm drains. Storm water run-off shall be restricted to existing drainageways. No new drainageways shall be created unless necessary easements are obtained. No increased peak flow in surface run-off shall be permitted if such increased run-off passes beyond the property lines of the parcel upon which such development occurs, unless it is within an approved public storm drainage system

m. Storm sewers and subdivision drainage facilities shall be based upon a design flow with a minimum return interval of a 10-year/24 hour storm. Potential hazard structures, such as

holding ponds, sedimentation ponds, etc., shall be designed to the 50-year/24-hour storm standards, in accordance with the Soil Conservation Service handbook entitled Urban Hydrology for Small Watersheds, Technical Release #55 and as amended.

n. Provisions shall be made to accommodate the increased run-off caused by changed soil and surface conditions during and after development. Sediment in the runoff water shall be trapped by the use of sediment basins or other acceptable methods, until the disturbed area is stabilized. Diversions, sediment retention basins, and so forth, shall be constructed prior to any on-site grading or disturbance of existing surface material.

2. Activities Requiring a Certified Erosion and Sediment Control Plan

A soil erosion and sediment control plan shall be provided for all site plans and for subdivisions, except those defined as "minor subdivisions" per RSA 676. Additionally, applicants may request the Planning Board to waive this requirement upon recommendation of the HCCD. (Applicants request waiver of Planning Board, Planning Board requests recommendation of HCCD, Planning Board acts upon HCCD recommendation.)

3. Exemptions

A single family dwelling that is not a part of a subdivision of land shall be exempt from these soil erosion and sediment control regulations.

4. Erosion and Sediment Control Plan

a) To be eligible for certification, a soil erosion and sediment control plan shall contain proper provisions to adequately control erosion and sedimentation and reduce the likelihood of storm water runoff form the proposed site, based on the best available technology. Such principles, methods and practices necessary for certification are found in the Erosion and Sediment Control Design Handbook for Developing Areas of New Hampshire (1981) and as amended. Alternative principles, methods and practices may be used with prior approval of the Planning Board.

b) Said plan shall contain, but not be limited to:

1) A narrative describing:
   a) the development;

   b) the schedule for grading and construction activities including:

      1. start and completion dates:
      2. sequence of grading and construction activities;

      3. sequence for installation and/or application of soil erosion and sediment control measures;

      4. sequence for final stabilization of the project site.

c) the design criteria for proposed soil erosion and sediment control measures and storm water management facilities.

d) the construction details for proposed soil erosion and sediment control measures and storm water management facilities.

e) the installation and/or application procedures for proposed soil erosion and sediment control measures and storm water management facilities.

2) A site plan map at a sufficient scale to clearly show:

a) the location of the proposed development and adjacent properties;

b) the existing and proposed final topography including soil types, wetlands, water courses and water bodies;

c) the existing structures on the project site, if any;

d) the proposed area alterations including cleared, excavated, filled or graded areas and proposed utilities, roads and, if applicable, new property lines, and the general location of proposed structures and driveways.

e) the location of and design details for all proposed soil erosion and sediment control measures and storm water management facilities;

f) the sequence of grading and construction activities;

g) the sequence for installation and/or application of soil erosion and sediment control measures;

h) the sequence for final stabilization of the development site.

5. Minimum Acceptable Standards

a) Plans for soil erosion and sediment control shall be developed in accordance with these regulations using the planning considerations specified on pages 2-1 to 2-3 of the Erosion and Sediment control Design Handbook for Developing Areas of New Hampshire (1981), as amended. Soil erosion and sediment control plans shall result in a development that: minimizes erosion and sediment during construction; is stabilized and protected from erosion when completed; and does not cause off-site erosion and/or sedimentation.

b) The minimum standards for individual measures are those in the Erosion and Sediment Control Design Handbook for Developing Areas of New Hampshire (1981), as amended. The Planning Board may grant exceptions when requested by the applicant if technically sound reasons are presented.

c) The Soil Conservation Service method as outlined from Appendix 1 of the Erosion and Sediment Control Design Handbook for Developing Areas of New Hampshire (1981), as amended, shall be used in determining peak flow rates and volumes of runoff unless an alternative method is approved by the Planning Board.

6. Issuance of Denial of Certification

a) The Planning Board shall either certify that the soil erosion and sediment control plan, as filed, complies with the requirements and objectives of this regulation or deny certification when the development proposal does not comply with these regulations.

b) Prior to certification, any plan submitted to the municipality may be reviewed by Hillsborough County Conservation District which may make recommendations concerning such plan, provided such review shall be completed within thirty days of the receipt of such plan.

c) The Planning Board may forward a copy of the development proposal to the Conservation Commission, other review agency or consultant for review and comment.

7. Conditions Relating to Soil Erosion and Sediment Control

a) The estimated costs of measures required to control soil erosion and sedimentation, as specified in the certified plan, may be covered in a performance bond or other assurance acceptable to the Planning Board.

b) Site development shall not begin unless the soil erosion and sediment control plan is certified and those control measures and facilities in the plan scheduled for installation prior to site development are installed and functional.

c) Planned soil erosion and sediment control measures and facilities shall be installed as scheduled according to the certified plan.

8. Inspection

Inspections shall be made by the Planning Board or its designated agent during development to ensure compliance with the certified plan and that control measures and facilities are properly performed or installed and maintained. The Planning Board may require the permitee to verify through progress reports that soil erosion and sediment control measures and facilities have been performed or installed according to the certified plan and are being operated and maintained.

E. Utilities:

1. All utility system installations shall be at the expense of the subdivider and shall be installed under the supervision of the appropriate Town agency.

2. The Board may require the installation of street lighting in any subdivision where it seems necessary.

F. **Open Space:**

1. The Board may, where it seems essential, require that the plat show one or more sites of suitable character, size, shape and location to be used as community open space, park or neighborhood playgrounds. The total size of such areas shall not exceed 15 percent (15%) of the total area of the subdivision. The subdivider may of his own volition exceed the above area requirements.

2. The subdivider shall preserve all existing trees and shrubbery to the fullest extent possible. Special consideration shall be given to the arrangement and ultimate improvement of the lots to this end. Precautions shall also be taken to protect existing trees, shrubbery and vegetation during the construction of roads and utilities.

3. Where any land other than that included in public rights-of-way is to be dedicated to the public use, the subdivider shall not remove any trees from the site without written permission from the Planning Board.

G. **Other:**

1. All subdivision development shall require off-street parking to be provided at the rate of at least two (2) parking spaces per dwelling unit.

2. Where necessary, in the judgment of the Board, rights-of-way for pedestrian travel and access may be required between subdivisions or its parts, or between a subdivision and public property.

3. Permanent survey monuments shall be set in the boundary of rights-of-way at intersecting streets, point of curvature and point of tangency of curves. The point of intersection of short curves may be used instead, where such is practical, at the discretion of the Town Engineer. Monuments shall be placed on one side of the street only and at one corner of intersecting streets. Adjacent monumented points shall be intervisible.

    a. Monuments shall be tied into a public street intersection, U.S.G.S benchmark or other recognized existing monument. Monument locations shall be shown and properly dimensioned on the final plat.

    b. Monuments shall be of stone, concrete, or other material acceptable to the Town Engineer, and not less than 4" in diameter or square, and not less than 42" long. Concrete monuments shall be reinforced with steel rods, and a plug, brass plate, or pin shall serve as the point of reference and a magnetic rod or other suitable metal shall be placed adjacent to the monument to allow for recovery.

    c. Iron pipes shall not be considered permanent monuments for the purpose of these regulations.

    d. Monuments shall be set at all lot corners.