SUBDIVISION REGULATIONS TOWN OF MERRIMACK, NH



MOST RECENTLY AMENDED BY THE MERRIMACK Planning Board:

SEPTEMBER 3, 2019

TOWN OF MERRIMACK

SUBDIVISION REGULATIONS

September 3, 2019

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TOWN OF MERRIMACK

SUBDIVISION REGULATIONS

September 3, 2019

SECTION 1 - AUTHORITY

Pursuant to the authority vested in the Merrimack Town Planning Board by the voters of the Town of Merrimack and in accordance with the provisions of Chapter 674:35-44 and 676:1 through 4-a, N.H. Revised Statutes Annotated, 1955, as amended, The Merrimack Town Planning Board adopts the following regulations governing the subdivision of land in the Town of Merrimack, New Hampshire.

End 1

SECTION 2 – DEFINITIONS [Amended 9/3/19]

- 2.01 Abutter: 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 Planning 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 the purpose 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. For the 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 manufacturing 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. (See also NH RSA § 672:3)
- 2.02 <u>Approval</u>: Shall mean that recognition by the Planning Board, certified by written endorsement on the plat, that the final plat submission <u>and/or phasing</u> plan meets the requirements of these regulations.
- 2.03 <u>Approval, Conditional</u>: Shall mean an expression by the Planning Board that the preliminary layout appears to satisfy all requirements established herein for the preliminary layout submission phase. Conditional Approval does not constitute, nor should it be constructed as, approval, either implied or granted, of the final plat, nor does it bind the Planning Board to approval of the final plat.
- 2.04 <u>Board</u>: Shall mean the Planning Board of the Town of Merrimack.
- 2.05 <u>Easement</u>: Shall mean an acquired privilege or right of use acquired in the land of another and is used to create facilities for access, space for emplacement of public utilities and right-of-way, both in favor of the municipality and/or in favor of its residents. It shall include, without limitation, streets and roads, electronic and telephone utilities, vehicular and pedestrian traffic, sidewalks, water, storm drainage, and sanitary sewer utilities, pipelines, street lighting, slopes, ingress and egress, construction and conservation easements.
- 2.06 <u>Final Plat</u>: The final drawing or drawings on which the subdivider's plan of subdivision is indicated, prepared as required under the provisions of Section 4.06 hereof.
- 2.07 <u>Lot Line Adjustment</u>: Adjustment(s) to the boundary between adjoining properties where no new lots are created.

- 2.08 <u>Master Plan</u>: Shall mean the comprehensive plan or plan of development for the community as adopted by the Planning Board.
- 2.09 <u>National Pollutant Discharge Elimination System (NPDES)</u>: Shall mean the name of the surface water quality program authorized by Congress as part of the 1972 Clean Water Act. This is the Environmental Protection Agency's program to regulate point sources that discharge pollutants into surface waters of the United States.
- 2.10 <u>Official Map</u>: Shall mean the adopted street or base map of the municipality as defined in RSA 674:9-11.
- 2.11 <u>Official Minutes of the Board</u>: Preliminary minutes of the Board shall be available within 5 business days from the date/time of the meeting or hearing, or as required by RSA 91-A:2 as amended. Preliminary minutes shall become the Official Minutes of the Board when approved for adoption by a majority of the Board at a regularly scheduled meeting of the Board.
- 2.12 <u>Preliminary Layout</u>: Shall mean a plan prepared as required in Section 4.05 and submitted to the Board for concurrence prior to preparing the final plat.
- 2.13 <u>Pre-Submission Hearing</u>: A hearing to ensure complete knowledge of applicable rules and regulations, to save time in the preparation of plans, and to ensure that an adequate plan is submitted.
- 2.14 <u>Re-subdivision</u>: Shall mean any change in a map of any approved or recorded subdivision plan, if any change affects any street layout shown on such map or reserved thereon for public use, or any lot line, or if it affects any map or plan legally reached prior to the adoption of any regulation controlling subdivisions, such parcel shall be considered for approval by the Planning Board by the current procedure, rules and regulations as for a subdivision.
- 2.15 <u>Right-of-way</u>: A strip of land that is generally used for the location of a street, walkway, utility line, or other access way, that is separate and distinct from the lots and parcels adjoining such R.O.W. and not included within the dimensions or areas of such other lots or parcels..
- 2.16 <u>Street</u>: Means any vehicular way that: (1) is an existing state or municipal roadway: or, (2) is shown on a subdivision plan approved pursuant to law; or, (3) is approved as part of the Official Map process outlined in RSA § 674:9 and 674:10. "Street" shall include road, highway, avenue, boulevard, lane, etc. Unless otherwise indicated, the term street shall refer to both public and private streets.
- 2.17 <u>Street Frontage</u>: Shall mean frontage on Class II, III, IV and V highways, and shall include new streets within a proposed subdivision.

- 2.18 <u>Streets, Access</u>: Shall mean minor ways designed or required to provide vehicular access to off street loading or off street parking facilities.
- 2.19 <u>Streets, Collector</u>: Relatively low speed, relatively low-volume streets that are intended for collecting trips from local streets and distributing them to the arterial network.
- 2.20 <u>Streets, Commercial</u>: Shall mean streets designed or required to serve industrial or mercantile concentrations and to carry traffic from these concentrations to major streets.
- 2.21 <u>Streets, Expressway</u>: Shall mean limited access highway designed to carry large volumes of high speed interstate and inter-city traffic as defined in RSA 230:4 Class II highways.
- 2.22 <u>Streets, Major</u>: Shall mean streets designed or required to carry large volumes of traffic to, from or through the central part of the Town.
- 2.23 <u>Streets, Residential</u>: Shall mean streets designed or required to provide vehicular access to abutting residential properties.
- 2.24 <u>Streets, Service</u>: Shall mean streets designed or required to provide vehicular access to abutting commercial properties.
- 2.25 <u>Subdivider</u>: The owner of record of the land to be subdivided, including any subsequent owner of record making any subdivision of such land or any part thereof, or the agent of any such owner.
- 2.26 <u>Subdivision</u>: Means the division of a lot, tract, or parcel of land into 2 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 resubdivision 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.

If no new streets are involved, the following divisions are excluded from the operation of these regulations: Divisions of Property by testamentary or intestate provisions, or divisions of property upon court order.

2.27 <u>Subdivision Construction</u>: Shall mean and include but shall not be limited to the clearing and/or grubbing of building sites and roadways; excavation, dredging, and/or filling for roadways, and utilities, installation of utilities, backfill operation, site development of every nature, grading and paving in any subdivision.

- 2.28 <u>Subdivision, Minor</u>: A minor subdivision is: a subdivision on an existing approved street or road with no possibility of future subdivision (i.e. no remaining frontage and/or acreage abutting or included in parcel by same owner); a subdivision which creates not more than three lots for building development purposes; or a proposal which does not involve creation of lots for building development purposes. Such lots may not be subdivided again as minor subdivisions.
- 2.29 <u>Submission Date</u>: Date of submission to the Board of the preliminary or final plat in accordance with, and meeting the requirements of Sections 4.01 thru 4.06, is the date of the public meeting at which the Planning Board determines that the application is sufficiently complete for Acceptance for review and consideration by the Board.

End 2

SECTION 3 – APPLICATION PROCEDURE

3.01 Pre-Submission Hearing:

a. Any applicant in writing may request a pre-submission hearing before the Board. This preliminary consultation shall be directed at a review of the basic concept of the proposal and suggestions which might be of assistance in resolving problems with meeting requirements during final consideration. The purpose of this hearing is to ensure complete knowledge of applicable rules and regulations, to save time in the preparation of plans, to ensure that an adequate plan is submitted and to acquaint the Board with the intentions of the applicant.

b. Pre-submission hearing documents may consist of a rough conceptual plan, sketch or layout not meeting any of the requirements for a preliminary or final plat but should be in sufficient detail to be informative to the Board.

c. The Board and the 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 if any. Such discussion may occur without the necessity of giving formal public notice as required under Section 3.03(d), but such discussions may occur only at formal meetings of the Board. Preliminary consultation and review beyond such conceptual and general discussion may proceed only after identification of, and notice to, abutters and the general public as required by Section 3.03(d).

d. Request for a pre-submission hearing shall be submitted not less than 15 days prior to a regular meeting of the Board and shall be properly posted as part of the Board's agenda as required by applicable State statutes. Pre-submission consultation and hearing shall be separate and apart from formal consideration of the completed application under Section 3.03 and the time limits for acting under Section 3.03(b) shall not apply until formal submission of a completed application under Section 3.03(a).

e. The Board shall act in an advisory capacity in accordance with the zoning ordinance of the Town of Merrimack and may request additional information. The actions of the Board resultant from a pre-submission hearing shall not be deemed to forfeit its rights to make major modifications, or disapprove a preliminary or final plat.

3.02 Preliminary Layout

a. Application for conditional approval of a preliminary layout may be submitted to the Secretary of the Board by the subdivider or his authorized agent utilizing a form provided by the Board. The application shall be accompanied by all information described in Section 4.05, and by evidence of approval of plans by any state or regional agency whose review is required by law. Such application shall be submitted not less than 15 days prior to a regular meeting of the Board. The Board shall give conditional approval or disapproval of the preliminary layout as originally submitted or modified. The Board shall give conditional approval with modifications only to authorize the preparation of the final plat, or shall disapprove such preliminary layout. The Board shall state in its records any modifications, which it will require in the preliminary layout, or any reasons for disapproval. A copy of this record shall be sent to the applicant.

b. Any plat submitted to the Planning Board shall bear the name and address of the applicant and all abutters to the land described in the plat and a hearing shall be held thereon. The applicant or his authorized agent in writing shall certify to the Board that the abutters to the land described are current and complete as shown on the plat. Consideration of said application may proceed only after identification of and notice to, abutters and the general public as required by Section 3.03(a). As noted in that section, all costs of notice, whether mailed, posted or published, shall be paid in advance by the applicant.

c. If the applicant intends to submit a final plat on only a portion of the total land to be subdivided, the preliminary layout submission shall cover the entire tract, and shall indicate the approximate outline and sequence of those portions of the tract for which subsequent final plats will be submitted.

d. Conditional approval of a preliminary layout shall be separate and apart from formal consideration of a completed application under Section 3.03 and the time limits for acting under Section 3.03(b) shall not apply until a completed application is submitted under Section 3.03(a), all in accordance with RSA 676:3 and 4 (as amended).

e. Conditional approval does not constitute, nor should it be construed as approval, either implied or granted, of the final plat, nor does it bind the Planning Board to approval of the final plat.

3.03 Application - Final Plat

The following procedures apply to subdivision approvals and will be followed by the Planning Board when considering or acting upon a plat or application submitted to it for final approval:

a. A completed application (as defined below) sufficient to invoke jurisdiction of the Board shall be submitted to and accepted by the Board only at a public meeting of the Board with notice as provided in Section 3.03 (d). The applicant shall file the application with the Board or its agents at least 15 days prior to the meeting at which the application will be accepted. The application shall include the names and addresses of the applicant and all abutters as indicated in town records not more than 5 days before the day of filing; all holders of conservation, preservation, or

agricultural preservation restrictions on the subject property; and every engineer, architect, land surveyor, or soil scientist whose professional seal appears on any plat submitted. Abutters shall also be identified on any plat submitted to the Board.

A completed application, sufficient to invoke the jurisdiction of the Board, shall consist of all data required in Section 4.05 (Preliminary Layout); Section 4.06.1 (Final Plat); Section 4.06.2 (Road Plan and Profile); Section 4.06.3 (Topographic Plan); Section 4.09 (Legal Data) and Section 4.06.4 (Assessor's Plat.) Said application must contain sufficient information to allow the Board to proceed with consideration and to make an informed decision.

b. The Board shall, at the next regular meeting or within 30 days following the delivery of the application, determine if a submitted application is complete according to the Board's regulations and shall vote upon its acceptance. Upon determination by the Board that a submitted application is complete according to the Board's regulations, the Board shall begin formal consideration and shall act to approve, conditionally approve, or disapprove within 65 days, subject to extension or waiver as provided in Section 3.03(c). In the event the Board fails to take timely action on the application as provided in this section then the applicant may then proceed as provided in RSA 676:4(I)(c)(1) and (2).

c. The Planning Board may apply to the Selectmen for an extension not to exceed an additional 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 in Section 3.03. (b) and consent to such extension as may be mutually agreeable.

d. Notice to the applicant, abutters and the public shall be given as follows: The Planning Board shall notify the abutters and the applicant by certified mail of the date upon which the application will be formally submitted to the Board. Notice shall be mailed at least 10 days prior to submission. Notice to the general public shall also be given at the same time by posting a copy of the application in a public place within the time. The notice shall include a general description of the proposal that is the subject of the application and shall identify the applicant and the location of the proposal. For any public hearing on the application, the same notice as required for notice of submission of the application shall be given. If notice of public hearing has been included in the notice of submission or any prior notice, additional notice of that public hearing is not required nor shall additional notice be required of an adjourned session of a hearing with proper notice if the date, time and place of the adjourned session was made known at the prior hearing. All costs of notice, whether mailed, posted or published, shall be paid in advance by the applicant. Failure to pay such costs shall constitute valid grounds for the Planning Board to terminate further consideration and to disapprove the plat without a public hearing.

e. Except as provided in this section, no application may be denied or approved

without a public hearing on the application. At the hearing, the applicant, any abutter or person with a direct interest in the matter may testify in person or in writing. Other persons may testify as permitted by the Board at each hearing. Public hearings shall not be required when the Board is considering or acting upon:

1. minor lot line adjustments or boundary agreements which do not create buildable lots, except that notice to abutters shall be given prior to approval of the application in accordance with Section 3.03. (d) and any abutter may be heard on the application upon request; or

2. disapprovals of applications based upon: failure of the applicant to supply information required by the regulations, including abutters' identification; or failure to meet reasonable deadlines established by the Board; or failure to pay costs of notice or other fees required by the Board.

f. The determination of reasonable fees in addition to fees for notice under Section 3.03 (d) to be imposed by the Board to cover its administrative expenses and costs of special investigative studies, review of documents and other matters which may be required by particular applications. The Board may, with the input and recommendation of the Director of Public Works and/or the Director of Community Development, require fees to be escrowed with the Town to cover the costs and expenses to the Town associated with any engineering or legal reviews, investigative studies, or inspections, which the Board may deem necessary with respect to the particular application as further defined in these regulations.

g. In case of disapproval of any application submitted to the Planning Board, the ground for such disapproval shall be adequately stated upon the records of the Planning Board.

h. If the completed application is approved, said approval shall be certified by written endorsement on the plat along with any conditions of such approval endorsed by the Chairman and Secretary of the Planning Board and recorded with the Registry of Deeds by the Planning Board. Costs shall be paid by the applicant.

3.04 Post Approval Procedures

a. <u>Recording of Final Plat</u>

Upon a vote by a majority of the Planning Board to approve a subdivision, the application shall be deemed to have final approval and the plan shall be signed by the Chairman and the Secretary of the Board. The signed plan shall be recorded in the Hillsborough County Registry of Deeds (HCRD) within thirty days of the signing of the plan. The Planning Board, by vote, may extend the filing period for good cause.

b. Conditions of Approval

All terms of a conditional approval, as determined by the Planning Board in its affirmative vote on the motion for conditional approval, shall be completed to the satisfaction of the Chairman and Secretary prior to signing of the plan by the Chairman and Secretary and within six months of the Planning Board's affirmative vote of conditional approval. Plans, which have not satisfied the conditions of approval within this time period, shall be null and void.

In addition to local approvals, the applicant shall be responsible for showing evidence of having obtained such State and Federal permits as may be applicable. Permits may include a Federal storm water management permit or other permits as required by the Federal NPDES program, NH Alteration of Terrain Permit, State and/or Federal wetlands permits, NH Department of Environmental Services (DES) Subdivision approvals, and the NH Department of Transportation Highway Access Permit.

c. Expiration of Approved Plans

In accordance with RSA 674:39, plan approvals become vested from subsequent changes to the Zoning Ordinance and Subdivision Regulations for a period of four years from the date of Planning Board Approval.

d. <u>Revocation of Approved Subdivision Plans</u>

In accordance with RSA 676:4-a, *Revocation of Recorded Approval*, a subdivision, plat, street plat, site plan or other approval which has been filed with the appropriate recording official, under RSA 674:37, *Recording of Plats*, may not be revoked by the Planning Board in whole or in part except as detailed in the statute.

3.05 Reserved.

3.06 Reserved.

3.07 Official Map

If there exists an official map of the Town, the recording of plats which have been approved as provided herein shall without further action modify the official map in accordance herewith. Recording of an approved subdivision plat shall not constitute acceptance by the Town of any street, easement, open space, improvement within a right-of-way or storm drainage system shown thereon.

3.08 Acceptance of Streets and Open Space

No street or open space will be accepted by the Town until such time as all improvements have been carried out as shown on the final plat, in accord with the requirements of these regulations, and subject to any conditions established by the Planning Board at the time of final plat approval.

End 3

SECTION 4 - PLAN REQUIREMENTS [Amended 9/3/19]

4.01 <u>Compliance with Regulations</u>

No subdivision of land shall be made, and no land in any subdivision shall be sold or offered for sale or lease, and no street or utility construction shall be started until a final plat, prepared in accordance with the requirements of these regulations, has been approved by the Board, and other required permits have been issued.

The Board shall evaluate the plat to provide against such scattered or premature subdivision of land as would involve danger or injury to health, safety or prosperity by reason of lack of water supply, transportation, schools, fire department, or other public services, or necessitate an excessive expenditure of public funds for the supply of such services.

The subdivider may avail himself of the assistance of the Board before preparation of applications or plans in accordance with Section 3.01.1.

4.02 Any applicant submitting a plat to the Planning Board shall execute an authorization granting permission to the members of the Planning Board, the Town Engineer, and such agents or employees of the Town as the Planning Board may determine, to enter upon the property which is the subject of the application for approval, at all reasonable times, for the purpose of such examinations, surveys, tests and inspections as may be necessary and appropriate to enable the Planning Board to fully consider the application before it. Such authorization to enter upon the property which is the subject of the approval shall continue in force until approval of as-built plans by the Planning Board.

4.03 <u>Preservation of Existing Features</u>

Consideration shall be given to the preservation and protection of existing features, trees, scenic points, brooks, streams, rock outcroppings, water bodies, other natural resources, and historic landmarks, including Class III and Class VI highways or other roads of previous years which may be used as recreational roads or riding paths.

Whenever any of the existing features are present on the land, such features shall be identified on the preliminary and final plats and the Board shall make a determination of the historic, scenic or recreational value of such features after the hearing on such plat.

4.04 <u>Soils Data</u>

A. Where private individual sewage disposal systems are proposed, the final plat shall have been reviewed and approved by the New Hampshire Department of Environmental Services. Water percolation test at specific locations on the final plat shall have been performed and certified under the supervision of the Building Inspector or his appointed representative. The Building Inspector in accordance with Section 11 of the "Merrimack Zoning Ordinance and Building Code" shall establish a reasonable fee for the accomplishment of such test. The developer shall be responsible for all cost or expenses incurred in the accomplishment of such percolation test. No buildable lot for which approval is requested shall be located more than 200 feet from one of the above-mentioned percolation test sites.

B. Soil types as explained in the Hillsborough County Soil Handbook shall be delineated and named on the preliminary layout or final plat. The soil types shall then be verified and certified by a NH licensed soil scientist.

4.05 Preliminary Layout

The preliminary layout may be drawn in pencil, and shall be submitted in four (4) paper print copies. Dimensions may be approximate; the data may be tentative, but shall be sufficiently clear to illustrate all conditions and establish the basis and clarify the design requirements for the subdivision plat. Maps shall be at a scale of not more than 100 feet to the inch.

The preliminary layout shall contain or be accompanied by the following information:

a. Names of municipality and subdivision, name and address of the subdivider and designer, and name and address of owner of record if different from that of developer;

b. Boundaries and area of the entire parcel, whether or not all land therein is to be subdivided; north point, bar scale, date and dates of any revisions;

c. Where the preliminary layout submitted covers only a portion of the subdividers entire holding, a sketch shall be furnished showing the proposed street system for the unsubmitted portion;

d. Names and addresses of abutting property owners, subdivisions, and buildings within 200 feet of the boundaries of the parcel to be subdivided and intersecting roads and driveways within 300 feet of the subdivision frontage on existing roads;

e. Location of all existing buildings;

f. Existing and proposed street right-of-way lines, widths of streets, proposed names of new streets, existing and proposed lot lines and location and width of proposed sidewalks or pedestrian ways;

g. Location of existing and proposed easements, deed restrictions, building setback lines, parks and other open space, water courses, large trees, foliage lines and significant natural and man-made features, water mains, sanitary sewers, storm water drainage lines, drainage structures and drainage ways;

h. Location of stump dumps and/or material disposal areas; all such dumps and/or material disposal areas must be permitted by the State in accordance with N.H.R.S.A. 149-M:10;

i. Existing and proposed plans for telephone, electricity and gas utilities;

j. Boundaries of Zoning Districts lying within the subdivision, municipal boundary if any, land use designations from master plan.

- 1) For subdivisions and site plans that involve land designated as "Special Flood Hazard Areas" (SFHA) by the National Flood Insurance Program (NFIP):
 - a) The Planning Board shall review the proposed development to assure that all necessary permits have been received from those governmental 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) The Planning Board shall require that all proposals for development greater than 50 lots or 5 acres, whichever is the lesser, include Base Flood Elevation (BFE) data within such proposals (i.e. floodplain boundary and 100-year flood elevation).
 - c) The Planning Board shall require the applicant to submit sufficient evidence (construction drawings, grading and land treatment plans) so as to allow a determination that:
 - (i) all such proposals are consistent with the need to minimize flood damage;
 - (ii) all public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage; and,
 - (iii) adequate drainage is provided so as to reduce exposure to flood hazards.

k. A general site location map at the scale of the official or municipal base map, locating exactly the subdivision boundary and proposed streets in relation to at least two existing intersecting streets or other features shown on the official map;

1. Existing subdivision, if any, in and adjacent to the subject subdivision;

m. A statement and contours in sufficient detail to indicate clearly the method of storm water drainage on and off the subdivision, methods of sanitary sewage disposal and water supply; soils data (See Section 4.04 B);

n. Watershed areas and drainage computations;

o. Preliminary road profiles, including typical cross sections;

p. Approval, as prescribed by law, from any other municipal, state, or federal agency that may have jurisdiction;

q. Copies of statements outlining the conditions under which any land is to be reserved for public use.

- 4.06 The final submission shall consist of all data required for preliminary layout submission plus (1) The Final Plat, (2) Road Plan and Profile, (3) Final Topographic Plan, (4) Legal Data as required by the Planning Board in Section 4.09, and (5) Assessors Plat.
- 4.06.1 Final Plat

The scale of the final plat shall be no smaller than 50 feet to one inch except that large subdivisions may be drawn to a scale of up to100 feet to one inch.

The final plat shall be in permanent black ink, on a permanent reproducible polyester film or linen. It shall be submitted on two (2) originals (one wash-off and one mylar) and seven (7) blue (black) line prints on paper. One original and seven (7) copies shall be retained by the Board.

Sheet sizes shall be in accordance with requirements of the Registry of Deeds, but is limited to any of the following dimensions:

a. 8 1/2" x 11"	c. 17" x 22"
b. 11" x 17"	d. 22" x 34"

In no case shall the sheets be larger than 22" x 34". Space shall be reserved on the plat for endorsement by all agencies. The subdivision plat shall be consistent with the approved preliminary layout.

The final plat shall show the following:

a. Final disposition of land into lots, streets, open space, drainage courses and any easements running with the land. The subdivision plat shall be based on a boundary survey with a maximum error of closure of 1 in 10,000 certified by a land surveyor registered in the State of New Hampshire. Distances shall be to the nearest 100th of a foot and bearings to the nearest 10 seconds. Computations of the boundary survey shall be submitted upon request by the Board.

b. Stations, radii, curve data and paving widths for proposed streets and additionally provide metes and bounds description for all proposed streets and for all easements within the subdivision, including R.O.W. widths.

c. Lot dimensions, areas in square feet and acres. Lots to be numbered consecutively in the following manner:

Tax Map Sheet Number - Parcel Number - Further subdivision of parcel number:

Example 1A-1-1

d. Accurate locations of all easements, either on or off the site;

e. North arrow indicating True North;

f. A statement from the owner's engineer of the work required on existing streets to meet the minimum standards set herein including cost estimates and the method of meeting such costs:

g. Names of proposed streets as endorsed by the Merrimack Fire Department;

h. House numbers may be assigned to Preliminary Layout by the Planning Board, or their agent;

i. Locations of all monuments to be set at street intersections, points of curvature and tangency of curved streets and at angles of lots;

j. If the subdivision abuts a state highway, or if a proposed street intersects a state highway, a written statement from the New Hampshire Department of Public Works and Highways approving any proposed driveway or street access with such state highway;

k. The plat shall contain the following statement: "The Subdivision Regulations of the Town of Merrimack are a part of this plat, and approval of this plat is contingent on completion of all the requirements of said Subdivision Regulations, excepting only any variances or modifications made in writing by the Board or any variances granted by the Zoning Board of Adjustment and attached hereto";

1. Proposed methods of sanitary sewerage and computations therefore; proposed drainage accompanied by a drainage analysis map and computations for the entire watershed area; methods of supplying water; existing and abutting well locations within 100';

m. If a subdivision is to be served by public water supply or by public sewers, a statement from the Municipal Department or company involved, attesting to the availability of such services;

n. Abutting subdivision names or titles and registry plan numbers, or, when abutting property is not a recorded subdivision, a certified statement from the owner's surveyor of the names and addresses of the current owners of record thereof prior to final submission, and the book and page where abutting subdivisions of properties are recorded. Where an undeveloped subdivision is an abutter, Registry Plan Number shall be shown;

o. Name and seal of engineer and of land surveyor licensed by the State of New Hampshire;

p. Notes on the plan shall be grouped together and titled as they relate to their specific purpose:

Example:	Town Related Notes
	State Related Notes
	County and Registry Notes
	Survey Notes
	Engineering & Misc Notes

q. In cluster subdivisions snow storage areas must be designated by location on the plan.

r. All residential subdivision plans shall provide for a paved pedestrian way or sidewalk to be constructed along all existing or proposed collector streets providing frontage to any lot or common area in a subdivision.

s. Any plat wherein it is the intent of the developer that the streets will remain private shall contain the following statement:

"The ways shown on this plat are intended by the subdivider ______

(name) and the Town of Merrimack Planning Board to remain as private ways. The recording of this plat shall not be construed as an offer of dedication of those ways as public highways under the New Hampshire common law of dedication and acceptance, nor shall the approval of this plat constitute an approval of those ways as public streets pursuant to RSA 674:40. "

4.06.2 Road Plan and Profile

The road plan and profile shall be prepared on a horizontal scale of 50 feet to the inch and a vertical scale of five feet to the inch.

The road plan and profile shall show the following:

a. Plan of all proposed streets and roads within the proposed subdivision and all intersecting streets for a distance of 300 feet in either direction from their intersection with proposed streets and roads or the subdivision frontage;

b. Stations, radii, curve data, street bounds, and paving widths for proposed streets and roads;

c. Existing and proposed plans for telephone, electricity, gas, water, and street lighting;

d. Final road profiles; cross section; location with stationing of all proposed public drain and sewer structures showing rim and flow line elevations, sizes and classes of pipe;

e. Final road plan and profiles shall show proposed centerline grades vertical curve information, existing contour information extending beyond the proposed right-of-way, proposed grading information within the right-of-way, culverts at driveways, location and widths of all proposed sidewalks and pedestrian ways;

f. Where cross country easements are required for drainage, a plan and profile shall be provided showing existing contours and proposed grading for culverts or swales that are required;

g. Plans should also show methods for controlling any increased surface run-off and for erosion control during the period of construction. If no such controls will be needed, the engineer will so state on the plans.

4.06.3 <u>Topographic Plan</u>

The scale of the topographic plan shall be the same as the scale of the final plat. The topographic plan shall show the following;

a. Existing and proposed contours at 2-foot intervals with at least two benchmarks provided by the developer and shown on the plan. All elevations shall relate to U.S.C.& G. sea level datum. The accuracy of the plan shall be verified by an actual field survey and shall be certified on the plan by a land surveyor registered in the State of New Hampshire;

b. Topographic plans should show finished grading for drainage facilities required for storm runoff and to control erosion and improper routing of runoff onto private property. Ditch and sideline construction should adapt to existing site conditions rather than relying on typical sections for all situations. Erosion control and stabilization plans shall be in accordance with Hillsborough County Conservation District-Vegetative Standard and Specifications for Seeding Grasses and Legumes for Long-Term Cover on Excavated Areas.

4.06.4 Assessors Plat

One copy of the approved final subdivision plan to the scale of the applicable Town Tax Map shall also be submitted. (Some of the tax maps are at a scale of 1" = 100', and some are at 1" = 200')

The plan should clearly show the subdivision name, location, lot dimensions, lot areas, tax plat number, parcel numbers, street names, and street numbers (if available). A photo-reduced copy of the final plat is acceptable provided the

required data is legible.

4.07 Minor Subdivisions and Lot Line Adjustments

Where the proposed subdivision is a "Minor" subdivision on an existing approved street or road with no possibility of future subdivision (i.e. no remaining frontage and/or acreage abutting or included in parcel by same owner), <u>or a Lot Line Adjustment</u>, eliminate Section 4.05(h) through (o), Section 4.06.2, and Section 4.06.3 and any other portions of Sections 4.05 and 4.06.1 as may be deemed unnecessary by the Board. <u>Further, in the case of a Lot Line Adjustment</u> eliminate such portions of Section 4.06.4 and Section 4.09 as may be deemed unnecessary by the Board.

4.08 Filing Fees

Filing fees in accordance with the schedule below shall be charged and shall accompany submission of final plat or minor subdivision. Failure to pay such costs shall constitute valid grounds for the Planning Board to terminate further consideration and to disapprove the plat without a public hearing.

A. Subdivision Plan

1. \$100.00 per lot, or \$250.00 per subdivision plan, whichever is greater; the Hillsborough County Registry of Deeds recording fee; and the mailing cost for notification of abutters.

2. In the case of a preliminary plan submittal, the fee shall be the same as in A.1, above less the recording fee.

When the preliminary plan or any portion thereof is submitted for final approval, a minimum fee of \$250.00; the Hillsborough County Registry of Deeds recording fee; and the mailing cost for notification of abutters shall be collected.

B. Engineering Analysis Cost

The Planning Board may also require the payment of such fees to reimburse the town for the cost of any engineering analysis of plans and/or documents provided by the applicant as may be reasonably required by the said Board. No plan shall be approved until such fees are paid in full.

4.09 <u>Legal Data Required</u>

Where applicable to a specific subdivision, the following are required, in form as approved by Town Counsel, prior to approval of a Subdivision plat:

a. A properly executed satisfactory deed by the legal owner to convey unencumbered title to the Town of:

1. Real estate to be used for streets, open space, and other public purposes;

2. Easements and rights-of-way over property to remain in private ownership;

3. Rights to drain out or across other property, whether public or private, including a street.

All such deeds shall be held by the Town in escrow until completion of improvements, and transfer of title to such interests shall be effective only at such time as the Board of Selectmen shall by vote accept such conveyances.

b. The developer's engineer shall prepare, on a form provided by the Town, an estimate of costs for improvements to proposed or existing streets, drainage and sewerage structures, and any related improvements to the site as may be necessary. The estimate is to be reviewed and recommended by the Director of Public Works to the Planning Board prior to the board's signing of the plan(s).

c. Evidence satisfactory to the Board indicating the ownership of the land in the proposed subdivision to be in the subdivider's name or his principal or other agent.

d. Where electric lines or other utilities are to be installed by a public utility, corporation or a municipal department, a statement shall be received in writing from such public utility, corporation or municipal department prior to final plat approval that the utility and/or services are available to the site and will be provided without expense to the Town.

e. A written acknowledgment of the subdivider's responsibility for maintenance, and the assumption by him of liability for injuries that may occur on any land to be dedicated for public use, until such land has been legally accepted by the Town.

4.10 Open Space

Whenever the Planning Board determines that there is a specific need related to the nature of the development, and to the extent such need is created by the subdivision, the Board may require that the subdivision reserve land for public use either as open space or recreational land.

No more than fifty percent of any land so reserved shall be swampland or contain impounded waters unless specifically specified on the plan and approved as such by the Board.

Where the Board finds it conducive to the most effective utilization of the land so reserved, it may require access through public right-of-way not less than fifteen

feet in width at a suitable location.

Where appropriate, the Board may require the developer of land so reserved to execute such private restricting covenants and/or establish a homeowners association and/or institute a provision for the continued responsibility for the land as may be deemed necessary to assure the desired use or state of the land.

4.11 <u>Trees and Planting</u>

Due regard shall be give to preservation of existing features, trees, scenic points and other natural and historic resources within the subdivision. The Board may require additional tree planting and other landscaping appropriate to the area being developed. Removal of stripped topsoil or surplus materials from the subdivision area shall not be permitted unless in accord with the zoning regulations. Existing trees on lots and open space land shall be preserved wherever feasible, or unless otherwise directed by the Board.

ROAD AND UTILITY STANDARDS

4.12 Street Design

a. Streets shall be designed in accordance with generally accepted engineering practices, A Policy on Geometric Design of Highways and Streets, 1990, (AASHTO), and these regulations, including the typical sections found herein. Street right-of-way widths shall be not less than fifty feet.

b. Street grades shall not exceed 6% over a distance of 800 feet or 8% over a distance of 600 feet; variations from these grades may be permitted by the Board where advisable based on topographic conditions and the feasibility of development of the parcel in question. Maximum slope grades shall include only the tangent distance between limits of vertical curves. No street grades shall be less than 1.5%. Vertical curves shall conform to the Formula: Length in feet equals K x algebraic difference in grade. The requirements as shown in the table below.

	STOPPING SITE DISTANCE		RADII		CREST K		SAG K	
	Min.	Des.	Min.	Des.	Min.	Des.	Min.	Des.
Residential	200	200	300	400	30	30	40	40
Streets								
Collector	275	325	575	700	60	80	60	70
Streets								

A maximum K of 143 shall not be exceeded to facilitate drainage.

c. Dead-end or cul-de-sac streets, whether designed to be permanently closed or continued in the future, shall not exceed 1200 feet in length as measured, along

the centerline of the right-of-way from the right-of-way line of an intersecting through street to the far end of the cul-de-sac right-of-way. The cul-de-sac shall have a turnaround at the closed end as follows:

1. Minimum radius to outside edge of right-of-way shall be 50 feet in residential areas and 60 feet in commercial areas.

2. Minimum radius to the outside edge of pavement shall be 42 feet in residential areas and 48 feet in commercial areas.

3. An island may be placed in the center of the turn-around in residential developments only provided that the paved roadway is at least 24 feet wide and the island radius, 75 feet. The minimum radius to the outside edge of the right-of-way shall be at least 50 feet.

4. The turnaround may be tangent to one side of the roadway or centered. In both cases the radius return for the outside edge of pavement shall be at least 20 feet and the right-of-way line shall be 11 feet beyond this.

d. Streets shall be laid out so as to intersect as nearly as possible at right angles and no street shall intersect any other street at less than sixty degrees. Street intersections with major arterial streets, minor arterial streets, and collector streets, as defined in these subdivision regulations, shall be at right angles. All approaches to intersections shall have a maximum grade of - 2% for at least 50 feet from the intersection. The maximum grade on the approach leg should not exceed 5 percent for a distance of 200 feet. This distance should be measured from the outer edge of shoulder of the intersecting street. (New streets shall not intersect existing streets near short-crest vertical curves in the existing streets). For local streets the minimum corner sight distance shall be in accordance with American Association of State Highway and Transportation Officials (AASHTO) requirements as contained in "A Policy on Geometric Design of Highways and Streets, 1990" for stopping and intersection sight distance based upon the type of road and speed limit, but in no case shall be less than 200 feet for local streets or 300 feet for collector streets.

e. Property lines at street intersections shall be rounded with radius of at least 25 feet with the edge of pavement radius constructed with a parallel curve (See Typical Intersection Plan, Figure 3 Page 9-4). The Board may require greater or lesser radii, whenever it deems such action advisable.

f. Street jogs with centerline offsets of less than 125 feet shall be prohibited unless the Planning Board shall find good reason exists for making an exception.

g. A tangent at least 100 feet long shall be introduced between reverse curves on all but residential streets.

h. When connecting street lines deflect from each other at any one point by more than ten degrees, they shall be connected by a curve with a radius adequate to insure a safe sight distance.

4.12.1 Provision For Future Widening or Upgrading of Streets

In proper cases where it may be feasible the Board shall require dedication by deed and platted in general accordance with the typical sections herein, at least 25 feet from the center line of the existing town road or right-of-way for the future widening of streets where existing road widths are insufficient for present standards or are of such a nature as to cause traffic hazards.

4.13 <u>Street Arrangement</u>

a. The arrangement of streets shall be considered in their relation to existing and planned streets, to topographical conditions, to public convenience and safety, and to the proposed uses of the land to be served by such streets.

b. The arrangement of streets shall provide for the continuation of the appropriate projection of existing streets in adjoining and surrounding areas. Where this is not practical, the arrangements of streets shall conform to a plan for the neighborhood approved or adopted by the Board.

c. Streets shall be arranged to provide maximum separation of through and local traffic and to discourage through traffic in residential areas.

d. Where a subdivision borders on or contains a limited access highway right-of-way, or an open water course, the Board may require a street approximately parallel to and on one or both sides of such right-of-way or water course, at a distance suitable for the appropriate use of the intervening land for park, residential, commercial, industrial, or other purpose. Such distance shall also be determined with due regard for the requirements of approach grades and future intersection grade separations.

e. Pedestrian right-of-way, not less than twenty feet wide, may be required where deemed essential to provide circulation, or access to schools, playgrounds, shopping centers, transportation, or other community facilities.

4.13.1 Driveways

a. Driveways shall not interfere with the free flowing drainage in the gutter line. No driveway shall have a slope greater than 10%; each driveway shall have a platform at least twenty (20) feet in length and no less than 1% of slope and no greater than 2% of slope. (See Figure 7, Page 9-7). Driveways having a grade towards the street must be sloped such that surface water drains to the gutter line in the direction of flow under all storm conditions. (See Applicable Figures, Section 9.)

b. No driveway shall intersect the street at less than a 60 degree angle and must have unobstructed vision in each direction based on type of road and speed limit per American Association of State Highway and Transportation Officials (AASHTO) requirements in document entitled "A Policy on Geometric Design of Highways and Streets, 1990". The Board may require greater sight distances and driveway locations be shown on the plan where hazardous conditions exist.

c. Driveway entrances shall be constructed such that they be sloped towards the roadway for a minimum distance of four (4) feet from the edge of pavement, this slope shall not be less than one inch per foot to prevent surface water from the roadway from draining into individual lots or depressed lots below road grade.

d. That portion of driveway construction, including culverts and other drainage structures, which is located in the public Right-of-Way, shall be included in the bond estimate figure for bonding of the public way. A typical section, clearly showing construction of same, shall be shown on plan.

e. That portion of driveway construction which is located in the public Right-of-Way shall be paved at the same time the street is paved.

4.14 Easements

a. Easements across lots or centered on rear or side lot lines shall be provided for utilities where necessary and shall be at least 20 feet wide.

b. Where a subdivision is traversed by or requires the construction of a watercourse or a drainage way, an easement of adequate width shall be provided for such purpose.

4.15 <u>Underground Utilities</u>

a. All utilities including electric, telephone, and other transmission or utility lines shall be installed underground within the boundaries of any subdivision unless specifically exempted from the requirement by the Board. In the event of the sale of undeveloped lots the responsibility of items noted in this section will remain with the developer.

b. All utilities installed on Town roads shall conform to the Typical Roadway Cross Sections, Figures 1, 2, & 3, Page 9-2, 9-3, and 9-4.

c. All underground utility stubs, both private and public, shall be extended to the right-of-way line prior to placement of gravel and crushed gravel.

4.16 <u>Storm Drainage System</u>

a. Storm drainage systems shall be designed in accordance with generally accepted engineering practices, rules and regulations of the New Hampshire Department of Environmental Services, the New Hampshire Department of Transportation Drainage Manual, and these regulations. A roadway storm drain

system may be a closed system, an open system, or a combination of the two. It is the intent of these regulations that system engineers be aware of the following considerations when drainage systems are being designed.

1. Extensive open drainage swales and holding basins often become the responsibility of the Town to maintain and constitute a significant expense to taxpayers. Roadside channels shall be designed in accordance with Federal Highway Administration design procedures publication "HEC 15-Design of Roadside Channels with Flexible Linings-October 1975."

2. Closed systems increase the velocity of flow and have the potential for increased erosion and flooding near the outfall. While good engineering practices can mitigate this potential, demand for water quality requires flow along a grassed swale prior to outfall into any wetland or water body.

3. Under conditions of severe topography, contractors have on occasion not been able to construct the highway and the approved open drainage swales within the 50-foot right of way, leading to problems of easement acquisition or to property owners holding clear title to part of the swale. In an effort to avoid these or similar problems in the road construction, it is expected that the drainage system engineer will carefully consider the relative fiscal impacts of the proposed system and design a system that will impose the least long-term maintenance costs and will preserve the highest level of water quality that is reasonably attainable. Therefore, the Planning Board reserves the right to judge the adequacy of the drainage system based upon these criteria.

b. A storm drainage system, either open or closed, including swales, headwalls, culverts, catch basins and storm drains shall be designed by a Registered Civil Engineer.

Calculations shall be done to a positive outfall. Where the Board anticipates that the additional runoff incident to the proposed subdivision or site plan will overload an existing downstream drainage facility so that there will be damage to private property or an increase in the expenditure of public funds, the Board shall not approve the subdivision or site plan unless the plan makes adequate provision, at the developer's expense, for all downstream drainage improvements.

c. The engineer shall examine, and perform the necessary calculations, to ensure that runoff due to additional upstream development will not overload the proposed or the existing downstream facilities, either open or closed systems, on either public or private property. Where the engineer determines that the additional runoff shall have no adverse effects on these downstream drainage facilities, or adjacent properties, he shall so certify by placing the following statement on the plan: "I certify that I have followed the Town of Merrimack's Subdivision Regulations as set forth in Section 4.16 Storm Drainage System. Furthermore, in my professional opinion, any runoff incident to development on this site shall have no adverse effects on any open or closed, public or private, downstream drainage facilities, nor shall it have adverse effects on downstream properties."

d. Design storm frequency shall be 25 years for roadway sections. Evaluate ponding limits using a fifty-year storm in all sags. All culverts shall be designed to ensure the roadway will not be overtopped or damaged during a design storm with a fifty-year frequency, or where the Board deems necessary a storm of greater intensity where site conditions, protection of private or public property, or an increase in the expenditure of public funds may warrant such action. Design methods may be:

a. Rational method for 0 - 200 acre drainage areas within a minimum time of concentration of 10 minutes for rural areas and 5 minutes for urban areas.

- b. Soil Conservation Service (SCS) TR-20 method
- c. Rainfall intensity shall be based on U. S. Weather Bureau at Concord

4.16.1 <u>Closed Drainage Systems</u>

1. Closed Drainage Systems:

a. Pipe shall be Reinforced Concrete Pipe (Minimum Class III) or polyethylene. Concrete pipe shall be provided, installed, bedded, and backfilled in strict accordance with the manufacturers recommendations, ASTM specifications C76 and C443, and Section 603 of the Standard Specifications for Road and Bridge Construction, New Hampshire Department of Transportation. Polyethylene pipe shall be provided, installed, bedded and backfilled in strict accordance with manufacturers recommendations, and ASTM D3450.

b. Minimum cover shall be 3 feet. In instances where this cannot be attained, computations signed and stamped by a Registered Engineer for the structural stability of the proposed design shall be submitted.

c. Minimum pipe diameter is 12 inches for the first 300 feet; minimum size for the remaining closed system is 15 inches.

d. A manhole, or catchbasin if appropriate, is required at every change in direction, and minimally every 300 feet.

e. Design shall be for self-cleaning velocities.

2. Catch Basins and Manholes:

a. These shall be built in accordance with N.H. Department of Transportation Standard Drawings. Type B catch basin grates shall be used for catch basins within the paved portion of a street. 300' shall be the maximum distance between catch basins on streets.

b. Design intake quantity should not exceed 1.5 cfs per grate.

c. For catch basins located off of the paved portion of the street, Type C catch basin grates shall be used. Type B catch basin grates may be used in locations off of the pavement in special circumstances.

4.16.2 Open Drainage System

1. Open channel flow shall be designed in accordance with Federal Highway Administration Design Procedures Publication "HEC-15 Design of Roadside Channels with Flexible Linings – October 1975" and the following guidelines:

Channel Type	Roughness Coefficient	Design Max. Velocity
Natural	.024	3 FPS
Grass	.030	6 FPS
Natural Ledge	.045	12 FPS

2. Culvert Design:

a. Culverts shall be designed to ensure ponded water for a storm with a design frequency of 50 years will not infiltrate into the structural section of the roadway or cause any other adverse impacts. As a general guide, the maximum allowable headwater table can be used:

Pipe Diameter	Maximum Headwater
12" – 30"	2 times culvert diameter
36" – 40"	1.5 times culvert diameter
54" or larger	1 times culvert diameter

b. Headwall shall be specified for culverts over 15" diameter. When approved by the Director of Public Works, flared end sections may be used for reinforced concrete pipe with diameters of 24" or less.

c. All culverts must have a minimum cover of 24 inches. For culverts with less than 48 inches of cover, computations signed and stamped by a Registered Engineer for structural stability, of the proposed design shall be submitted for review.

d. Minimum culvert size is 12 inches diameter.

3. Catch Basins and Manholes:

a. These shall be built in accordance with New Hampshire Department of Transportation Standard Drawings. Type B catch basin grates shall be used for catch basins within the paved portion of a street. 300' shall be the maximum distance between catch basins on streets.

b. Design intake quantity should not exceed 1.5 cfs per grate.

c. For catch basins located off of the paved portion of the street, Type C catch basin grates shall be used. Type B catch basin grates may be used in locations off of the pavement in special circumstances.

4.16.3 Underdrains

a. Underdrains shall be considered in all roadway design and where required shall be installed. Underdrains shall be used in areas where the seasonal groundwater elevation is within four feet of finished roadway grade and ledge cuts.

b. Underdrains shall be 6-inch minimum diameter perforated PVC pipe installed with a minimum of 12 inch of crushed stone around pipe. Stone to be wrapped with filter fabric.

c. Underdrains shall outlet into a headwall or catchbasin in accordance with the Standard Detail Sheets issued by the New Hampshire Department of Transportation.

4.17 Lot Size and Arrangement

a. The arrangement of lots shall be appropriate for the location of the subdivision and for the type of development and use contemplated.

b. Lot size and dimensions shall conform to the requirements of the Zoning Ordinance. Lot sizes shall be adequate to provide off-street parking and loading facilities in commercial, industrial and residential areas as required by the Zoning Ordinances.

c. The subdividing of land shall provide, by means of a public street, satisfactory access for each lot to an existing street.

d. Reserve strips controlling access to streets shall be prohibited except where their control is definitely placed in the Town of Merrimack under conditions approved by the Board.

e. Double frontage and reverse frontage lots shall be prohibited except where essential to provide separation of residential development from major traffic arteries or to overcome specific disadvantages to topography and orientation, additionally the plan shall show the location of proposed driveways or access to the lot.

f. All lots shall be bounded with permanently set granite or precast concrete markers with minimum dimensions of 4 inches by 4 inches by 3 feet on frontage corners and with iron pipes at other corners.

4.17.1 Land which is of such a nature as would involve danger or injury to health, safety, or prosperity by reason of lack of sewers, water supply, drainage or other menace shall not be platted for occupancy or use unless accompanied by detailed engineering data supporting its proposed use. In any case in which such data cannot support its intended use such land shall be combined into the adjacent or abutting lots of owners, or placed in open space in accordance with the provisions of Section 4.10.

4.18 <u>Right-of-Way Work (Per Typical Cross Sections 1 & 2)</u>

a. Monuments shall be placed at all street intersections, points of curves and angle points. Monuments shall be concrete or granite bound markers. These bounds shall be 4 inches by 4 inches by 4 feet.

b. The entire right-of-way shall be graded to the extent that no cross section slope shall exceed 4:1 in fill or 2:1 in a cut section.

c. A minimum width of 28 feet of gravel base shall be placed on a previously prepared sub-grade of acceptable well draining granular soil for a standard of 24 foot wide paved roadway or thirty-two feet minimum width for a 28 foot wide paved roadway. The base shall consist of a minimum of twelve inches of well-compacted gravel under a minimum of six inches of equally well-compacted crushed gravel. A minimum of twelve inches of sand that conforms with Section 304 of the New Hampshire Department of Transportation Standard Specifications shall be placed under the gravel in sections where the subgrade is ledge. The gravel base and the crushed gravel base under the pavement shall each be graded at a cross slope of 1/4 inch per foot. Gravel and crushed gravel shall meet the material requirements of section 304 of the Standard Specifications for Road and Bridge Construction, New Hampshire Department of Transportation. The density of gravel and crushed gravel base courses shall not be less than 95 percent of the maximum density per ASSHTO T99.

The center of the right-of-way shall be paved at a minimum width of twenty-four feet. Paving shall be hot bituminous pavement and shall be placed in two courses. A prime coat must be applied before paving starts. The courses shall consist of a 2-inch binder course and a 1-inch wearing course. The bituminous pavement shall be batched and placed in accordance with Section 403 of the Standard Specifications for Road and Bridge Construction as published by the New Hampshire Department of Transportation. The centerline of the paved portion shall be identical to the right-of-way centerline. The pavement cross slope shall be 1/4 inch per foot. The developer shall be allowed to pave up to a maximum of 28-foot width. A 3-foot sod shoulder strip or bituminous asphalt (Cape Cod) berm shall be placed as shown on the Typical Cross Sections, Figures 1 and 2, Pages 9-2 and 9-3.

d. As a condition of approval, the Planning Board may provide that when during the course of construction groundwater conditions are encountered which differ from design criteria, the developer shall cease construction on that portion affected and bring same to the attention of the Town, or its agents, who upon inspection shall decide if the impact upon the design is sufficient to require the developer to submit to the Town revised plans for controlling the groundwater conditions. These plans shall be reviewed and approved by the Planning Board prior to the developer resuming construction in the affected area.

e. Where public sanitary sewerage is available or is reasonably expected to be available within the subdivision, sewer mains and laterals shall be designed and constructed to serve each lot or dwelling unit meeting the requirements of Standards of Design For Sewage and Wastewater Treatment Facilities, New Hampshire Department of Environmental Services and the Merrimack Department of Public Works. Sanitary sewers shall be located within the street right-of-way in accord with the Typical Sections unless a waiver is granted by the Planning Board with a recommendation by the Director of Public Works.

f. The construction of all roadway facilities, including but not limited to storm drainage facilities, sidewalks, curbing, and slopes, shall meet the material and construction requirements of the Standard Specification for Road and Bridge Construction, New Hampshire Department of Transportation, latest edition and the Merrimack Department of Public Works. The construction of all sanitary sewer facilities, including manholes and building connections, shall meet the requirements of Standards of Design For Sewerage and Wastewater Treatment Facilities, New Hampshire Department of Environmental Services and the Merrimack Department of Public Works.

4.19 <u>STREET SIGNS</u>

All signs shall meet the requirement of the Manual of Uniform Traffic Control Devices, latest edition. Street signs shall be placed at a location and of a type approved by the Director of Public Works. Regulatory signs shall be placed at a location and of a type approved by the Police Chief. Street signs shall bear the names of the streets shown on the approved plan provided that the developer shall seek and receive approval from the Board of Selectmen for the list of said names. Signs shall be erected by and at the expense of the developer.

4.20 PEDESTRIAN WAYS AND SIDEWALKS

Pedestrian facilities constructed within the right-of-way shall be in accordance with the Typical Cross Sections, Figures 1, 2, and 3, as noted below:

1) Pedestrian facilities shall be required along sections of Route 3 within the jurisdiction of the Town and shall be consistent with the existing and anticipated pedestrian traffic and the planned widening of the highway. Vertical granite curbing shall be installed in accordance with New Hampshire Department of Transportation Standard Drawings.

2) A paved pedestrian facility shall be constructed along all existing or proposed collector or arterial streets or streets constructed as a part of a subdivision. Refer to Section 4.21 for definition of collector and arterial streets.

3) Should it be necessary to locate and construct pedestrian facilities outside of the right-of-way, an easement of twenty feet shall be provided to the Town.

4) The design of pedestrian facilities shall provide for the use by same by handicapped persons (Architectural Barrier Free Design Code, State of New Hampshire) including ramps at corners, intersections, crosswalks, or where specified by the Planning Board.

5) The design of pedestrian facilities shall be paved with a minimum course of a 2-inch depth of bituminous concrete pavement, placed in two courses, over a twelve inch of compacted gravel. Pedestrian facilities shall be 5 feet wide. All material and construction shall meet the requirements of the Standard Specifications for Road and Bridge Construction, New Hampshire Department of Transportation, latest edition and the requirement of the Merrimack Department of Public Works.

6) The Planning Board may waive the requirements to provide pedestrian facilities on both sides of a street providing frontage to a subdivision for good cause, but in any instance one pedestrian facility shall be provided on all residential streets.

7). <u>Payment in lieu of construction:</u>

The Planning Board may accept a payment in lieu of sidewalk construction if one or more of the following conditions exist:

1. the sidewalk does not connect to potential pedestrian destinations

such as parks or schools;

2. a partial improvement is not feasible due to the inability to achieve proper design standards;

3. forthcoming installation of public utilities or street paving would be likely to cause severe damage to the new sidewalk;

4. a partial improvement would create a potential safety hazard to motorists or pedestrians;

5. development on adjacent properties is likely or that sidewalk improvements would be extended by the Town in the foreseeable future.

Any funds collected under this Section will be used for the construction of a pedestrian way or sidewalks that are related to the needs created by the project and any funds collected under this section will be deposited into the Town's pooled cash account, to be held by the Town as restricted revenue. No funds generated under this section may be expended for any purpose other than for sidewalk improvements approved and authorized by the Planning Board and no funds generated under this section may be released or expended without prior Planning Board approval.

In general, pedestrian facilities shall be constructed parallel to the street and located within the right-of-way as far as practical from the travel lanes and usually close to the right-of-way line. The arrangement of pedestrian facilities shall provide for the continuation of existing or planned pedestrian facilities in adjoining and surrounding areas.

4.21 <u>STREET LIGHTS</u>

A street light of the type approved by the Director of Public Works shall be provided where proposed streets intersect the following streets:

Major Arterials:

Continental Boulevard D. W. Highway (US Rte 3) F E Everett Turnpike Greeley Street Industrial Drive Milford Road (NH Rte 101A)

Minor Arterial Streets:

Amherst Road Baboosic Lake Road Bedford Road-East of Wire Road Boston Post Road Camp Sargent Road McQuestion Road Naticook Road

Collector Streets:

Back River Road Bean Road Bedford Road-West of Wire Road Joppa Road Manchester Street Meetinghouse Road Patten Road Pearson Road Seaverns Bridge Road Tinker Road Turkey Hill Road Wilson Hill Road

Streetlights located on residential streets within the subdivision shall be of a type and a location approved by the Director of Public Works.

End 4

SECTION 5 - BUILDING PERMIT

5.01 Performance Bond or Construction

I. Except in the case of a subdivision in which each lot is on an existing improved Town road, no building permits shall be issued for any lot within the subdivision until:

a. The subdivider or owner shall have completed the streets, public improvements, drainage structures and other utilities or facilities are installed to the extent and manner approved by the Planning Board, and subject to the review and approval of the Department of Public Works of the Town of Merrimack, New Hampshire; or

b. The subdivider or owner shall have filed with the Board an estimate of costs of streets, public improvements, drainage structures, and other utilities or facilities to be installed and constructed, together with maps, plans and supporting data, prepared by an engineer licensed in the State of New Hampshire. The Department of Public Works shall review the estimate of costs together with other data submitted and shall review the estimate of costs together with other data submitted and shall recommend to the Planning Board the amount of the bond or security which would be satisfactory to secure the municipality in accordance with the provisions of R.S.A. 674:36 III. The Planning Board shall determine the amount of surety bond or security satisfactory to it and such other reasonable conditions as may be deemed appropriate to secure the municipality.

II. That if the subdivider or owner shall seek phased construction upon lots within a subdivision, then the estimate of costs referred to in Subsection I (b) hereof shall specifically define the costs to be incurred during each phase so that the Planning Board may be able to define and determine the amounts of security or surety that will be required by the Town during any such phase. Nothing herein shall preclude the subdivider or owner from completing a portion of the required improvements as set forth in Subsection I (a) above, and submitting a surety bond or other security as provided in Subsections I (b) and II for that street work or utility installation sought.

III. Upon approval by the Planning Board of an estimate of bond of security or surety the subdivider or owner shall submit either:

a. A Surety bond, by a surety company authorized to do business in New Hampshire, in the amount approved by the Planning Board, to be filed with the Town Treasurer; or

b. Cash, irrevocable letter of credit issued by a New Hampshire Banking Institution or bank book properly endorsed to the Town, in the amount as approved by the Planning Board, and deposited with the Town Treasurer.

IV. The Planning Board shall specify in each instance where a bond or other security is to be accepted by the Town, the period within which completion of street work and utility

installation shall be accomplished, and that specified period shall be expressed in the bond or other security.

In order to confirm that various items and features delineated on plans presented to the Planning Board for approval (or which are otherwise required in connection with the development), are, in fact, constructed in accordance with those plans and/or in accordance with applicable codes and standards, the Planning Board may, at the time of plan approval, require the applicant to establish an appropriate escrow, or other security, in addition to a Performance Guarantee otherwise provided by these regulations acceptable to the Planning Board which will be used by the Town of Merrimack as security for retention of appropriate engineers or other consultants to confirm that construction is in conformance with the approved plans and/or applicable codes and standards. The applicant shall reimburse the Town for the cost of such engineers and consultants, prior to release of said security.

The escrow amount shall be determined by the Department of Public Works to cover the estimated costs of engineering or other consultants and may include a reasonable charge to cover the Town's administrative costs. If it is determined that any of the required improvements have not been constructed in accordance with the Town's construction standards, the applicant shall be responsible for the costs of reconstruction and re-inspection services of the improvements. The escrow funds shall be periodically reviewed to assure that sufficient funds are available to cover all inspection costs and additional escrow shall be provided by the applicant as needed. Any balance remaining in the escrow after acceptance of the project improvements shall be returned to the Owner/Applicant as indicated in the subdivision or site plan application approved by the Board, unless a release or other instrument signed by the Owner/Applicant directs that any such escrow balance be distributed to another party.

V. Upon completion of improvements by the subdivider or owner, and approval by the Planning Board, surety covering maintenance of streets for a period of two years from completion shall be required in an amount equal to 10% of the total cost of such improvements or \$2,000.00, whichever is greater. Maintenance of streets shall be defined as work required to correct defects in the construction that becomes apparent to the town within the two year time period.

5.01.1 Release of Performance and Maintenance Bond

a. The performance bond shall not be released until completion of the public utilities and improvements in substantial accordance with the requirements of the Town of Merrimack.

b. Before a performance bond can be released, as-built plans of all improvements must be submitted with certification by a registered engineer and/or registered land surveyor printed thereon that all installations are as shown. These as-built plans will show true locations of Sewer MH'S, CB's, headers, underground utility locations and depths (telephone and electric), drain MH's, water and gas mains, shutoffs and entrances, and any

other pertinent information. These plans shall also be certified by the Town Engineer to the Planning board, that all improvements meet acceptable construction requirements. Asbuilt plans shall be one mylar and one copy.

c. Upon recommendation of the Director of Public Works the Planning Board shall act to approve or disapprove the release of said performance or maintenance bond. Such request for release shall be reviewed by the Planning Board within 45 days of its submission to the Director of Public Works.

d. At the end of the two year period the developer can request of the Department of Public Works that the maintenance bond be released. Upon the recommendation of the Director of Public Works the Planning Board shall act to approve or disapprove the release of said maintenance bond within 45 days of the submission to the Director of Public Works.

e. Upon failure of the developer to fulfill the terms of the performance or maintenance bond within the time specified, the board may recommend proceedings to recover all sums due and owing under the said bond, on behalf of the Town.

f. Upon completion of the requirements in this Section the Board shall recommend acceptance of such roadways or dedicated land to the Board of Selectmen.

5.02 Construction Requirements - Building Permits

Except in the case of a subdivision in which each lot is on an existing improved town road or street, no building permit shall be issued until such time as major improvements within the street right-of-way and appurtenant storm drainage systems have been completed as shown on the final approved plat in accordance with the requirements of the subdivision regulations or a bond or other security as may be provided by the provisions of Section 5.01 hereof has been posted, and subject to any conditions established by the Planning Board at the time of final plat approval.

As a minimum, however, the following shall be completed prior to issuance of any building permit:

- 1 Lots shall be bounded in accordance with Section 4.17 (f).
- 2. Two copies of the proposed plat plan shall be submitted to the Building Inspector containing the following information:
 - a. metes and bounds in accordance with the subdivision regulations are set as shown;
 - b. location to scale of the proposed building foundations with setback dimensions to the two closest property lines, and the proposed slab elevation of the lowest finished floor;

- c. if applicable, dimensions from foundations to the well, septic tank cleanout cover with approximate size and location of leach bed shall be shown;
- d. easements and location of any underground utilities and zoning setback lines;
- e. plans shall be drawn at a scale of 1" = 50'; or at 1" = 100' if the entire lot will not fit on a 17" x 22" plan.

end 5

SECTION 6 - OCCUPANCY PERMITS

6.01 Occupancy Permits

Prior to the issuance of an occupancy permit, the following must be complete:

- 1. Compliance with all applicable codes and ordinances of the Town of Merrimack.
- 2. Two copies of the plot plan shall be submitted to the Building Inspector prepared by a Registered Land Surveyor certifying the following information:
 - a. metes and bounds in accordance with subdivision regulations are set as shown;
 - b. location to scale of the building foundations with setback dimensions to the two closest property lines, and the actual slab elevation of the lowest finished floor;
 - c. if applicable, dimensions from foundations to the well, septic tank cleanout cover with approximate size and location of leach bed shall be shown;
 - d. easements and approximate location of any underground utilities and zoning setbacks;
 - e. plans shall be drawn at a scale of 1'' = 50', or at 1'' = 100' if the entire lot will not fit on a 17" x 22" plan.
- 3. All public utilities for each lot, including, but not limited to, water, gas electric, sewer, and drainage in accordance with the approved phasing plan;
- 4. Initial permanent street signs in accordance with Section 4.19;
- 5. Bituminous concrete binder course and street bounds in accordance with Section 4.18 (a) on the roadway up to and including the road frontage of the lot requesting occupancy permits in accordance with the approved phasing plan.
- 6. The seven-part REQUEST FOR CERTIFICATE OF OCCUPANCY form, effective date: January 2, 1989, shall be completed and signed by each department prior to the issuance of any Certificate of Occupancy.

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end 6

SECTION 7 - [Eliminated on 9/3/19 with the adoption of separate Site Plan Regulations by the Planning Board]

SECTION 8 - ADMINISTRATION AND ENFORCEMENT

8.01 <u>Modifications</u>

The requirements of the foregoing regulations may be modified when, in the opinion of the Board, specific circumstances surrounding a subdivision, or condition of the land in such subdivision, indicate that such modification will properly carry out the purpose and intent of the master plan and of these regulations.

8.02 Acceptance of Streets

Nothing herein is intended to modify the requirements of law with reference to the acceptance of streets by the Town. Nothing herein is intended to modify or control the construction, reconstruction, or extension of roads by the Town or State.

8.03 Other Regulations

Where these regulations are in conflict with other local ordinance, the more stringent shall apply.

8.04 Enforcement

These regulations shall be enforced by the Board of Selectmen or its duly authorized representative.

8.05 <u>Penalties</u>

As provided in RSA 676:16, any owner, or agent of the owner, of any land located within a subdivision, who transfers or sells any land, before a plat of the said subdivision had been approved by the Planning Board and recorded or filed in the office of the Register if Deeds shall forfeit and pay a penalty of five hundred dollars for each lot or parcel so transferred or sold; and the description by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring shall not exempt the transaction from such penalties.

8.06 <u>Appeals</u>

Any person, aggrieved by an official action of the Board, may appeal therefrom to the Zoning Board of Adjustment as provided by RSA 676:5.

8.07 <u>Validity</u>

If any section, subsection, or phrase of these subdivision regulations is found for any reason to be invalid by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portion of these regulations. 8.08 Effective Date

The effective date of these regulations shall be:

Adopted November 7, 1967 Amended December 7, 1971 Amended September 19, 1972 Amended June 27, 1973 Amended January 30, 1976 Amended September 16, 1977 - Effective November 1, 1977 Amended November 22, 1977 Amended February 12, 1980 Amended April 21, 1981 Amended August 31, 1982 Amended July 22, 1985 Amended April 29, 1987 Amended July 31, 1990 Amended February 11, 1992 Amended September 15, 1999 Amended February 5, 2002 Amended June 4, 2002 Amended February 4, 2003 Amended October 7, 2003 Amended February 10, 2004 Amended September 6, 2005 Amended April 17, 2007 Amended May 15, 2007 Amended November 27, 2007 Amended July 8, 2008 Amended October 6, 2009 – Inserted FEMA compliant language to Sect's. 4.05 & 7.04. Amended March 16, 2010 – Added LED Lighting language to Sect. 11 Amended March 27, 2013 – Amended Sect. 7, New Parking Subsection Amended June 17, 2014 – Amended Sect. 7, revised parking requirement for selfstorage Amended September 3, 2019 - Separated Site Plan sections to stand-alone regulations, revised portions of Section 2 for consistency with definitions in Site Plan Regulations, renumbered/reformatted remaining sections as necessary.

end 8

SECTION 9

TYPICAL CROSS SECTIONS, PLANS, BERMS, AND PROFILES

Figure 1: Typical Roadway Cross Section I, Open Drainage

Figure 2: Typical Roadway Cross Section II, Closed Drainage

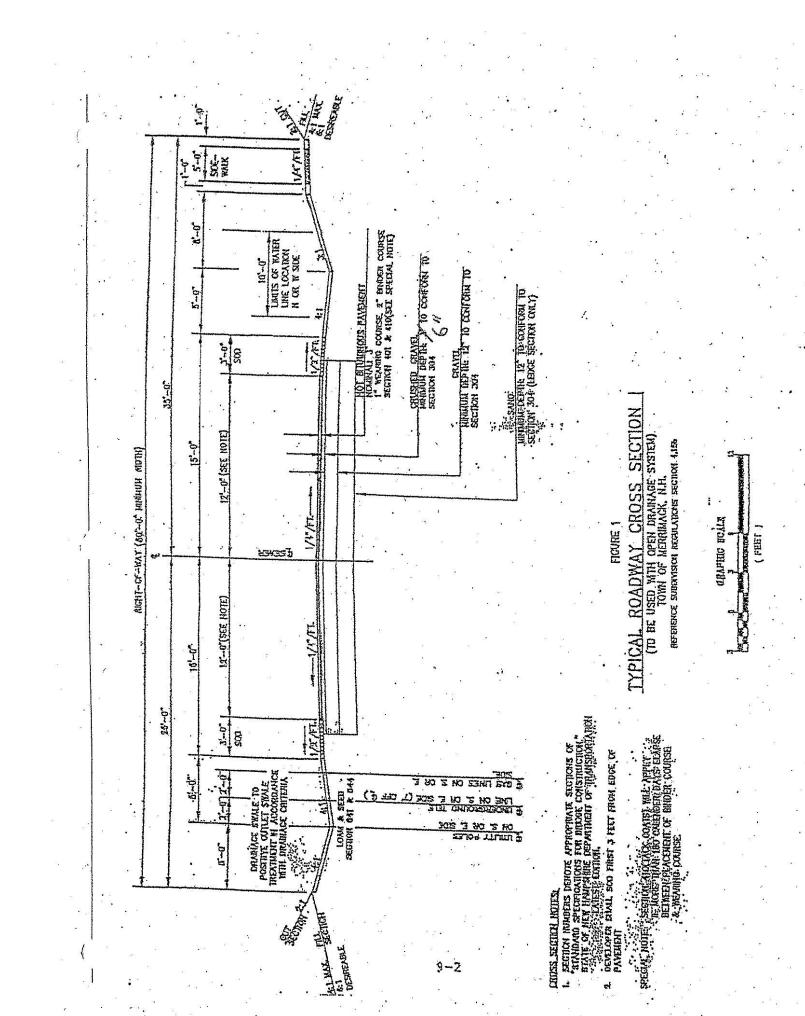
Figure 3: Typical Intersection Plan

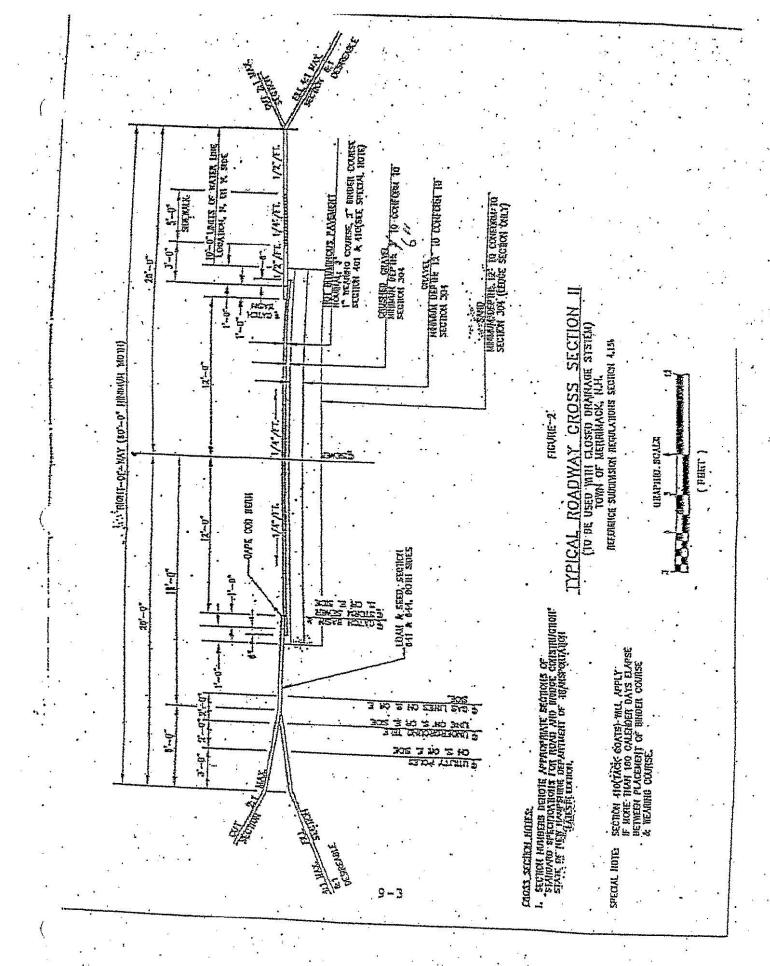
Figure 4: Typical Driveway Cross Section, Closed Drainage

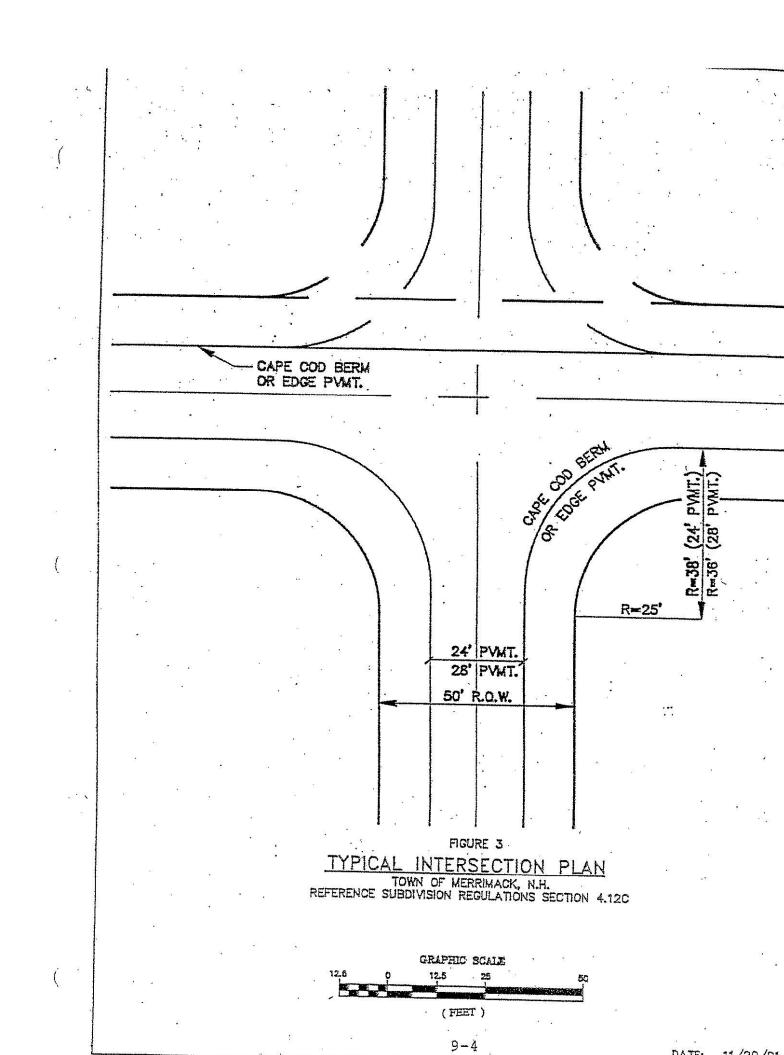
Figure 5: Typical Cape Cod Berm

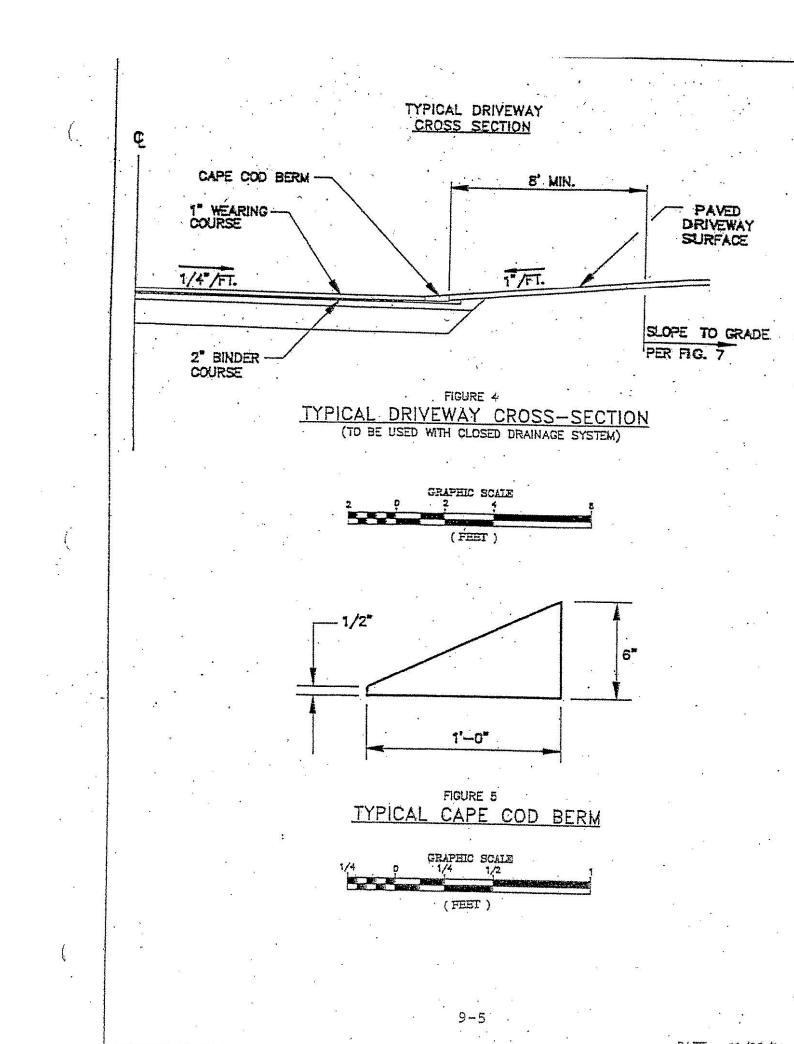
Figure 6: Typical Driveway Cross Section, Open Drainage

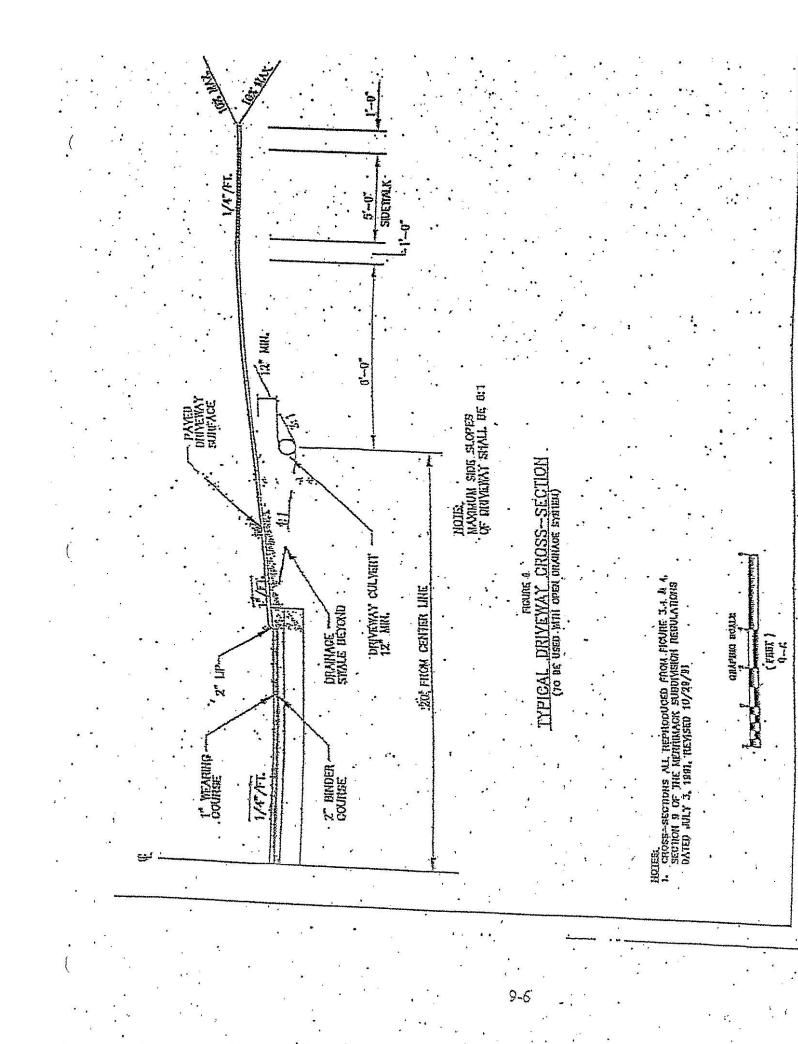
Figure 7: Residential Driveway Profiles

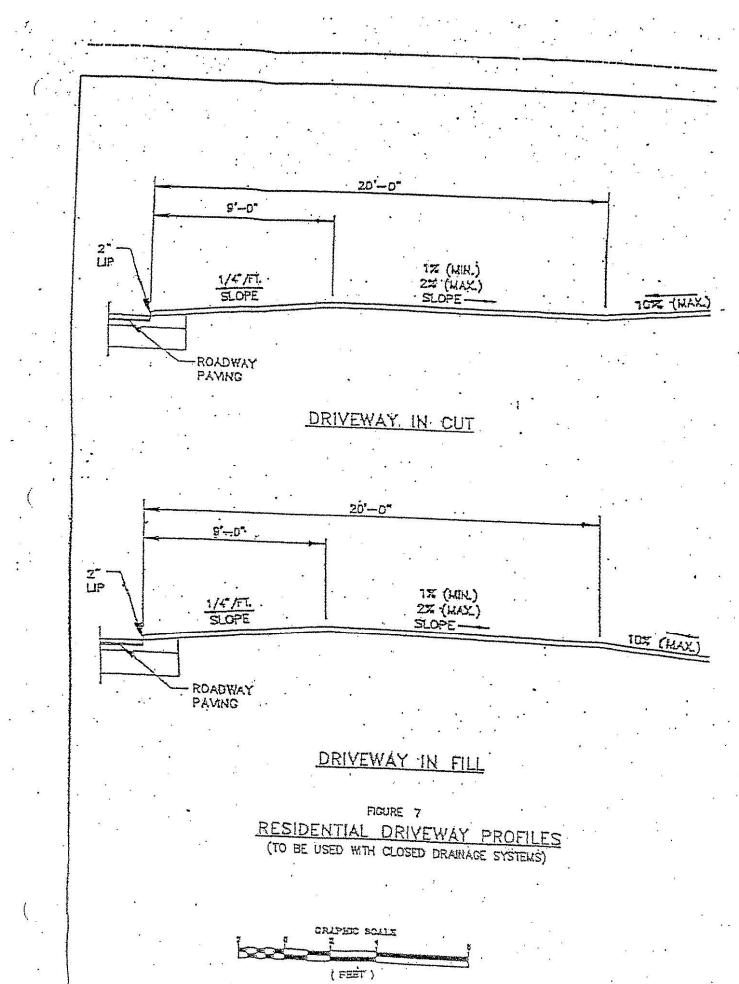












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SECTION 10 - LANDSCAPING STANDARDS

10.01 Residential Subdivisions

Conventional and cluster residential subdivisions plans are not necessarily required to submit detailed landscape plans, however, certain general development standards intended to enhance the safety and comfort of residents, enhance the aesthetic appeal of the neighborhood, and protect prominent natural features of the landscape while helping to safeguard the public water supply should be addressed as a part of any subdivision plan.

1. General Standards

a. Prominent natural or man-made features of the landscape such as mature trees, surface waters, natural rock outcrops, old roadways or stonewalls should be retained and incorporated into the subdivision plan where possible.

b. Land clearing should be kept to a minimum with existing natural vegetation retained where possible.

c. In order to retain the rural character of the residential areas of Town, existing stonewalls and mature trees within the public right-of-way shall be preserved except where road or driveway access points and their associated sight lines are required. Exception is made for dead, diseased, dangerous or dying trees which present an obvious safety hazard. The rebuilding of aged, fallen, or damaged stone walls, the construction of new stone walls and the replanting of shade or ornamental trees along disturbed portions of existing rights-of-way are encouraged.

d. Lawn areas should be kept to a minimum. Natural re-growth of disturbed areas, mulched planting beds and alternative groundcover plant varieties are encouraged

e. Not less than four inches of loam shall be restored to all disturbed areas intended for lawns, planting beds or for natural re-growth.

f. Landscaped entrances to new subdivision streets are encouraged. Plant varieties selected should be hardy, drought resistant and require minimal maintenance. A blend of deciduous, evergreen, flowering and non-flowering plant varieties is encouraged to provide an attractive year-round display. Native plant species, or plant species that are been well adapted for growth and survival in Merrimack or the surrounding region are preferred.

End 10

SECTION 11 [Eliminated on 9/3/19 with the adoption of separate Site Plan Regulations by the Planning Board]

<u>SECTION 12</u> [Eliminated on 9/3/19 with the adoption of separate Site Plan Regulations by the Planning Board]

SECTION 13 [Eliminated on 9/3/19 with the adoption of separate Site Plan Regulations by the Planning Board]