

# **TOWN OF EPPING, NH**

  

# **SUBDIVISION REGULATIONS**

**Amended to:**  
**December, 2005**  
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## TOWN OF EPPING

### LAND SUBDIVISION REGULATIONS

#### **SECTION 1 - AUTHORITY AND TITLE**

Pursuant to the authority vested in the Epping Planning Board by the voters of the Town of Epping at the Annual Town Meeting of 1969, and to the authority granted to the Planning Board under Chapter 674:35-36 of the Revised Statutes Annotated of New Hampshire of 1983, as amended, the Planning Board hereby adopts the following regulations governing the subdivision of land in the Town of Epping.

These regulations shall be known, and may be cited as, the "Town of Epping Land Subdivision Regulations," hereinafter referred to as "Subdivision Regulations." The current set of Regulations revise and replace the Epping Land Subdivision Regulations of 1970, as amended, and take effect upon adoption by the Board and filing with the Selectmen and Town Clerk in accordance with RSA 675:6.

#### **SECTION 2 - CONFLICTING PROVISIONS AND VALIDITY**

Whenever the regulations made under the authority hereof differ from those prescribed by any statute, ordinance, or other regulations, that provision which imposes the greater restriction or the highest standard shall govern.

If any section, clause, provision, portion or phrase of these regulations shall be held to be invalid or unconstitutional by any court of competent authority, such holding shall not affect, impair or invalidate any other section, clause, provision, portion or phrase of these regulations.

#### **SECTION 3 - JURISDICTION**

The provisions of these regulations shall apply to all land within the boundaries of the Town of Epping.

- 3.1 Subdivisions. The provisions of these regulations shall apply to all land within the boundaries of the Town of Epping.

Any person proposing to subdivide in the Town of Epping must apply to the Planning Board for approval of such subdivision.

A subdivision application must be made and approved before any offer to sell, rent or lease a proposed subdivision or part thereof before any construction, land clearing or building development is begun, before any permit for the erection of any building may be granted, and before a subdivision plat may be filed with the Rockingham County Registry of Deeds.

- 3.2 Permits. No building permit may be issued for the construction or alteration of any building or structure within the purview of these Regulations until a copy of an approved subdivision plat has been presented by the applicant to the Building Inspector/Code Enforcement Officer.

#### **SECTION 4 - PURPOSE**

Consistent with the enabling legislation cited above, the purpose of these Regulations are to ensure that the subdivision of land is consistent with the enumerated purposes of RSA 674:36, as amended, which are incorporated by reference herein, and that all subdivision and development shall be consistent with the following purposes:

- (a) Subdivision of land and development shall not be “scattered or premature” as would involve danger or injury to health, safety, or prosperity by reason of the lack of water supply, drainage, transportation, schools, fire protection, or other public services, or necessitate the excessive expenditure of public funds for the supply of such services.
- (b) Proposed streets shall be properly arranged and coordinated in relation to other existing or planned streets.
- (c) Subdivision and development shall be harmonious with the Town and its environs. Developments must contribute to a rational and safe transportation system, provision of appropriate recreational opportunities, and must not be inconsistent with the recommendations of the Epping Master Plan.
- (d) Subdivision of land and development shall be provided with adequate services and utilities.
- (e) Suitably located streets shall be required of sufficient width to accommodate existing and prospective traffic and to afford adequate light, air, and access for fire-fighting apparatus and equipment to buildings, and be coordinated so as to compose a convenient system.
- (f) Subdivision of land and development shall promote and not harm the public's health, safety, and welfare.
- (g) Provision of open spaces and green spaces of adequate proportion.
- (h) Subdivisions that show new streets or narrowing or widening of such streets shall show a park or parks suitably located for playground or other recreational uses purposes.

## **SECTION 5 - DEFINITIONS**

**CERTIFIED SOIL SCIENTIST:** a person qualified in soil classification and mapping whom is certified by the State of New Hampshire.

**COMMERCIAL USES:** As defined by the Town of Epping Zoning Ordinance.

**COMMUNITY WASTEWATER SYSTEM:** A non-municipal wastewater disposal system that serves more than one lot. When this type of system is proposed, the design and specifications for the same shall be submitted and shall have been certified by a professional engineer qualified and registered under applicable New Hampshire statutes.

**COMMUNITY WATER SUPPLY:** A non-municipal water supply system that serves more than one lot. When this type of system is proposed, the design and specifications for the same shall be submitted and shall have been certified by a professional engineer qualified and registered under applicable New Hampshire statutes.

**CRITICAL AREAS:** Areas of any size within 100 feet of a stream, water body, or poorly or very poorly drained soils; areas containing slope lengths exceeding 25 feet on slopes greater than 15 percent; or critical habitat.

**DEVELOPMENT:** this term shall mean the construction of improvements on a tract or tracts of land, including the enlargement of a structure or physical changes to the site in an effort to accommodate an intended use.

**DRIVEWAY -** Means a privately owned and maintained access way to not more than one lot.

**EASEMENT:** an easement shall mean the private landowners right or privilege that a person may have in another's land usually for the purpose of installing and/or maintaining utilities, drainage ways, or for access. Such areas shall not be considered presumptive locations for public roadways unless specifically approved as such by the Planning Board.

**ENGINEER OR SURVEYOR:** these terms shall denote the duly designated, legally recognized, New Hampshire licensed engineer or surveyor employed by the applicant as may be pertinent to the actual services to be performed in accordance with the provisions set forth in RSA 310-A, as amended.

**HARDPAN:** this term refers to a compact soil layer high in silt and very fine sand, generally low in clay; its permeability is less than 0.6 inches per hour.

**IMPROVEMENT:** this term shall refer to site grading, landscaping, street or road construction, and utilities (including water, sewer, electric, gas, storm drainage, and their appurtenances) to be installed or agreed to be installed by the applicant on land to be used for public or private streets and easements or other purposes as are necessary for general development of the site. Agricultural and silvicultural activities are not necessarily improvements under this definition and may require a case-by-case analysis.

**INDIVIDUAL SEPTIC DISPOSAL SYSTEM:** this term refers to any sewage disposal and/or treatment system other than a municipal system or community system.

**INDIVIDUAL WATER SUPPLY SYSTEM:** this term refers to any water supply system other than a municipal system or a public water system, which provides potable water.

**LOT LINE ADJUSTMENT:** a lot line adjustment or boundary line agreement where no buildable lots are created. Such action requires notice and opportunity to be heard but does not require a public hearing for board action.

**LOT:** this term refers to a piece or parcel occupied or intended to be occupied by a principal building or a group of such buildings and accessory buildings, or utilized for a principal use and uses accessory or incidental to the operation thereof, together with such open spaces as required by these regulations and/or the Epping Zoning Ordinance, and having frontage on a public street.

**MUNICIPAL WATER SUPPLY** - A water supply system that serves an average of at least twenty-five (25) individuals daily year-round or that has at least fifteen (15) service connections and that is owned and operated by a municipal or regional government.

**PLANNING BOARD AGENT** - Means the planning consultant, official, or other person(s) assigned by the Board to perform plan review and other such duties.

**RIGHT-OF-WAY**: refers to any area or interest in land that is intended for public traverse, whether accepted by the town or not.

**SEASONAL HIGH WATER TABLE (SHWT)**: this term refers to the upper limit of the ground water in a soil that becomes seasonally saturated with water.

**SENSITIVE AREAS**: this term refers to land and resources that possess environmental, cultural, or historic factors that warrant special consideration during planning board review. Such area may include, but are not limited to, historic homes, stream banks, wetlands, wildlife habitat (plant and animal), trails, etc.

**SLOPE** - The average steepness of the land surface under consideration. For the purpose of determining lot size categories, slope shall be determined by slope factors used U.S. Soil Conservation Service Soil Survey (National Cooperative Soil Survey) soils classification (where A = 0-3%; B = 3-8%; C = 8-15%; D = 15-25%; and E = >25%).

**SOIL TYPE** - As defined by the U.S. Soil Conservation Service, United States Department of Agriculture. For the purpose of this Regulation, soil type shall be determined by a certified soil scientist.

**STREAM**: A course of water that flows for sufficient time of the year to develop and maintain defined channels but may not flow during dry portions of the year. Includes but is not limited to all perennial and intermittent streams located on USGS maps.

**STREET**: as set forth in RSA 672:13, street means, relates to and includes street, avenue, boulevard, road, land, alley viaduct, highway, freeway and other ways. The term "streets" shall also apply to areas on any plans designated as streets, roads, lanes, etc.

**SUBDIVIDER** - Means an individual, firm, association, syndicate, partnership, corporation, trust, or any other legal entity or agent therefore that undertakes the subdivision of land in the Town of Epping.

**SUBDIVISION, MINOR** - means a subdivision of land into three or fewer lots, with no potential for resubdivision, and requiring no new roads, utilities or other municipal improvements.

**TOWN ENGINEER** - Means the duly designated registered professional engineer of the Town of Epping.

**UPLAND SOILS**: refers to soils that are not poorly or very poorly drained in accordance with these regulations.

**WETLANDS**: As defined and determined by NHDES.

## SECTION 6 - GENERAL STANDARDS

**In review of any subdivision plans conducted under these regulations, the Planning Board will require that adequate provisions be made by the owner or his agent for:**

- 6.1 The safe and attractive development of the tract and to guard against such conditions as would involve danger or injury to health, safety, and the diminution in value of surrounding properties;
- 6.2 Traffic circulation and access including adequacy of entrances and exits, traffic flow, sight distances, access to state highways, turning lanes, and traffic signalization;
- 6.3 Pedestrian and bicycle safety and access;
- 6.4 Off-street parking;
- 6.5 Storm water drainage and ground water recharge;
- 6.6 Water supply, waste water and septage disposal, and solid waste disposal;
- 6.7 Adequate fire safety, prevention, and control;
- 6.8 The harmonious and aesthetically pleasing development of the municipality and its environs;
- 6.9 Suitably located and coordinated travelways of sufficient width to accommodate existing and prospective traffic and to afford adequate light, air, and access to buildings for firefighting apparatus and other emergency equipment;
- 6.10 Conformance with all existing regulations and ordinances;
- 6.11 Demonstration that the proposal is generally consistent with the Town's Master Plan;
- 6.12 The minimization of encroachment on neighboring land uses;
- 6.13 Adequate green areas, open space, conservation easements, slope and drainage easements as may be necessary/applicable;
- 6.14 Facilities to meet the recreational needs of the residents in the subdivision.
- 6.15 Sidewalks, when required, shall be installed and constructed in accordance with the specifications of the Town of Epping.

## **SECTION 7 - GENERAL INFORMATION**

- 7.1 The subdivider shall make application using appropriate forms provided by the Planning Board and shall conform to the application procedures and any other applicable regulations adopted by the Town.
- 7.2 For more complete information it is strongly recommended that the applicant read the Town of Epping Zoning Ordinance, Building Code, Site Plan Review Regulations, Road Design and Construction Specifications (as applicable).
- 7.3 Changes in lot line locations require subdivision application and approval in the same manner as ordinary subdivisions as defined in these regulations except that a public hearing shall not be required as specified in Section 8.4 of these regulations. However, abutters must be notified of the meeting. (RSA 676:4, I(e)1.)
- 7.4 The applicant shall be required to pay all reasonable costs or fees for special investigative studies and the review of documents, which are particular to the application, in addition to administrative and notification fees as required by the Board.
- 7.5 In accordance with RSA 676:16, as amended, the transfer or sale of any lot in an unapproved subdivision will be enjoined by the Town and subject to a civil penalty of \$1,000 for each lot or parcel so transferred or sold.
- 7.6 The Board may make a visual on-site inspection of the land at any stage of the proposal. Inspection is to be at such time when the site is free of snow cover, unless the Board is otherwise satisfied that such inspection is not required.
- 7.7 If a plan is withdrawn prior to hearing notification for the plan, no further action is required by the Board, and it will be considered terminated. One copy of any such plan(s) shall be retained for Board files.
- 7.8 Approval of the plan by the Board shall not constitute an acceptance by the Town of the dedication of any proposed street, highway, park or other public open space.
- 7.9 The Board may approve the plan with such conditions as may be necessary to ensure proper completion of required improvements, as detailed in Sections 9 and 10 of these regulations.
- 7.10 The Planning Board adopts the provisions of RSA 674:40-41 "Improvements in Unapproved Streets" and "Erection of Buildings on Streets; Appeals."
- 7.11 Only the Town of Epping Planning Board has the authority to waive any Land Subdivision Regulations.



SECTION 8 - PROCEDURES

**Section 8 REPEALED AND READOPTED AS EPPING PLANNING BOARD RULES OF PROCEDURE**

These procedural regulations have been removed and have been readopted in their entirety into the Epping PB Rules, as amended. The Epping PB Rules adopted in accordance with RSA 674:35 & 36, among others are the sole source for rules governing the Planning Board process on all applications including subdivision applications. They are incorporated by reference to the extent permissible by law. Please refer to the referenced document for procedural requirements including application forms and fees.

## **SECTION 9 - GENERAL REQUIREMENTS FOR THE SUBDIVISION OF LAND**

The subdivider shall observe the following general requirements and principles of land subdivision:

- 9.1 The minimum dimensional requirements of lots shall be determined by the provisions of the Town of Epping Soil Type Lot Size Regulations (Section 11 of these regulations) and by applicable provisions of the Epping Zoning Ordinance.
- 9.2 Reserve strips of land which, in the opinion of the Planning Board, show an intent on the part of the subdivider to control access to land dedicated or to be dedicated to public use shall not be permitted.
- 9.3 There shall be adequate width and area on every proposed lot after the erection of a residence to permit the parking of at least three (3) cars for each dwelling unit within the lot and within the lot clearances required by the Zoning Ordinance and Building Code, within a garage or other enclosure, or in lieu thereof, upon a gravel or surfaced parking area.
- 9.4 Land of such character that it cannot be safely used for building purposes because of exceptional danger to health or peril from fire, flood, impermeable soil or other menace shall not be platted for residential occupancy, nor for such other uses as may increase danger to health, life or property or aggravate the flood or sewage hazard, until appropriate measures have been taken by the owner or his agent to eliminate such hazards.
- 9.5 The Board may, where it deems necessary, due to the character, size, and location or other factor specific to the proposed subdivision, require that one or more sites within the subdivision be dedicated for use as recreation (neighborhood park or playground) or open-space land. Such sites shall be of suitable character and size for the intended use. Such areas, whether privately or publicly owned shall have a sufficient restrictive covenant, which shall run with the land, recorded in the deed to assure permanent use as a recreation or open space land. Privately owned recreation or open space land shall be deeded in such a way that will assure the maintenance of the land and facilities in an orderly manner suitable for the intended use.
- 9.6 All public or private streets, roadways, utilities, sewerage and drainage facilities, curbs and sidewalks, when required, shall be installed and constructed in accordance with the specifications spelled out in the Town of Epping Road Design and Construction Specifications
- 9.7 A layout indicating how the site will be served by electric, telephone and any other public utility must be provided. If the utility company(s) require an easement to provide service, no final approval shall be granted by the Epping Planning Board until such easements are secured. If no easements are required, a letter of intent to provide service from the utility company(s) must accompany the application.
- 9.8 Until such time as permanent monumentation is established in a subdivision location, all lot corners of boundary lines shall be maintained with temporary pin placements consisting of wood or metal stakes flagged with survey ribbons. This is to be accomplished after all roadside stakes are in place.
- 9.9 The subdivider shall install two (2) granite monuments at least thirty-six (36") inches in length and four (4") inches square with suitable center point at every corner which abuts a road, street, or right-of-way. In addition, the subdivider shall install iron pin monuments not less than one (1) inch in diameter and thirty-six (36) inches long at all other points on the boundary lines of lots where there is a change in direction.  
  
These monuments are to be in place prior to the issuance of certificate of occupancy,
- 9.10 The Board may require special improvements which it deems reasonably necessary or desirable for the conditions or circumstances relative to the particular subdivision. Any such special requirements shall be stated in writing in the minutes of the Board with the reasons therefor.

- 9.11 The Board may provide against such scattered or premature subdivision of land as would involve danger or injury to health, safety, or prosperity by reason of the lack of water supply, drainage, transportation, schools, fire protection, or other public services or necessitate the excessive expenditure of public funds for the supply of such services.
- 9.12 Lots for development shall not change the topography of the land to be developed by the removal of trees, shrubs, soil and rocks, except that which is necessary for the building of structures and roads.
- 9.13 The Town of Epping does not allow the creation of pork chop lots in any zone.
- 9.14 The Town of Epping does not allow the act of subdivision along Class VI roads. All subdivisions must occur along Class V roads or better.

## **SECTION 10 - SPECIFIC PLAN REQUIREMENTS**

### **10.1 Subdivision Plan**

#### 10.1.1 Scope of Review

Every application for subdivision review must incorporate the entire parcel within the review. Not to do so may cause approval of a lot or situation which is not in conformance with the zoning ordinance and/or other applicable ordinances and regulations.

#### 10.1.2 Professional Standards

Subdivision plans shall be prepared, stamped, and signed by a registered Professional Engineer and/or Licensed Land Surveyor licensed in New Hampshire. The requirement for a Professional Engineer shall apply to all plans showing roadways, utilities, bridges and culverts, plus drainage and other construction plans. In specific cases, the Board may waive the requirement for a Professional Engineer in accordance with Section 13, Waivers.

### **10.2 Specific Plan Information - Existing Site Conditions**

In order for the Board to comprehensively evaluate a subdivision plan proposal, the applicant is required to show the following information as part of the subdivision plan, unless granted a waiver in accordance with Section 13, Waivers. Other information may be reasonably required by the Board and shall be submitted. Such additional submittals may be required in cases where the submitted information fails to permit the Board to review the subdivision in light of the requirements of Sections 7 and 8 and the purposes of these regulations.

- A. Location of site, names, and addresses of current owners of record and current abutting land owners. A separate list of current names and addresses of abutters must also be provided.
- B. Proposed subdivision name. Name and address of person(s) or firm preparing the plan. Said plan must contain the date of preparation, title, north arrow, scale, legend and zoning district(s). Name and address of person(s) or firm preparing other data and information if different from the preparer of the map. Plans shall also contain a signature block for Board approval.
- C. Surveyed property lines including angles or bearings, distances, monument locations and size of the entire parcel. Said plan must be attested to and stamped by a Licensed Land Surveyor licensed in the State of New Hampshire, signature, seal, and license number shall be legible and included on the plan.
- D. Existing grades and topographic contours at intervals not exceeding two (2) feet with spot elevations where the grade is less than five percent (5%).
- E. The location of existing drainage systems, structures, and drainage easements, if any.
- F. The shape, size, height, location and use of all existing structures, including wells and septic systems, on the site and within 200 feet of the site.
- G. Natural features such as streams, marshes, lakes, ponds, rock outcrops, wooded areas, significant trees, ledge, and other significant environmental features, including wetland soils as defined under current Epping Wetlands Ordinance, wetlands shall be identified by a NH certified soil scientist or NH certified wetland scientist.
- H. Man-made features such as, but not limited to, existing roads, stone walls, pedestrian ways, and other structures. The plan shall also indicate which structures are to be retained and which are to be removed or altered.

- I. The size and location of all existing public and private utilities, including off-site utilities to which connection is planned, and any underground storage tanks, abandoned or in use.
- J. A vicinity sketch showing the location of the site in relation to the surrounding public street system, to be shown within a distance of 1,000 feet.
- K. Location and description of all existing easements and/or rights of way, parks, reservations, conservation land, and holders of conservation easements.
- L. Tax map and parcel number.
- M. Each existing building or manmade structure, including stone fences, shall be shown on the plan and reviewed with the Board for historic significance. Such historic features may be destroyed or removed only with Board approval
- N. Summary of Epping Zoning Ordinance requirements, including, but not limited to summary of lot size requirements, lot area, frontage, etc.
- O. The subdivision plan shall show any burial site or cemetery as a separate lot from the remainder of the subdivision by means of a fence or stone wall. This fence shall be placed not less than twenty-five (25) feet from any grave, monument, or tomb and will be shown on subdivision plans accordingly, RSA 289:3.
- P. Plans shall show all existing or planned burial site(s) or cemetery(s) as separate lot(s) which may be deeded to the Town of Epping. Access for maintenance shall also be shown on the subdivision plan.
- Q. Scale should be not more than 1" = 100' (one inch = 100 feet).
- R. The final plan(s) shall include sufficient data acceptable to the Planning Board and the Town Engineer to determine readily the location, bearing and length of every existing and proposed street line and lot line, and to reproduce such lines upon the ground. All dimensions shall be shown to hundredths of a foot and bearings to at least half minutes. The error of closure shall not exceed a ratio of 1 to 10,000. The final plan(s) shall show the boundaries of the property and the bounds of any public or private streets and easements abutting or pertaining to the proposed subdivision in any manner.

### 10.3 Specific Plan Information- Proposed Site Conditions

In order for the Board to comprehensively evaluate a subdivision plan proposal, the applicant is required to show the following information as part of the subdivision plan, unless granted a waiver in accordance with Section 13, Waivers. Other information may be reasonably required by the Board and shall be submitted. Such additional submittals may be required in cases where the submitted information fails to permit the Board to review the subdivision in light of the requirements of Sections 7 and 8 and the purposes of these regulations.

- A Proposed grades and topographic contours at intervals not exceeding two (2) feet with spot elevations where grade is less than five percent (5%).
- B Construction drawings and location, name, width, curbing and paving of proposed streets, drainage ways, and profiles and the elevations of sufficient points on the property to indicate the general topography of the property, driveways and sidewalks with indication of direction of travel for one-way streets. Including the radii of streets, driveways, access ways, and sidewalks within the site and its relationship to the off-site street system.

- C Location and timing patterns of proposed traffic control devices, including painted road indicators, and all signage.
- D Designs of any bridges or culverts that may be required.
- E Where the plat submitted covers a part of the subdivider's entire holding, a sketch of the prospective future street system of the unsubmitted part shall be furnished and the street system of the submitted part will be considered in the light of adjustments and connections with the street systems for the part not submitted.
- F The location and layout of proposed drainage systems and structures, including elevations for catch basins designed in accordance with these regulations.
- G Note indicating that "all road and drainage work to conform to the standard specifications for construction in the State of New Hampshire" of Town of Epping Road Design and Construction Specifications
- H The size and location of all proposed public and private utilities, including but not limited to: water lines, sewage facilities, gas lines, power lines, telephone lines, fire hydrants and alarm connection, underground storage tanks, and other utilities.
- I The location and type of street lighting, including the cone of illumination on the site.
- J Location and description of proposed easement(s) and/or rights-of-way. Locations of access to existing town roads, as stated in RSA 236-13, Section 5, and copies of permits for the access.
- K The location and size of all proposed open space areas or parcels to be dedicated to public use and the conditions of such dedication and a copy of such private deed restrictions as are intended to cover part or all of the tract.
- L Deeds or other proposed documents of conveyance of any land located within the subdivision proposed by the Subdivided for use for recreational or other Town purposes and Town ownership shall be part of the application. These proposed documents of conveyance shall be in a form satisfactory to Town Counsel. The fact that the Subdivider makes such offers and Town Counsel approves the form of the documents does not bind the Town or its agents to accepting the offer. The suitability of lands offered for recreational or conservation uses shall be determined by the Conservation Commission of the Town. A letter indicating the Commission's opinion shall accompany the application.
- M The location of all monumentation that is to be installed in accordance with these regulations shall be shown on the plans. If the monumentation is changed in the field after construction supplemental information shall be filed with the Planning Board to be added to the file. Any change in the actual layout of the lots shall require planning board approval in accordance with these regulations.
- N Any other information the Board may require in order to properly evaluate the proposed development including, but not limited to, the following:
  - (1) Calculations relating to stormwater runoff.
  - (2) Information on the composition and quantity of wastewater generated.
  - (3) Information on air, water, or land pollutants discharged.
  - (4) Estimates of traffic generation.
  - (5) Grading, drainage and erosion and sediment control plan.
  - (6) Any other plan required under § 8.2.

#### 10.4 Sidewalks and Bikeways

Sidewalks and/or bikeways, where appropriate, shall be provided for pedestrian traffic to provide connection between the subdivision and nearby destinations. Sidewalks shall be at least six (6) inches above grade and shall be protected by curbing. Sidewalk designs shall include means for handicapped access. The board shall consider the following when determining the appropriateness of sidewalks:

- A. Proximity to schools.
- B. Whether recreational facilities and land is available within the subdivision.
- C. Proximity to commercial destinations, including but not limited to, restaurants, stores, shops, etc.
- D. Proximity to other pedestrian or bikeways, including abandoned” ways or sidewalks.

#### 10.5 Landscaping Design and Plan

The Town of Epping requires attention to landscaping design in order to protect and preserve the appearance, character, and value of the surrounding neighborhoods by providing a better transition; by improving the compatibility between various land uses in the Town; and by buffering neighboring properties and areas from any adverse effects of site development.

These regulations shall mitigate the appearance and detrimental impact of non-residential uses. Any application of these regulations shall protect the value and provide for quiet enjoyment and nuisance-free use of neighboring properties.

- A. To the extent feasible, naturally landscaped buffer strips of 25 feet must be preserved where a proposed residential development abuts non-residential zones or uses. This buffer shall adequately shield the residential properties from the adverse effects of the non-residential use. No roads shall be located within any part of this buffer zone.

Where appropriate, existing trees and vegetation must be incorporated into the buffer strips or landscaping design. Buffer strips must contain vegetation which will screen the view from adjacent residential property during all seasons, this screening must exclude visual contact between uses and create a strong impression of the separation of spaces. Fencing alone may be considered an acceptable method of screening only if granted a waiver in accordance with Section 13, Waivers.

- B. Where appropriate or required, subdivisions shall be planned to provide that natural vegetation be retained as a buffer along environmentally sensitive areas such as watercourses, wetlands, and standing waters, in accordance with sound environmental practices, as described by the Department of Environmental Services. Appropriate landscaping along designated Scenic Roadways is strongly encouraged and any tree removal shall only be permitted in accordance with state and local Scenic Roadway provisions.
- C. Pre-existing or non-conforming lots which are the subject of subdivision shall not be subject to the landscaping recommendations or requirements described above.

#### 10.6 Protection of Natural and Historic Features

- A. Each significant natural feature within the site including large or unusual trees, watercourses, natural stone outcroppings, and other scenic features shall be shown on the plan. It is recommended that such significant features be preserved in the development of the site.

- B. Each existing building or manmade structure, including stone fences, shall be shown on the plan and reviewed with the Planning Board for historic significance. Such features will not be destroyed or removed without Planning Board approval.
- C. Where subdivisions impact or access via designated Scenic Roads, mitigative measures shall be taken to preserve the scenic quality of such roads. These measures may balance the needs and requirements for safety and health, but should only minimally consider economic expediency.

#### 10.7 Bridges

Bridges must be built according to the N.H. Department of Transportation current manual, *Standard Specifications for Road and Bridge Construction* as amended. All bridge plans must be approved by the State Engineers prior to construction.

#### 10.8 Fire Protection

- A. Cisterns shall be required for developments as follows:
  - 1. If the new development is within ½ mile (measured by roadways from the beginning of the new road or for frontage lots, the furthest lot) of a cistern or fire hydrant, a cistern will not be required.
  - 2. If the development has 10 or more buildings a cistern will be required. However, if the parent parcel is subdivided again within 10 years and the total of lots (old and new) equals 10 or more homes a cistern will be required.
  - 3. If the new development has an extensive road network or more than 35 dwelling units more cisterns may be required at the discretion of the Fire Chief or his/her designee.
- B. The cistern requirements shall be as follows:
  - 1. A minimum capacity of 30,000 gallons.
  - 2. Suction capacity shall be capable of delivering 1,000 gallons per minute (GPM) for three quarters of the cistern capacity.
  - 3. The entire cistern shall be rated for highway loading, unless exempted by the Fire Chief or his/her designee.
  - 4. Drawings of the design are for estimating general requirements and design purposes only and are not intended for use as design per NFPA 22, Standard for Water storage tanks for Fire Protection systems and NFPA 1142 for Suburban and Rural water supply.
  - 5. Cisterns shall be sited to the particular location by a registered engineer and approved by the Fire Chief or his/her designee.
  - 6. Tank construction materials shall be as follows:
    - a. Fiberglass underground tank or tanks
    - b. The Fiberglass tank should sit level on a 3-inch layer of crushed gravel for protection however if this differs from manufacturers recommendation, follow manufacture guidelines.
    - c. The tank should be secured with straps so it's secured to the ground according to the manufacturer's recommendations.
    - d. Meet the performance as noted in paragraph 2 of this regulation.
- C. Suction and Fill Piping Materials:
  - 1. All suction and fill piping shall be in accordance with current NFPA Standards as outlined in both NFPA 1141, Standard for Fire Protection infrastructure in Suburban and Rural areas, 2008 edition and NFPA1142, Standard for Water Supplies for Suburban and Rural firefighting, 2007 edition.



2. The filler pipe shall be six-inch (6) ASTM Schedule 40 PVC with glued joints with a Stortz fitting. The filler pipe shall be braced to ensure durability during filling operations. The Fire Chief or his/her designee shall approve brace configuration and installation.
3. The filler pipe shall be thirty-inches (30) above final backfill grade.
4. A thirty-two-inch (32) diameter manhole shall allow the unit to be secured with a padlock and shall be approved by the Fire Chief or his/her designee. The Epping Fire Department will supply the padlock.

D. Backfill and Bedding:

1. All backfill material shall be per manufacturer installation standards.
2. The entire cistern shall be completed and inspected by the Fire Chief or his/her designee before any backfilling is done.
3. Bedding for the cistern shall be per manufacturer installation standards. No fill shall be used under the stone.
4. The perimeter of the tank at the cover joint shall be sealed with eight-inch (8) PVC water stop.
5. After backfilling, bollards shall protect the tank.
6. The backfill over the tank shall meet be per manufacturer installation standards.
7. Insulation shall be per manufacturer installation standards.
8. All backfill shall extend at least ten feet beyond the edge of the cistern and then have a maximum of 3:1 slope, loamed and seeded.

E. Vehicle Accessibility Requirements:

1. The distance from the bottom of the suction pipe to the fire apparatus connection shall not exceed fourteen (14) feet.
2. The pitch of the shoulder and vehicle pad from the edge of the pavement to the fire apparatus suction connection shall be one (1) percent to six (6) percent downgrade.
3. The shoulder and vehicle pad shall be of sufficient length to allow convenient access to the suction connection when the fire apparatus is set at 45 degrees to the road.
4. The shoulder and vehicle pad section shall consist of asphalt pavement or screened gravel with no stones larger than one and one-half (1-1/2) inches and shall be compacted to 95 percent of its original volume in accordance with ASTM D1557.
5. The suction fitting shall be located between twenty-two (22) and twenty-four (24) feet from the nearest running edge of road pavement.
6. Two (2) concrete filled steel bollards shall be placed in a manner to protect the hydrant. The base of these bollards shall extend below the frost line. The upper portion of the bollards shall extend thirty-inches (30) above the level of the gravel where vehicle wheels will be located when cistern is in use.

F. All horizontal suction piping shall slope slightly uphill toward the fire apparatus connection.

G. The installer is responsible for completely filling and maintaining the cistern until accepted by the Fire Chief or his/her designee. A bond should be issued for the cistern and turned over to the town the same day the road is bonded.\*\*\*

H. The Fire Chief or his/her designee shall conduct inspections during the construction and installation process as follows:

1. Excavation
2. Installation of base material
3. Tank placement
4. Piping installation
5. Backfilling

I. Alternative fire protection options may be considered including sprinklers and dry hydrants subject to review and approval by the Fire Department.

#### 10.9 Water, Wells, On-site Sewage, and Hydrogeological Studies

##### A. Water.

1. On-site water supply: the provision of an on-site water supply shall conform to criteria of the Drinking Water and Groundwater Bureau of the N.H. Department of Environmental Services. It shall be the responsibility of the applicant to provide sufficient and complete information to prove that the site is able to permit the installation and operation of both individual on-site water supply and sewage disposal systems.
2. A hydrogeologic study shall be required for any well with a withdrawal of over 20,000 gallons per day or any development purposed near a known contaminated ground water site prior to the approval of the subdivision.
3. Drinking water supplied by a community water system serving less than twenty-five (25) persons shall be tested by the Developer and submitted to the Town for review. Community water systems serving more than twenty-five persons are subject to NHDES regulation. "

##### B. Well Radius Placement.

1. Each newly created lot shall show the entire well radius protection area as required by the State Department of Environmental Services rules.
2. The entire required well radius shall be located within the boundaries of each newly created lot.
3. Well radius easements covering neighboring parcels are not permitted in new subdivisions. This insures:
  - (a) Protection of health and safety for individual on-site water resources from adverse impacts of land uses on adjacent and neighboring parcels.
  - (b) Allows for maximum flexibility in the placement of septic systems and other land uses on neighboring parcels of land.
  - (c) Promotes the wise and free use of property unencumbered by easements.

#### 10.10 Sewered Area System Siting Requirements

If an applicant intends to utilize Town of Epping sewer and water service, or private community water system, they should make an appointment with the Epping Sewer and Water Commission to determine proper requirements and procedures. Plans must be submitted for review by the water and sewer commission engineer, if required.

Written approval is required prior to Planning Board approval.

#### 10.11 Non-Sewered Area System Requirements

- A. In areas not served by public sewage disposal systems at the time of subdivision, it shall be incumbent upon the subdivider or his agent to adequately demonstrate that all proposed lots will meet all current state septic system disposal standards. No subdivision of land will be approved where it creates a building lot that will not meet these standards.
- B. The subdivider or his agent shall be required to submit all site information, including but not limited to percolation tests, test pits, soil, slope, and minimum distance data as may be required by the Planning Board to determine the suitability of each proposed lot for on-site sewage disposal.
- C. In no case shall the Planning Board grant final approval of a proposed subdivision until the following State approvals, if necessary, have been received: New Hampshire Department of Environmental Services (DES) - Water Supply and Pollution Control Division Subdivision Approval; DES Subsurface Disposal; DES Site Specific; DES Wetlands Board - Dredge and Fill Permit; DES Water Supply Approval; and U.S. Army Corps of Engineers 404 Permit.
- D. The location of and pertinent data on sufficient test pits and percolation tests to show that the regulations can be met on each lot created by the subdivision. Information shall include at least the following: the location of test pits; percolation test data; the certification of the test pit inspector witnessing the perc tests; and an outline of the areas reserved for leach fields which corresponds to test locations.

#### 10.12 Utilities

- A. The applicant proposing a residential development shall insure the installation all electric, telephone, and other utility distribution lines per specifications of the public utility companies involved, and easements required for transformer units shall be provided by the developer.
- B. The Planning Board requires underground utilities.

#### 10.13 Easements

- A. All easements dedicating rights to the Town of Epping are subject to review and approval by the Board and Town Counsel, and any other Town agent or body which the Board and/or Counsel deem necessary.
  - 1. Where the topography is such as to make difficult the inclusion of any utilities or other facilities within the road rights-of-way, the subdivision plan shall show the boundaries of the proposed permanent easements over or under private property. Such easements shall not be less than twenty-five (25) feet in width and shall have satisfactory access to existing or proposed rights-of-way.
  - 2. Where a proposed residential development is traversed by a watercourse or drainage way, the Board may require a stormwater easement or drainage right-of-way of at least twenty-five (25) feet in width.

#### 10.14 Open Space Requirements

In accordance with RSA 674:36,II, a subdivision of land shall show open spaces of adequate proportions. Plats submitted to the planning board for approval which show new streets or narrowing or widening of such streets shall show a park or parks suitably located for playground or other recreational purposes that are reasonably sized for neighborhood use.

- A. Natural Features. The subdivision and development shall, whenever possible, preserve in their natural condition important natural features. The Planning Board may request an advisory opinion from the

Conservation Commission in the determination of the value of natural features and the boundaries of such natural systems. Such areas include watercourses, wetland areas, steep slopes, large or unique trees, groves, or special habitats. Natural features that provide buffers between lots, or sections, of a subdivision should be preserved to enhance privacy and aesthetic value.

- B. Buffer Strips. The Planning Board may require the designation of buffer strips of at least fifty feet width around surface water, wetlands, or other natural features which may be adversely affected by erosion or stormwater runoff. The Board may require a vegetative buffer to provide screening where non-residential developments abut a residential zone.
- C. Parks. The Board may require the dedication or reservation of such open space within the subdivision for park, playground or other recreational or open space purposes, for the residents of the subdivision.
- D. Tree Planting. The planting of shade trees within all subdivision layouts where residential, commercial, or industrial development is to take place may be required of the developer who shall supply planting plans to the Board. The planting plans of shade trees within proposed or accepted rights-of-way must be submitted to the Conservation Commission and receive its approval before planting.

#### 10.15 Storm Water Drainage and Erosion Control

- A. 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. No new drainage-ways shall be created unless necessary easements are obtained. Such easements shall be duly recorded on the plat and the property deeds involved. No increase in surface runoff shall be permitted if such increased runoff passes beyond the property lines of the parcel upon which such development occurs, unless it is within an approved public storm drainage system. Storm drains shall be based upon a design flow to accommodate a 25-year/24-hour storm. Drainage facilities shall be based upon a design flow to accommodate a 100-year storm. All water courses shall be designed so as not to create erosive velocities. Calculations of runoff used to determine storm water system design shall be submitted for Planning Board review.
- B. Provisions shall be made to accommodate the increased runoff 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 other erosion/sedimentation control structures shall be constructed prior to any on-site grading or disturbance of existing surface material.
- C. A storm water system shall be constructed in accordance with the following requirements:
  - 1) The storm water system shall include an adequate number and sizes of catch basins and/or drop inlets, and shall be fully designed to handle all computed or reasonably anticipated storm water drainage. The minimum size, slope, and location of the pipe shall be determined by a qualified engineer and installed under his supervision.
  - 2) No storm water pipe, catch basin, drainage inlet, or other pipe floor drain, draining surface water shall be connected to any sanitary sewer system, pipe or other part of said system. All storm water pipe shall be inspected and approved by the Town Engineer before covered. Inspection shall be completed on a normal workday within a 24-hour period after notification.
  - 3) The subdivider shall provide satisfactory information that his storm water drainage system will not cause flooding or unreasonable deposits of such waters upon or onto adjacent private or public lands or streets, unless deed easements for the same are obtained in the name of, or to be deeded to, the Town of Epping.

## 10.16 Traffic Impact and Mitigation Analysis

All proposed developments shall be reviewed by the Board to ascertain that adequate provisions have been made by the owner or his/her agent for traffic safety. To facilitate this review, the applicant may be required to provide a traffic impact analysis when deemed necessary by the Board due to the size, location, or any other traffic generating characteristics of the development.

A. A traffic impact and mitigation analysis shall be required in the following circumstances:

1. The subdivision involves the creation of 10 or more residential lots or residential units;
2. The subdivision is intended to facilitate non-residential land uses;
3. A traffic impact analysis may be required of any development, at the discretion of the Planning Board, where information submitted does not permit the Board to with adequately identify the impacts of the development to the health, safety, and welfare of existing and proposed public.

B. The traffic impact and mitigation analysis shall be prepared by a NH licensed Professional Engineer. This analysis shall be prepared to meet, at a minimum, the NHDOT's Policy for the Permitting of Driveways and Other Access to the State Highway System (as amended) and NHDOT Intersection Capacity Analysis Guidance (as amended).

C. Depending on the magnitude of the proposed development, acceptable report formats may include: a letter report, a formal traffic impact and access study, or a technical memorandum addressing specific issues and concerns. All report types shall include a technical appendix containing all pertinent traffic data and analyses used in the preparation of the study.

D. Where applicable, reports shall include a qualitative as well as quantitative analysis including, but not limited to, details concerning the following impacts and proposed efforts to mitigate these impacts:

1. Inventory of the existing roadway conditions surrounding the site including identification of existing deficiencies;
2. Description of the proposed development including a trip generation estimate for daily and peak hour conditions;
3. Internal circulation patterns including service, delivery, and emergency response vehicles;
4. Pedestrian and bicycle mobility;
5. Adequacy of the existing roadway network to accommodate site-generated traffic;
6. Sight distances;
7. Traffic control needs;
8. On and off-site parking adequacy;
9. Accident statistics;
10. Neighborhood impacts; and
11. Air quality and noise impacts.
12. Any other identifiable impact that the Board finds necessary to address.

E. The extent of the study area for the traffic analysis will depend on the location and size of the proposed development. Small projects may require minimal analysis limited to site access locations and existing intersections immediately adjacent to the project. Large-scale projects may require a more extensive study area. The study area limits shall be reviewed by the Town Planner and/or town-hired consultant prior to the preparation of the study.

F. Analysis periods shall include weekday morning and evening peak hours for residential, industrial, and office type developments. Commercial developments (depending on the use) may include weekend peak hours in addition to the weekday.

- G. Reports shall include the following unless the requirement is beyond the scope of the reasonably predicted impact of the development:
1. Existing Conditions Analysis
    - i. ADT and peak hour volumes shall be provided for critical roadways and intersections.
    - ii. Traffic volumes shall be seasonally adjusted to reflect peak traffic month conditions. Historical traffic volume data obtained from the Town, NHDOT, or Nashua Regional Planning Commission shall be used to determine seasonal variations within the study area.
    - iii. Levels of service and vehicle queues shall be calculated for the existing (peak month) conditions at all study area intersections.
    - iv. Existing conditions traffic volume networks shall be prepared for the study area.
  2. “No Build” Analyses
    - i. Analyses shall be performed for the opening year of the project and opening year plus ten.
    - ii. Traffic growth projections shall include regional background growth in addition to traffic generated by any nearby proposed or approved development projects. Local historical traffic volume data shall be reviewed in assessing a traffic growth rate for use in the study.
    - iii. Opening year and opening year plus ten traffic volume networks shall be prepared for the No Build condition.
  3. Trip Generation Estimate and Distribution
    - i. Daily and peak hour trip estimates for the proposed project shall be developed using rates published by the Institute of Transportation Engineers (ITE). Deviations from the industry standard rates must be substantially supported with data collected at similar facilities.
    - ii. Procedures used to determine the distribution and assignment of site-generated trips shall be documented within the study.
    - iii. Site-generated trips shall be added to the No Build traffic volume networks to establish the Build condition. Traffic volume networks demonstrating the distribution and assignment of site-generated trips shall be included in the study.
  4. Build Analysis
    - i. Analyses shall be performed for the opening year of the project and opening year plus ten.
    - ii. Opening year and opening year plus ten traffic volume networks shall be prepared for the Build condition.
  5. Mitigation Plan
    - i. Where traffic operations or safety deficiencies are expected to occur as a result of the proposed development, mitigation measures to alleviate such deficiencies shall be evaluated and recommended by the proponent.
    - ii. Acceptable mitigation measures may include (but are not limited to) roadway and intersection improvements that address capacity or geometric problems, traffic calming, and transportation demand management.
    - iii. Conceptual improvement plans demonstrating the recommended mitigation shall be provided when appropriate.

- H. Recommended acceptable sources include the latest edition of the following publications (as amended):
1. Trip Generation, 6<sup>th</sup> Edition, 1997, ITE
  2. Trip Generation Handbook – An ITE Proposed Recommended Practice, October 1998, ITE
  3. Policy for the Permitting of Driveways and Other Access to the State Highway System, March 10, 2000, NHDOT
  4. Intersection Capacity Analysis Guidance, January 8, 2001, NHDOT Memorandum
  5. Highway Capacity Manual 2000, Transportation Research Board
  6. Manual on Uniform Traffic Control Devices Millennium Edition 2000, FHWA
  7. A Policy on Geometric Design of Highways and Streets 2001, Fourth Edition, AASHTO
  8. Highway Design Manual, March 1999, NHDOT
- I. The Board may retain the services of a consultant qualified in traffic engineering and transportation planning to review the traffic impact analysis and to ensure that adequate provisions are made in the development plan to reduce or eliminate project-related impacts. The Board may further require, pursuant to RSA 676:4 I(g), that the developer reimburse the Town for reasonable costs of this review. No plan shall be approved until such fees, if applicable, are paid in full.

#### 10.17 Inspections

- A. Periodic inspections of the work by an engineer designated by the Board are required during construction or alteration of all roads. Inspections are required:
- 1) 10.8.1.1 After clearing and grubbing and removal of topsoil has been completed, but before grading has been started.
  - 2) After the addition of required fill and setting of culverts, but before gravel base has been laid.
  - 3) After gravel base has been laid and compacted, but before surfacing has been placed.
  - 4) During surfacing.
  - 5) At such other times as may be found necessary by the board.
- B. It shall be the responsibility of the subdivider to notify the designated engineer of all required inspections at least 48 hours in advance, Saturdays, Sundays and holidays excluded, and to pay the Town for cost of inspection service at his customary rates including travel time and reasonable mileage charges.
- C. All community and municipal water systems shall be inspected for compliance. It shall be the responsibility of the State to determine the frequency of said inspections.
- D. All underground pipe installations for all community and municipal systems shall be inspected prior to burial for compliance to municipal installation standards. It shall be the responsibility of the installer to notify the Town Engineer to inspect all underground piping prior to burial.

#### 10.18 Performance and Maintenance Security

- A. The Planning Board may accept performance security in lieu of the subdividers completion of street work and other required improvements in conformance with these regulations. The security shall be in a form and amount, and with surety, and other conditions all satisfactory to the Board to insure for the Town the construction and installation of such improvements within a period of time not to exceed two (2) years. The time limit of two years for completion from the date of final approval shall be expressed in the security. The security shall remain valid and available until drawn upon by the Town or released in accordance with 10.9.5 below.

Further to the above, the security shall be one of the following:

1. Certified check or bank check properly endorsed to the Town of Epping.
  2. Irrevocable letter of credit submitted on the standard form approved by the Town. (If other than the Town's approved form, the performance agreement shall be reviewed and approved by the Town Counsel as to proper legal form and enforceability. The cost of this review shall be borne by the subdivider.
- B. The subdivider shall file with the Board a detailed estimate of all costs of required street improvements, drainage structures, utilities or other improvements. The Board may have the estimate reviewed by a professional consultant, if deemed necessary. The cost of this review shall be borne by the subdivider. The Board, after considering the estimate, any other pertinent information received, and their own knowledge shall determine the amount of the performance security required.
  - C. The Board may further extend the time of two years for completion when the reasons for delay were unforeseeable and beyond the reasonable control of the subdivider. Any such extension shall be in writing and signed by a majority of the Board signifying their concurrence and shall only be granted after ensuring the validity and availability of the security for such extension. Any such extension shall be solely at the discretion of the Planning Board.
  - D. The performance security shall not be released until the Board has certified after inspection that the required improvements have been completed in accordance with the approved plat. A fee, payable by the subdivider, may be charged to cover the cost of professional consultation selected by the Board to assist in determining completion of all required work to the construction standards of the Town.
  - E. All security shall be held by the Selectmen of the Town. The Selectmen shall not draw upon or release any security until they are in receipt of a resolution passed by a majority of the Planning Board stating the purpose and amount to be drawn or released. The Selectmen shall enforce such securities by all appropriate legal and equitable remedies.
  - F. Prior to the acceptance of said street(s) and improvements, the Board will not release the performance guarantee until a maintenance guarantee is in place. All but 15% of the original security shall be released to the developer and will be held for a period of 2-years from the date of street acceptance by the Board of Selectmen. The maintenance guarantee will insure the continued and proper operation and integrity of the streets, drainage, and all other facilities and improvements. If repair or unusual maintenance is needed or additional improvements are required then such costs as are necessary shall be drawn against said guarantee.

The performance security will include the estimated cost of construction, as verified by the Town Engineer, plus a 10% inflation factor will also be added to this total.

#### 10.19 Legal Documents

Where applicable to a specific subdivision, the following are required in a form approved by Town Counsel:

- A. Agreement to convey to the Town land to be used for streets or other public purposes, with transfer of title.
- B. Easements and rights-of-way over property to remain in private ownership, including drainage easements.
- C. Performance security, as described in Section 10.18.

#### 10.20 Streets and Roads

All public and private streets, roads, driveways, sidewalks, pedestrian ways and bikeways shall be submitted as specified in - "Road Design and Construction Specifications" of these Regulations.



### 10.21 Driveways

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

No driveway shall access more than two (2) single-family or duplex units, or one (1) three or four-family structure. Dual access "looped" driveways may be required if deemed necessary by the Planning Board.

### 10.22 Protection of Natural and Historic Features

Each significant natural feature within the subdivision including large or unusual trees, watercourses, natural stone outcroppings, and other scenic features shall be shown on the subdivision plan. Planning Board approval shall be obtained before removal of such features.

Each existing building or man-made structure, including stone fences, shall be shown on the subdivision plan and reviewed with the Planning Board for historic significance. Such features will not be destroyed or removed without Planning Board approval.

### 10.23 Off-Site Improvements

Pursuant to RSA 674:36, the Board may require special improvements on or off-site which it deems reasonably necessary or desirable for the conditions or circumstances relative to the particular subdivision plan review. Any such special requirements shall be stated in writing in the minutes of the Board with the reasons therefor. The Board may require, either that the applicant construct the improvements in whole or in part, or reimburse the municipality or any other party who, at the direction of the municipality, undertakes such improvements. The applicant's responsibility for such improvements is limited to that portion of the cost of the improvements which bears a rational nexus to the needs created by, and special benefits conferred upon, the site, taking into consideration the municipality's ability to pay for such improvements.

## **SECTION 11 – SOIL BASED LOT SIZE DETERMINATION**

The Planning Board of the Town of Epping, New Hampshire hereby adopts the following as part of their subdivision regulations in accordance with RSA 674:35-36 for the following purposes:

To assure that the land indicated on plats submitted to the Planning Board shall be of such character that it can be used for the building purposes without danger to health;

To prescribe minimum areas of lots so as to assure conformance with local zoning ordinances and to assure such additional areas as may be needed for each lot for on-site sanitary facilities; and

To protect ground water quality for purposes of public health and safety.

### 11.1 Minimum Lot Sizes

11.1.1 In the absence of municipal wastewater system, minimum lot sizes within all subdivisions shall, in addition to meeting the requirements of the zoning ordinance for the zone wherein the subdivision is proposed, also meet the lot size requirements as may be needed for each lot to ensure ground water quality protection. The minimum lot size requirements shall be determined by the State Subdivision Rules (as amended) found under Chapter Env-Wq 1000 Subdivision and Individual Sewage Disposal System Design Rules. Each newly created lot shall have at least 30,000 sq. ft. of contiguous usable uplands.

## 11.2 LOT SHAPE AND SIZE REGULATIONS

These regulations are adopted to assure conformance with the requirements and intents and purposes of the Zoning Ordinance. These regulations affect lot shape and size within a proposed subdivision to the extent they create conditions specific to the subdivision that assure safe, convenient, and prosperous developments for the current owner and all subsequent residents, the provision of adequate access for safety vehicles, additional areas for each lot necessary to accommodate on-site septic facilities, provide for clarity of ownership, and to prevent the occurrence of zoning violations caused by poorly designed lot shapes.

These regulations carry out the intent of the zoning ordinance and provide clarity and flexibility in the administration of the requirements of the zoning ordinance where questions are left unresolved. They are not meant to supplant the zoning ordinance and may be waived in accordance with Section 13 Waivers.

### 11.2.1 Intent and Purposes for Lot Shape and Size Regulations

The intent of these regulations is to enhance and insure consistency with the Epping Zoning Ordinance.

The following purposes are:

- A. Lots shall be shaped in a manner that promotes clarity of ownership, access across fee-title land rather than easement interests which may promote destructive property disputes, and to promote the convenient and harmonious development of the land.
- B. The layout of lots which violate these purposes is not permitted.
- C. The close proximity of narrow portions of lots that will create a situation that reduces privacy and increases congestion and overcrowding of the land are not permitted.
- D. The close proximity of house sites tend to create conflicts among the use of the land, including maintenance disputes, use disputes, and property ownership disputes between landowners and is not permitted.
- E. Oddly shaped lots cannot reasonably be interpreted to be an orderly layout of the land or ensure that proper description of ownership or ease of identification will carry forward in time are not permitted.

### 11.2.2 Lot Shape

- A. Lots shall be shaped in a manner that promotes clarity of ownership
- B. No portion of a lot between the dwelling unit site and the street upon which the lot has frontage shall be less than 100' in width.
- C. To maximum extent possible all new lots shall be rectangular in nature.
- D. No portion of a lot created under these regulations shall be less than 75' in width.

## **SECTION 12 - SPECIAL FLOOD PROTECTION PROVISIONS**

12.1 If any part of the area of the proposed subdivision, or development subject to site review, lies within the boundaries of the Special Flood Hazard Area, as shown on the map on file in the Planning Board (Selectmen's) office, the following special criteria shall apply:

- 12.1.1 Drainage -- drainage facilities and ways shall be constructed in a manner to accommodate a so-called 100-year frequency flood;

- 12.1.2 Building Sites -- the subdivision or site shall be so laid out that sites for buildings to be used for human occupancy will either:
- 12.1.2.1 not be located in the flood hazard area, or
  - 12.1.2.2 if a building is to be located within the flood hazard area, it shall be constructed in such a fashion that neither the structure or its essential utilities will be harmed by a 100-year frequency flood.
- 12.1.3 Restrictions necessary to achieve the goals of this Section shall be placed on the plan or shall accompany the plan and be referenced by it.

## **SECTION 13 - ADMINISTRATION AND ENFORCEMENT**

### 13.1 General

- 13.1.1 These Regulations shall be administered by the Planning Board with the assistance of the Building Inspector, Town Engineer and such other persons as the Board shall designate. It shall be the duty of the Board of Selectmen to enforce the Subdivision Regulations. The Selectmen in enforcing these Regulations shall act upon complaint or information from the Planning Board, Building Inspector, Town Engineer, or otherwise, and shall, whenever practicable, take such action as the Planning Board or such other officer requests.
- 13.1.2 The Code Enforcement Officer or other agent so designated by the Planning Board shall be charged with the responsibility of inspecting improvements and development of subdivisions on site for compliance with the Subdivision Regulations.

### 13.2 Appeals

- 13.2.1 Any person aggrieved by any decision of the Planning Board concerning a plat or subdivision may appeal said decision to the Superior Court, as provided by R.S.A 677:15.

### 13.3 Waiver Procedure

- 13.3.1 When a proposed subdivision plat is submitted for approval, the applicant may request in writing to waive specific requirements of these Regulations as they pertain to the subdivision plan. The applicant shall present reasons in writing why the waiver is needed.
- 13.3.2 The Planning Board may grant a waiver in a special case, so that justice may be done and the public interest secured, provided that such waiver will not have the effect of nullifying the intent and purposes of these Regulations; and further provided that the Planning Board shall not approve waivers unless it shall make findings based upon the evidence presented to it in each specific case.

### 13.4 Amendments

The Planning Board may from time to time amend these regulations. Amendments to the Subdivision Regulations shall include the following steps:

- 13.4.1 The Board shall hold at least one (1) public hearing on the proposed regulations and/or amendments.
- 13.4.2 Notice for time, place and date of any hearing to amend shall be given at least ten (10) calendar days before hearing, not including day of posting or day of hearing. Notice of hearing shall be published in a paper of general circulation in Town and posted in two (2) public places. Notice shall include an adequate statement describing the proposal and the place where a full text of proposal is on file for public inspection. Posting shall include a copy of the full text.
- 13.4.3 The Planning Board may adopt the amendments upon completion of the public hearing by an affirmative vote of a majority of its members.

13.4.4 Regulations and/or amendments adopted shall be legal and have full force and effect when copies are certified by a majority of the Planning Board members and filed with the Town Clerk and the Board of Selectmen. A copy of the regulations and/or amendments shall be forwarded to the Office of State Planning.

13.5 Penalties for Transferring Lots in Unapproved Subdivisions.

13.5.1 Any owner, or agent of the owner, of any land located within Epping, who transfers or sells any land before a plat of said subdivision has been approved by the Planning Board and filed with the appropriate recording official under RSA 674:35 II, shall forfeit and pay a civil penalty of \$1000 for each parcel or lot 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. The Town of Epping may enjoin a transfer or sale which violates the provisions of this Section and may recover the penalty imposed by civil action. (RSA 676:16)

13.6 Fines and Penalties

13.6.1 Any person who violates any of the provisions of this title, or any local ordinance, code, or regulation adopted under this title, or any provision or specification of any application, plat, or plan approved by, or any requirement or condition of a permit or decision issued by, any local requirement or condition of a permit or decision issued by, any local administrator or land use board acting under the authority of this title:

- a) Shall be guilty of a misdemeanor if a natural person, or guilty of a felony if any other person.
- b) Shall be subject to a civil penalty not to exceed \$100 for each day that such violation is found to continue after the conviction date or after the date on which the violator receives written notice from the municipality that he is in violation, whichever is earlier. (RSA 676:17)

13.7 Separability

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

13.8 Effective Date

These revised regulations are effective as of February 10, 2020 on which day they have been filed with the Epping Town Clerk and Board of Selectmen.

13.9 Relationship Between State and Local Regulations

Where both state and local regulations are applicable, the more stringent regulation shall take effect. If the state regulation addresses an issue not included in the local regulation or if the local regulation addresses an issue not included in the state regulation, that regulation shall automatically apply

## **Addendum A**

# **ROAD DESIGN AND CONSTRUCTION SPECIFICATIONS**

The New Hampshire Standard Specifications for Road and Bridge Construction and Standards for Road Construction and "A Policy on Geometric Design of Highways and Streets, 2004" by AASHTO are incorporated by reference hereon. Specific standards set by these regulations shall be the primary design criteria, however, if in the judgment of the Board, or the Town Engineer, safety considerations warrant additional requirements, they may be required at the Board's discretion based upon review of the potential impacts and careful consideration of the applicant's information, the Planning Boards' consultants, existing and proposed conditions, and the Board's own judgment and knowledge of the area.

### **GENERAL STANDARDS**

#### 1) **Street Layout, Plan, and Access to Existing Road Network**

In general, the layout of all proposed streets shall provide for the continuation of the principal streets in an adjoining subdivision, if applicable. When the adjoining property is undeveloped, proper consideration of future development potential shall be given with respect to future continuous alignments. Safe access to all abutting lots shall be provided. Due consideration to contours and other natural features shall be given when laying out streets. The proposed street plan shall show all work necessary to connect and complete improvements and utilities between the proposed street(s) and any connecting street in an existing subdivision. All streets and related improvements shall be constructed in conformance with the standards described herein. Intersecting property lines at proposed street intersections shall be joined by a curve of at least 20-foot radius.

When land adjacent to an existing temporary cul-de-sac is sub-divided, the developer shall remove the existing turn-around and replace it with a road design acceptable to the Planning Board and consistent with the existing street. The developer shall be solely responsible for landscaping the affected property owner(s) parcel(s) including the driveway.

Connectivity. It is the intent of this ordinance that most open space design developments do not include provisions for connectivity of roadways where the majority of house sites are located. If connectivity is desired by the Board for future development purposes and/or reasons of health and safety, the Board may require secondary roads to serve the house sites and encourage the use of separate connector roads to serve as the mode of interconnectivity.

The Planning Board may require greater right-of-way width, where in its judgment, the demands of present or future traffic make it desirable, or where topographic conditions create a need for greater width for grading purposes.

#### **Signage**

For single point of access roadways, a dead-end informational sign shall be placed at the beginning of any cul-de-sac or single point of access roadway. The dead-end sign shall have black lettering on a yellow background. In all cases, proper signage shall be displayed (DEAD END or NO OUTLET).

#### **Definitions:**

**Permanent Single Point of Access Roadway:** A street network that cannot be connected to existing roadways in more than one location or other potential developable parcels because of topography, size or shape of the tract, characteristics of adjacent existing or approved development(s), or other unusual conditions to the property that make future connection(s) to a dedicated street impossible or highly improbable.

**Temporary Single Point of Access Roadway:** A cul-de-sac where there shall be future continuation of the road or street. Notwithstanding the other provisions of this subsection, no temporary single point of access roadway shall be permitted in excess of 1200' (one thousand two hundred feet) may be created unless no other practicable alternative is available.

Loop or Multiple Point of Access Roadway: A road network that is served by more than one access point to the existing road network. In order to qualify for a loop or multiple point of access roadway, points of access must be equal to or more than 750 feet (measured along the centerline of the existing roadway) from each other. Measurements shall be taken irrespective of intersections, roadway changes, etc.

Single Point of Access Roadway: A road network of any configuration that is served by one access point to the existing road network or multiple points of access that are less than 750 feet from each other (measured along the centerline of the existing roadway).

Single-Point of Access Roadway - Roadway Length: The street length shall be measured along the centerline of the street from the point of intersection with the existing town road network and encompass the entire road network within the development irrespective of internal loops or any other configuration. No portion of roadway shall be measured twice. The length shall not include rights-of-way for future connection provided no development is proposed from these rights-of-way. The “point of intersection with the existing town road network” shall be defined as the center of the proposed road where it intersects with the existing road network irrespective of the number of intersections. For roads that intersect the existing road network but fail to qualify as loop or multiple point of access roadways, the distance shall be measured to include the entire road network within the development including every point of intersection. The intent of this definition is to include all road length and to prevent cascading dead-end roadways or other interpretations to the contrary.

Traffic Volume: Calculated number of vehicular trips per day per housing unit per subdivision as determined using standard traffic engineering reference documents published by the Institute of Traffic

Right-of-way: Proposed Connections: Streets in proposed subdivisions shall be connected to rights-of-way in adjacent areas to allow for proper inter-neighborhood traffic flow. If adjacent lands are unplatted, stub outs in the new development shall be provided for future connection to the adjacent unplatted land. Location rights-of-way as designated on the plan, shall allow for the future connectivity of roads in accordance with the Master Plan. In all cases, rights-of-way shall be a minimum of 50’ (fifty feet) in width. The right-of-way shall be designated by a gravel area 25 feet wide by 25 feet deep with large boulder placed at the entrance.

**Purpose:**

The goals of these regulations are to incorporate the recommendations of the Epping Master plan. In general, the intent is to connect streets in order to provide multiple entrances and exits for residents and emergency vehicles. Multiple access points are considered crucial to public safety as well as necessary for the development of a rational and convenient transportation system. In addition, diversifying impacts and vehicle loads onto multiple access points spreads the number and chances of conflicts from turning and intersections and provides for a more diverse range of commuting options to minimize over-utilization of roadways that would lead to increased municipal expense from maintenance and upgrading not in conformance with a reasonable and expected growth in highway maintenance funding.

New roads should have a flexible design that preserves the natural features of the area as much as possible. Such features include trees and shrubs, watercourses, historical and similar community assets which if preserved will add to the attractiveness and value of the properties. Similarly, keeping paved travel lanes to a minimum width that are appropriate to a street’s function will preserve a more appealing streetscape, reduce vehicular speeds, and minimize stormwater run-off. All reasonable traffic calming measures shall be utilized as much as possible. Single point of access designs which include so-called runway or bowling alley style (straight and wide) roads shall be discouraged. The arrangement, character, width, grade, and location of all streets shall be considered in their relation to: existing and planned streets; topographical conditions; public safety and convenience; reasonable circulation of traffic within the area of the cul-de-sac; run-off of stormwater, and environmental impacts.

**Objectives:**

1. Promote public safety
2. Promote the inter-connection of streets
3. Promote the reduction of traffic volume
4. Promote non-vehicular connections when terminated streets cannot be avoided

**Design Criteria:**

**A. Traffic Volume**

A Single Point of Access Roadway shall support no more than 150 vehicular trips per day. (Reference: Residential Streets, Second Edition, 1990 published by the American Society of Civil Engineers, National Association of Home Builders and the Urban Land Institute) as amended.

**B. Landscaping**

The permanent cul-de-sac roadways shall have a permanent area in the center of the turn-around. The center of the turn-around shall have suitable drainage and/or landscaping as approved by the Planning Board or its designee.

**C. Road Length**

Roadway Length and Service Limitations.

Purpose –

1. In order to protect the health and safety of residents of the Town of Epping, the Planning Board adopts these restrictions on roadway design and length in order to develop a safe and convenient transportation system.
2. Roadway length and service restrictions are specifically adopted to ensure adequate emergency vehicle access, prevent confusion regarding accessibility to neighborhoods and to minimize undue municipal expense by overburdening existing road networks with upgrades and maintenance expenses. Reducing the length, occurrence, and service levels of dead-end roadways and single access neighborhoods is specifically needed to protect the health and safety of residents, property, and promote fiscal responsibility in highway maintenance programs.
3. Single-access neighborhoods promote reasonable emergency response rates that are necessary for the protection of citizens and property.
4. Based upon input from the Town of Epping Fire and Police Departments and the Highway Department, the Planning Board hereby finds that road lengths and single access developments must be limited as a matter of health and safety, fiscal responsibility and hereby adopts the following regulations.

**D. Regulations**

1. No single point of access roadway network shall serve a development with more than 12 dwelling units.
2. No roadway in a single access development shall contain more 1200' feet of roadway length measured from a single point of access to any dead-end or cul-de-sac, including all portions of loop roadways.

3. Temporary single point of access roadways, regardless of design (e.g. cascading cul-de-sacs), shall be no longer than 1200' (one thousand two hundred feet) in length or support no more than 12 (twelve) single family housing units. The housing units may contain single-family style, duplex style, or any combination thereof, but shall not total more than 12 (twelve) units, thus allowing for no more than 150 vehicle trips per day, as spelled out in Design Criteria A.

When submitting a plan showing a **temporary single point of access** the developer/applicant must include:

- a. A topographical map of the area for future road connectivity, identifying wetland areas and land elevations using best available information. This provision is not to be construed to require anyone to access another parcel for purposes of compliance.
- b. Cul-de-sac turnarounds located on streets that could be continued shall show provisions for reversion of the excess easement (right-of-way) to adjacent property owners upon extension of the street. Frontage requirements will be based on the reversion.
- c. If additional developable land exists at the end of a temporary single point of access roadways, and the continuation of the roadway network thru to another thru street cannot be guaranteed to be completed within 3 years, development of land beyond the end of the single point of access roadway shall be considered scattered and premature.
- d. Prohibited Loop Roadways. No roadway network shall loop back onto the existing road network within 750 feet of any other access point.
- e. Permanent and temporary cul-de-sacs shall have minimum of 100' diameter green space in the middle.
- f. In the case of single point of access roadways, when necessary to provide safe, convenient, and direct access for pedestrians and bicyclists, the Planning Board may require the applicant to dedicate sufficient right-of-way areas to the public and/or improve access to nearby residential areas, parks, schools, churches, or other neighborhood activity centers.

2) Road Assessment Costs

The municipality may require any new development to share in the costs of any immediately-necessitated road improvements benefiting said development.

The amount so assessed shall not exceed the total costs of constructing, re-constructing, repairing, or improving the road giving access to a proposed development site. The amount assessed shall be reasonable and proportional, based on the needs created by and benefits conferred upon the development site.

3) Streets with Frontage in Other Municipalities

Streets shall **not** be designed in such a manner as to provide frontage to land in a neighboring municipality. The Board may, at its discretion, disapprove proposed streets within 200 feet of any municipal border in order to control the following:

- a) Creation of a Town road which predominantly serves properties external to the Town of Epping.
- b) Creation of undesirable traffic patterns from outside Epping.



4) Reserve Strips

No subdivision showing reserve strips controlling access to streets shall be approved unless the land included in such reserve strips has been dedicated to public use under conditions approved by the Planning Board.

5) Street Names

The subdivider may suggest his own street names by designation upon his preliminary layout, but shall not insert names for streets upon his final plat without the Planning Board's approval of said names. Names of new streets shall not duplicate, nor bear phonetic resemblance to, the names of existing streets within the Town.

6) Street Signs

Street name signs and traffic control signs along public and all private roads shall be provided and installed by the developer in conformity with the specifications of the Road Agent and Town Engineer. Until such time as each street is accepted by the Town as a public way, the sign posts at the intersections of such street with any other street shall have affixed thereto a sign designating such street as a private way.

7) Cul-De-Sacs

No dead-end streets shall be extended from another dead-end street. Dead-end streets shall terminate in a cul-de-sac Provisions shall be made for reversion of the excess right-of-way in the cul-de-sac to adjacent property owners upon extension of the street.

The center-line of all cul-de-sacs shall be aligned with the center-line of the street.

8) Bridges

On stream crossings spanning 10 or more feet, the bridge structure shall be designed to HS-20 loading (AASHTO Specifications, hereby incorporated into these regulations by reference). Also, culverts with a diameter of 4 feet or larger will be considered and designed as bridges, and approval by the Board will depend on the individual situations and materials involved. The minimum roadway width on bridges shall be 24 feet. Greater street widths, depending on the volume of traffic anticipated, may be required at the discretion of the Planning Board.

9) Sidewalks, Pedestrian Ways, and Bicycle Paths

Sidewalks, pedestrian ways, and bicycle paths may be required at the discretion of the Planning Board. When required, sidewalks, pedestrian ways, and bicycle paths shall be installed and constructed in accordance with the latest Standard Specifications for Road and Bridge Construction of the State of New Hampshire. Proposed designs of pedestrian ways and bicycle paths will be subject to the approval of the Planning Board. Sidewalks are defined as those walkways adjacent to traveled roadways. Pedestrian ways and bicycle paths may or may not be adjacent to traveled roadways.

10) Curbs Gutters and guardrails

Street curbing and gutters may be required at the discretion of the Planning Board. When required, granite curbing shall be installed and constructed in accordance with the latest Standard Specifications for Road and Bridge Construction of the State of New Hampshire. The curb reveal shall be six (6) inches above finished pavement grade.

The face of guardrails shall be a minimum distance of two feet off the edge of pavement. They shall be galvanized steel and conform with NHDOT Standard Specifications for Road and Bridge Construction 2010.

11) Driveways and Other Accesses

Driveways and other accesses to the local street network or proposed streets shall be constructed in accordance with the State of New Hampshire Department of Transportation "Policy Relating to Driveways and Access to the State Highway System", as amended, and the Town of Epping Driveway Regulations. Both of these documents are hereby incorporated into these regulations by reference.

12) Utilities

Utilities shall be located underground toward the limit of the right-of-way unless otherwise directed by the Board

13) Future Utilities

A feasible layout for all future utilities within the subdivision on adjacent land (when applicable), relative to natural features, shall be provided by the developer.

14) Clearing and Grubbing

All trees and brush, stumps, large roots, loam, forest litter, sod, mulch, silt or other unacceptable material within right-of-way or slope lines, whichever is farthest from the center-line of the street, shall be cut, excavated, and removed completed from said area. All stumps and large roots shall be removed from all cuts and to a depth of 4 feet below the finished grade in fills. Stumps and roots with a ground level 5 feet below the top of a proposed fill shall be cut within 6 inches of the existing ground surface. Under no circumstance shall any wood, brush, or any other unsuitable material be placed under or allowed to remain within the limits of the subgrade area.

15) Cut and Fill in Street Construction

Excavation of roadbeds shall consist of removing earth or ledge to a depth of 2 feet below the finished roadbed grade (subgrade) shown on the final profile (i.e., below the required road base). Filled roadbeds shall be formed by spreading successive layers of fill material not greater than 12 inches in depth. Each layer shall be compacted to a density of at least 95% of maximum density measured by modified proctor method before another layer is begun. Material containing loam, forest litter, wood, roots, or other substances that will not provide a stable bed or embankment will not be acceptable for the construction of fills. Clean, granular material meeting the NHDOT "Standard Specifications for Road and Bridge Construction, 2010" will be used as a guideline standard for fill material. Broken ledge may be used in layers in fills over 4 feet in thickness. The voids in each layer shall be filled with earth or spalls. Broken ledge shall not be placed within 2 feet below the finished subgrade. Ledge fragments, or boulders larger than 1/2 cubic yard shall not be used within 2 feet of the finished subgrade.

Side slopes cut for roadways will be no steeper than:

- a) 4 to 1 in cuts up to 4 feet;
- b) 3 to 1 or 2.5 to 1 for deeper cuts, depending on the type of soil involved;
- c) 4 to 1 fill slopes for a distance of at least 10 feet from the edge of the shoulder;

- d) 2.5 to 1 fill slopes beyond 10 feet. Use of guardrail may allow use of 2 to 1 fill slopes adjacent to the shoulder;
- e) all slopes will be grassed, sodded, mulched, or stabilized in a manner acceptable to the Board. Loam shall be spread and compacted to a 4-inch minimum thickness;
- f) projecting roots must be trimmed back;
- g) ledge may be vertical with a minimum of 20 feet to the centerline of the road. All loose pieces must be dislodged.

16) Roadway Grades

Roadway grades shall be constructed in conformance with the standards provided herein and as shown in Figure 3. Exceptions in unusual cases may be granted by the Planning Board.

17) Grade Stakes

Centerline and right-of-way stakes shall be installed at one hundred (100) foot intervals after grubbing and clearing has been completed and until such time sideline staking has been established.

Sideline staking shall be installed after the road/street sub-base has been established and the site is in balance. All sideline stakes shall be installed at a width of thirty-two (32) feet and at one hundred (100) foot intervals. These stakes shall remain and be maintained until such time as the road/street is completed. Should any of these stakes be removed or destroyed, the developer, or his agent, shall re-establish said stakes within twenty-four (72) hours.

18) Paving Placement

Wearing course shall not be scheduled for placement after October 1<sup>st</sup> and before May 1<sup>st</sup> an exception may be granted by the Road Agent, the request shall be made in writing. Furthermore, the temperature of the ground surface and day shall be a minimum of 40 degrees and rising. All other paving done after October 1<sup>st</sup> and before May 1<sup>st</sup> shall be modified by a qualified warm mix technology.

A minimum of a 10-ton vibratory roller shall be used for compaction. The initial rolling shall be done with a vibratory steel-drum roller and the final rolling shall be done with a static steel-drum.

19) Drainage Structures

(See also Regulation Section 10.10 - Storm Water Drainage and Erosion Control) of these regulations.

- a. The minimum culvert size shall be fifteen inches in diameter and be long enough to preclude blockage by erosion of adjacent roadside slopes.
- b. All culverts shall be placed below subgrade with a minimum of two feet of gravel cover at the highest point and with a minimum pitch of 1/2" per foot.
- c. Culverts less than four feet in diameter shall be high-density polyethylene (HDPE) with flares or other material approved by the Board.

- d. Culverts with a diameter of 4 feet or larger will be considered as bridges.
- e. Culvert entrances and exits shall be designed with rubble or concrete headwalls, or flared ends, per the state Standards. Use of headwalls is preferred, but flared ends may be considered for smaller pipes. Properly designed rip-rap aprons shall be designed at all culvert exits.

20) Landscaping

Upon completion of any development or development phase, all esplanade or planting strip areas adjacent to streets shall receive at least 4 inches of compacted high-quality top-soil (loam) free of stones over one inch in diameter, clay, and sods. At a minimum, these areas shall be seeded with a high-quality grass seed in conformance with NHDOT "Standard Specifications for Road and Bridge Construction," Section 644 as amended.

21) Clean-Up

Before acceptance, a street shall be cleaned up, by whatever means necessary, so that it is left in a neat and presentable condition. Construction related debris of all kinds, both natural and man-made shall be completely removed from the right-of-way.

22) Safety

The Planning Board reserves the right to modify proposed street plans for the purpose of enhancing the safety of the traveled way. Potential modifications include, but are not limited to, removing obstructions, adding guard rails in areas where steep slopes exist or are created, and requiring additional warning signs.

23) Alley Ways

Alley ways shall not be permitted.

24) Acceptance

No street shall be accepted by the Town until it has been inspected by the appropriate Town official(s) and found to be constructed in accordance with the specifications prescribed herein or additionally prescribed or agreed to by the Planning Board and approved by the Selectmen.

The applicant is required to submit an "as built" plan of all completed roads and rights-of-way to include utilities, grades, drainage, culverts, and signs.

Plans shall show the designs of any bridges or culverts which may be required.

Prior to the acceptance of said street(s) and improvements, the Board will not release the performance guarantee until a maintenance guarantee is in place. All but 15% of the original security shall be released to the developer and will be held for a period of 2-years from the date of street acceptance by the Board of Selectmen. The maintenance guarantee will insure the continued and proper operation and integrity of the streets, drainage, and all other facilities and improvements. If repair or unusual maintenance is needed or additional improvements are required then such costs as are necessary shall be drawn against said guarantee.

The performance security will include the estimated cost of construction, as verified by the Town Engineer, plus a 10% inflation factor will also be added to this total.

Also see section: 10.18 Performance and Maintenance Security

**STREET CONSTRUCTION STANDARDS**

(FOR MATERIAL, COMPACTION, AND CONSTRUCTION STANDARDS, THIS SPECIFICATION INCORPORATES NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, as amended)

|   |                                 |
|---|---------------------------------|
| <b>Right-of-Way Width (center widths may be required if warranted by the opinion of the Planning Board)</b>                               | <b>50'</b>                      |
| <b>Minimum Pavement Width</b>   |                                 |
| 0-300 ADT Volume  | <b>24'</b>                      |
| More than 300 ADT Volume  | <b>26'</b>                      |
| <b>Minimum Shoulder Width</b>   | <b>4'</b>                       |
| <b>Mailbox</b>  | <b>40'' of edge of pavement</b> |
| <b>Minimum Distance Centerline of Roadway to Centerline Ditch</b>   | <b>20'</b>                      |
| <b>Minimum Grade</b>  | <b>0.5%</b>                     |
| <b>Maximum Grade (no section shall exceed 8%, section = 100 feet)</b>   | <b>8%</b>                       |
| <b>Minimum Subbase*</b>   |                                 |
| Crushed Stone (Coarse) NHDOT 304.5  | <b>12''</b>                     |
| Crushed Stone (Fine) NHDOT 304.4  | <b>6''</b>                      |
| <b>Minimum Paving</b>   |                                 |
| Binder (3/4'' aggregate)  | <b>2.5''</b>                    |
| Wearing (1/2'' aggregate)   | <b>1.5''</b>                    |
| <b>Road Crown</b>   | <b>2%</b>                       |
| <b>Maximum Cul-De-Sac Length</b>  | <b>1200'</b>                    |
| <b>Minimum Cul-De-Sac Diameter</b>  | <b>150'</b>                     |
| <b>Minimum Tangent Length Separating Reverse Curvature</b>  | <b>150</b>                      |
| <b>Minimum Street Sight Distance</b>  | <b>400'</b>                     |
| <b>Minimum Centerline Horizontal Curve Radius (Larger curves may be warranted by opinion of the Planning Board and the Town Engineer)</b> | <b>300'</b>                     |
| <b>Sidewalk Section</b>   |                                 |
| Width   | <b>5'</b>                       |
| Crushed Gravel subbase  | <b>8''</b>                      |
| Paving (1/2'' aggregate)  | <b>2''</b>                      |
| <b>Maximum Grade on Intersection – Approach within 100 feet</b>   | <b>2%</b>                       |
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|                                       |                   |
|---------------------------------------|-------------------|
| <b>Minimum Angles of Intersection</b> | <b>75 Degrees</b> |
|                                       |                   |
| <b>Minimum Ditch Depth to Finish</b>  | <b>24''</b>       |

**\* Note: Sieve analysis of materials used verifying conformance to state standard shall be submitted for review and approval by the Town Engineer. Also, compaction tests verifying 95% in-place density per modified proctor shall be submitted.**