

TOWN OF EPPING, NH

SITE PLAN REVIEW REGULATIONS

Amended to:
September, 2008



ARTICLE I: GENERAL PROVISIONS

Section 1. Authority.

Pursuant to the authority vested in the Planning Board by the voters of the Town of Epping at the March 9, 1971 Annual Town Meeting, and re-affirmed at the September 25, 1979 Special Town Meeting (as upheld by the Rockingham Superior Court decision E2220-79 of the 1980 September Term), and in accordance with the NH. Revised Statutes Annotated, Chapter 674:43-44 as amended, the Planning Board adopts the following regulations governing the review of site plans for multi-family dwellings and non-residential uses. These regulations shall be entitled, "Site Plan Review Regulations."

Section 2. Purpose.

The general purpose of this chapter is to guide the character of non-residential and multi-family development, re-development, expansion, and change of use in order to provide for the health, safety, convenience, prosperity, and general welfare of the Town's inhabitants, businesses and visitors. Throughout these regulations, the Board seeks to balance the demand for growth, development and change with the need to preserve and enhance those qualities which make Epping a safe and desirable place to live, work and visit. In keeping with this general purpose, the following are specific objectives of this chapter:

- A. To evaluate the landowner's rights to use their land while considering the corresponding rights of abutting landowners and the public at large to be protected from undue hazards, disturbances, nuisances, pollution and diminution of property values;
- B. To protect public safety by means such as requiring appropriate provision and arrangement of roads, driveways, sidewalks, traffic aisles, parking, loading areas and emergency vehicle accesses;
- C. To provide for fire safety and prevention;
- D. To promote the harmonious and aesthetically pleasing development of the Town, ensuring visual harmony of neighborhoods, providing adequate provision of greenspace and open space, protecting the natural beauty of the Town and enhancing the quality of life for residents;
- E. To maintain the vitality of the tourist economy while allowing economic growth in all sectors of the economy;
- F. To protect environmental quality by means such as controlling erosion and providing for sanitary sewage disposal; and
- G. To ensure the provision of adequate facilities and services as are necessary to serve the proposed uses.

Section 3. Definitions.

Bonding: any acceptable form of financial security. The specific dollar amount, the form, and any associated agreements or stipulations shall be negotiated directly with the Board of Selectmen.

Development: the construction or improvements or change of use on a tract or tracts of land for nonresidential and/or multi-family use.

Disturbed Area: the area of land, excepting that covered by greenspace and building(s), changed by human construction activities.

Greenspace: a permeable area of vegetated ground surface.

Multi-family: three or more residential units in one building.

Plat Standards: standards which dictate the content and presentation of plats and/or plans.

Site Sketch: a scale drawing of a site.

Section 4. Applicability.

The following criteria specify the level of review necessary for a proposal to develop a commercial or multi-family site:

- A. Not Applicable. The determination of “not applicable” by the Board shall mean that no site plan review approval is necessary, although other types of approvals or permits may be necessary per other municipal codes and an application shall be kept on file. The Site Plan Review Regulations shall be deemed not applicable for the following:
 - 1. Temporary events which require no permanent alterations to the site and which function safely within the approved configuration of the site as determined by the Board
- B. Minor Review. A Minor Review by the Planning Board shall be required for signs and any change of use of a non-residential site, for which no change in floor area is proposed, and which either:
 - 1. Maintains or decreases the intensity of use on the site with respect to parking demand and traffic generation; or
 - 2. For a site with 2,000 square feet or less of gross floor area;
- C. Full Review. A Full Review by the Planning Board shall be required for the following:
 - 1. Establishment of non-residential use where no non-residential use currently exists;
 - 2. Establishment of multi-family use where no multi-family use currently exists;
 - 3. Any other development or change of use of non-residential or multi-family use on a site that contains three or more units in a single structure.
- D. The Board is hereby authorized to waive the submission requirements of these regulations upon satisfaction of the criteria of this section. The purpose of granting waivers under the provisions of these regulations shall be to insure that an applicant is not unduly burdened as opposed to merely inconvenienced by said regulations. The Board shall not approve any waiver(s) unless a majority of those present and voting shall find that all of the following apply:

1. The granting of the waiver will not result in a review that overlooks issues that may address impacts that are detrimental to the public safety, health or welfare or injurious to other property.
2. The waiver will not result, in any manner, a development that is contrary to the provisions of the Epping Zoning Ordinance or the general intent and goals of the Master Plan.
3. The submittal, upon granting of such waiver(s), may be conditioned in such a fashion as to substantially secure the objectives, standards and requirements of these regulations.
4. The waiver prevents an unnecessary and unreasonable expense that clearly outweighs the benefit of providing the required information.
5. The purposes of these regulations may be served to a greater extent by an alternative submittal, or where such submittal information is redundant and clearly unnecessary for the Board to adequately review the application.

Waiver requests for submittals shall be presented in writing with the application filing. The Board will rule on the waiver during the acceptance process. In the case that the waiver is denied the Board may either deny acceptance or accept the plan with a condition that the required information is submitted within a defined timeframe.

ARTICLE II: APPLICATION PROCEDURES

Section 6. Minor Review.

The application for a Minor Review shall be made to the Planning Board. The applicant shall follow the process specified in Epping PB Rules, adopted: 010605. In the case of approved Minor Review applications, plans will not be recorded at the Registry of Deeds, unless required by the Planning Board.

Section 7. Full Review.

The application for a Full Review shall be made to the Planning Board. The applicant shall follow the process specified in Section 8 through Section 19 of this Chapter. In the case of approved Full Review applications, approved plans shall be signed and recorded at the Rockingham County Registry of Deeds.

Sections 8 – 19 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, adopted: 010605. The Epping PB Rules adopted in accordance with RSA 674:43 & 44, among others are the sole source for rules governing the Planning Board process on all applications including site plan 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.

ARTICLE III: DESIGN STANDARDS

Section 20. General Standards.

Site preparation is to be conducted with minimal disturbance to existing vegetation. Stripped topsoil

shall be piled and reused on the site where practical. A minimum of four inches of topsoil shall be placed on all disturbed areas.

Water supply and sewage disposal systems must be designed to adequately meet the needs of the proposed use under the regulations of the New Hampshire Water Supply and Pollution Control Division (NHWSPPD) and/or the Town of Epping Subdivision Regulations. In areas not currently served by public sewers, it shall be the responsibility of the applicant to provide adequate information to prove that the area of the lot is adequate to permit the installation and operation of an individual sewage disposal system. The applicant shall be required to perform the necessary tests and submit the test results along with the proposed plan to the NHWSPPD for its consideration and approval. Such approval must be obtained before site plan approval.

Section 21. Specific Plan Requirements.

Specific Plan Information

In order for the Board to comprehensively evaluate a site plan proposal, the applicant is required to show the following information as part of the site plan, unless granted a waiver in accordance with Section 43, Waivers.

- 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. 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 by a professional surveyor licensed in the State of New Hampshire.
- 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 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, and other significant environmental features, including wetland soils.
- H. Man-made features such as, but not limited to, existing roads and 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. A High Intensity Soil Survey (HISS) of the entire site, or the portion as determined by the Board. Calculations shall be provided and shown on a sheet appropriate to the plan. Such soil survey shall be prepared by a certified soil scientist. Any cover letters or explanatory data provided by the certified soil scientist shall also be submitted.
- L. Location and description of all existing easements and/or rights of way.
- M. Tax map and parcel number.
- N. 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

Proposed Site Conditions

- 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. The location and layout of proposed drainage systems and structures, including elevations for catch basins.
- C. The shape, size, height, and location of all proposed structures, including expansion of existing structures on the site, first floor elevation(s), building elevation(s), and a rendering of the proposed structure(s).
- D. Construction drawings, including, but not limited to, pavement, sidewalks, steps, curbing and drainage structures.
- E. Location and timing patterns of proposed traffic control devices, including painted road indicators, and all signage.
- F. The location, width, curbing and paving of proposed streets, 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.
- G. The location, size and layout of on and off-street parking, including loading zones. The plan shall indicate the calculations used to determine the number of parking spaces required and provided.
- 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, type and size of all proposed landscaping, screening and open space areas.
- J. The location and type of lighting, including the cone of illumination on the site.
- K. The location, size and exterior design of all proposed signs to be located on the site.
- L. The type and location of all solid waste disposal facilities and accompanying screening.
- M. Location of proposed on-site snow storage.
- N. Location and description of proposed easement(s) and/or rights-of-way.
- O. Note indicating that "all road and drainage work to conform to the standard specifications for construction in the State of New Hampshire".
- P. Location, projection direction, and decibel level of all sound reproduction devices located on the site.
- Q. 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 noise generation.
 - (5) Grading, drainage and erosion and sediment control plan.

Section 22. Traffic Impact Analysis.

All proposed commercial, industrial, or multi-family development shall be reviewed by the Planning Board to ascertain that adequate provisions have been made by the owner or his/her authorized agent for traffic safety to facilitate this review. The Planning Board may require the developer to provide the Board a traffic impact analysis when deemed necessary, due to the size, location or traffic generating characteristics of the development. The traffic impact analysis shall address each of the following:

- A. Traffic circulation and access, including adequacy of adjoining streets and intersections, entrances and exits, traffic flow, site distances, curb cuts, turning lanes and existing or recommended traffic signals.
- B. Pedestrian safety and access.
- C. Off-street parking and loading.
- D. Emergency vehicle access.
- E. Off site improvements necessitated and to be constructed by the developer.
- F. Any other traffic concern the Planning Board specifies.

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

Section 23. Driveways/Vehicular and Pedestrian Access.

To ensure site safety and to protect the safety and capacity of the road network, the following standards are established to control site access:

- A. Any property having access onto a State Highway shall obtain a State Driveway permit, or a letter from the NHDOT stating that such permit is not necessary given the scope of the current application.
- B. Any property having access onto a Town Highway shall obtain a Town Driveway Permit, or a letter from the Road Agent stating that such permit is not necessary given the scope of the current application.
- C. A lot shall have no more than one driveway onto each road on which it fronts, except that a pair of one-way driveways (one each entrance and exit) which are adequately designed, signed and marked as being one-way may be substituted for a single two-way driveway.
- D. All commercial driveways shall be paved with bituminous concrete. The Board may allow the use of permeable pavement if it is found necessary to reduce the need for the installation of drainage facilities to accommodate runoff.
- E. Driveways (two-way) shall be no wider than 36 feet; one way driveways shall not exceed 18 feet in width. The maximum grade of a commercial driveway shall not exceed 5%, and shall maintain a negative grade until it is beyond the ditch line.
- F. For commercial sites, there shall be connecting drives (not considered driveways when calculating the limit on the number of driveways) provided to the property boundaries of adjoining commercial sites to permit access to adjacent properties without forcing patrons to travel on the road network.
- G. In the case of a concurrent subdivision and site plan or where otherwise feasible, shared driveways for adjacent lots shall be required. All shared driveways shall require a recorded cross-easement for access.
- H. The Board may require the frontage of the property and the driveway to be curbed if it will improve traffic control and safety. Curbing shall be granite.
- I. Sidewalks shall be provided for pedestrian traffic to provide a connection between the main entrances of business, housing or industrial establishments, parking areas and along public roadways. In the event that pedestrian patrons or employees are anticipated, sidewalks shall be provided from the street to the main building entrance. All sidewalks adjacent to parking areas or access drives shall be at least six inches above finished grade and curbed with vertical granite

curbing.

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

Section 24. Parking.

A. Off-street parking spaces shall be provided in accordance with these specifications for any change of use, new use, or expansion of use. In no case shall on-street parking be credited for any site because its availability is subject to change over time based on the public need to use the right-of-way for other, possibly conflicting, uses.

1. Number of Spaces. Each site shall provide at least the minimum number of parking spaces for the site, determined as follows:

The following minimum standards shall apply:

USE	<u>SPACES REQUIRED</u>
Agricultural: Road Stand	7 spaces per customer service employee
Carry-out Restaurants (no beverages or Food consumed on premises)	1 space per 50 square feet of gross floor area
Child Care Facility	1 space per 10 children, maximum rated occupancy, plus 1 space per employee
Colleges, Universities, Trade School and Vocational Institutions	1 space per 2 seats and 1 space per employee
Combination sit-down and carry-out Restaurant	Parking requirements shall be the aggregate of requirements for sit-down restaurants and carry-out restaurants, above.
Covered Skating Rinks, Bowling Alleys and Other Similar Places of Assembly, the capacity of which cannot be measured in terms of seats.	1 space per 150 square feet of gross floor area.
Funeral Home	1 space for each 4 patron seats in the largest assembly area
Gas Service Station, Automotive Repair Garage	1 space for each employee on principal work shift, plus 4 spaces for each service bay, or 300 square feet of interior service area.
Industrial: Wholesale, Warehouse and Storage	1 space per employee; and 1 space per company vehicle operating from the premises; and 1 space per 1,200 square feet of gross floor area.
Industrial: Manufacturing, Research and Testing Laboratories	1 space per employee; and 1 space per 1,000 square feet of first 20,000 square feet of gross floor area; and 1 space per each additional 10,000 square feet of gross floor area; and 1 space per company vehicle operating from the premises.

Lounge	1 space per 2 seats.
Medical and Dental Offices and Medical Office Buildings	3 spaces per doctor and 1 space per employee.
Membership Clubs	1 space for each 4 persons maximum occupancy; and 1 space per 3 seats for ancillary restaurant and 1 space per employee.
Motels and Hotels	1.1 space per rental unit; and 1 space per 5 seats in ancillary restaurant, of gross floor area used; and 1 space per 300 square feet floor area for function rooms and other such uses.
Multi-Family Housing	2.5 spaces per dwelling unit.
Office: Business, Professional, Administrative and Bank	1 space per 250 square feet of gross floor area.
Place of Assembly: Theaters, Churches, Auditoriums, Restaurants (sit-down) and other places of assembly with fixed seats (based on maximum capacity).	1 space per 3 seats; and 1 space per 55 inches of permanent bleacher or bench seating space; and 1 space per 150 square feet of area without permanent seating facilities that is devoted regularly to public assembly; and 1 space per employee.
Retail Sales of Furniture, Automobiles, Nursery Stock, and such other goods as usually involve extensive display areas in relation to customer traffic.	1 space per 500 square feet of gross floor area.
Retail Stores, Store Groups, Shops and Service Establishments	1 space per 200 square feet of gross floor area of first floor area and 1 space per 400 square feet of gross floor area above and below first floor.
Sports Complex*	0.25 space per seat as general requirement
Other	As determined by the Planning Board

* Applicant shall submit: A traffic analysis which would include, but not be limited to, design hourly volume (DHV), peak hour traffic entering and leaving the site and generated traffic; and a comprehensive traffic assessment concerning traffic circulation within the parking lot, and conflict points at the site, and adjacent roadways and intersections.

B. Parking Space Location. Of the total number of parking spaces required, off-site parking on a separate private lot of record shall be permitted in lieu of on-site parking when the following conditions are met:

1. the parking spaces on the other lot of record are located within 400 feet of the parking area on the applicant's lot;
2. the parking is off-street;
3. the applicant's use is permitted in the zoning district in which the off-site parking is located;

4. the lot providing the parking documents excess parking spaces that are available based on parking standards in these Regulations; and
 5. a recorded parking easement which specifies the number and location of parking spaces is provided to the Board.
- C. Minimum Number of Handicap Parking Spaces. Each site shall provide the appropriate number of handicap parking spaces, as specified by New Hampshire Code of Administrative Rules, PART Ha 304.02, as amended.

Section 25. Parking Lot Design.

Parking lots shall meet the following design requirements, in addition to any other applicable design requirements contained in this Chapter:

- A. Aisle Widths. Minimum aisle widths in parking lots shall be 18 feet for one-way aisles, and 24 feet for two-way aisles.
- B. All parking lots, loading areas and travel aisles shall be paved with bituminous concrete.
- C. Parking Space Dimensions. Minimum parking space sizes shall be 9 feet wide by 18 feet long. Handicap parking spaces shall be in accordance with ADA requirements.
- D. Traffic Control Islands. In any parking lot, no more than two aisles, double or single, may run generally parallel to one another without separation by a raised, curbed traffic control island which runs parallel to and the full length of the aisles. Traffic control islands shall be a minimum of twelve feet in width. At the ends of each traffic control island there shall be 12 foot-wide raised islands which shall extend (on both sides, if parking rows are double) the full length of the parking stalls. The applicant, if desired, may shorten the main traffic control islands no more than 14 feet at each end to better allow for the removal of snow. If the main traffic control island is proposed to be shortened, pavement markings will be required to prohibit through-traffic. The Board may require additional traffic control islands to prevent or correct traffic safety problems. Curbing shall be granite.
- E. Traffic Circulation. The parking lot design shall be such that there is safe and adequate traffic circulation, and room to stack exiting vehicles separate from the entering traffic lane(s).

Section 26. Loading.

All non-residential sites shall provide off-street loading facilities. These facilities shall be located and designed to minimize traffic flow disruptions of entering and exiting vehicles, and so that delivery vehicles can be parked completely out of the right-of-way. Loading facilities shall be designed such that delivery vehicles do not need to stop or reverse direction on Town roads.

Section 27. Snow Removal.

Snow removal shall be considered for all sites, and the general plan for snow removal shall be indicated in a note. Locations for snow storage shall be designated on the plat, or there shall be a note indicating that all snow shall be removed from site. In no case shall snow be stored on a landscaped area in which

the snow pile could destroy the landscaping.

Section 28. Pedestrian Access and Circulation.

All sites shall provide for safe pedestrian access and circulation. Such provision shall include sidewalk access to existing streetside sidewalks if applicable, pedestrian aisles through parking lots, and other facilities as are appropriate for the site.

Section 29. Lighting and Signage.

I. Definitions:

- **Acreage, Net.** The ground area where lighting will fall, including the area of the building, in an amount of 0.1 footcandles or greater after deleting all portions within a development where no use or improvement is reasonably anticipated, such as open space, wetlands, and unoccupied portions of the lot.
- **Area:** The area of one (1) side of a NOT MORE THAN TWO (2) SIDED SIGN.
- **Class 1 Lighting.** All outdoor lighting used for, but not limited to, outdoor sales or eating areas, assembly or repair areas, advertising and other signs, recreational facilities and other similar applications where COLOR RENDITION IS IMPORTANT to preserve the effectiveness of the activity.
- **Class 2 Lighting.** All outdoor lighting used for, but not limited to, illumination for walkways, roadways, equipment yards, parking lots and outdoor security where GENERAL ILLUMINATION for safety or security of the grounds is the primary concern.
- **Class 3 Lighting.** Any outdoor lighting used for DECORATIVE effects including, but not limited to, architectural illumination, flag and monument lighting, and illumination of trees, bushes, etc.
- **Development Project.** Any residential (3 units or more), commercial, industrial or mixed use development plan which is submitted to the Town for approval.
- **Direct Illumination.** Illumination resulting from light emitted directly from a lamp or luminaire, not light diffused through translucent signs or reflected from other surfaces such as the ground or building faces.
- **Directional Sign** – A sign used to direct traffic or pedestrians onto or within a site and not for advertising.
- **Directory Board** - A wall sign erected on a building wall at the ground floor level and containing name identification for more than one activity or business located on a single building or a group of buildings. Each listing shall be no larger than one (1) square foot. A directory board shall be considered to be one wall sign.

- **Filtered Light.** Light from a light source that is covered by a glass, acrylic or other cover that restricts the amount of non-visible radiation (infrared, ultraviolet) emitted by the luminaire (quartz glass does not meet this definition).
- **Footcandle:** A unit of measure of the intensity of light falling on a surface, equal to one lumen per square foot and originally defined with reference to a standardized candle burning at one foot from a given surface.
- **Free Standing Sign -** Unattached to any building. Sandwich boards and similar installations shall be considered free standing signs for purpose of this regulation. A sign supported by one or more uprights or braces permanently affixed into the ground.
- **Fully Shielded Fixture.** An outdoor light fixture shielded in such a manner that all light emitted by the fixture, either directly from the lamp or indirectly from the fixture, is projected below the horizontal as determined by photometric test or certified by the manufacturer.
- **Identification Sign -** A sign indicating the location of, or direction to, a separate function performed within one portion of that building. Examples of identification signs are: "entrance", "exit", "auditorium", etc. Identification signs do not name or advertise the activity conducted within or without the premises.
- **Identification Kiosk -** A free standing structure erected on a suitable foundation and designed to provide advertising space for a building or a group of buildings containing three or more businesses on a single premises or group of contiguous premises. The Identification kiosk may be an integrated part of a permitted free-standing sign or an additional free-standing sign.
- **IESNA –** The Illuminating Engineering Society of North America. A professional organization that provides technical information on illumination.
- **Installed Lighting.** Attached, or fixed in place, whether or not connected to a power source.
- **Lumen.** The unit used to measure the actual amount of light which is produced by a lamp.
- **Luminaire.** The complete lighting assembly, less the support assembly. For purposes of determining total light output from a luminaire, lighting assemblies which include multiple unshielded or partially shielded lamps on a single pole or standard shall be considered as a single unit.
- **Multi-class Lighting.** Any outdoor lighting used for more than one purpose, such as security and decoration, such that its use falls under the definition of two or more classes as defined for Class 1, 2 and 3 Lighting.
- **Non-Conforming Sign:** A sign lawfully existing at the time of adoption of this ordinance or any subsequent amendment which does not conform to one (1) or more provisions of this ordinance.
- **Opaque.** Opaque means that material must not transmit light from an internal illumination source.

- **Outdoor Light Fixtures.** Outdoor electrically powered illuminating devices, outdoor lighting or reflective surfaces, lamps and similar devices, either permanently installed or portable, which are used for illumination or advertisement. Such devices shall include, but are not limited to, search, spot and flood lights.
- **Outdoor Light Output, Total.** The maximum total amount of light, measured in lumens, from all outdoor light fixtures. For lamp types that vary in their output as they age (such as high pressure sodium), the initial output, as defined by the manufacturer, is the value to be considered.
- **Outdoor Recreation Facility** means an area designed for active recreation, whether publicly or privately owned, including, but not limited to, baseball diamonds, soccer and football fields, golf courses, tennis courts and swimming pools.
- **Partially Shielded Fixture.** An outdoor light fixture shielded in such a manner that more than zero (0) but less than ten (10) percent of the light emitted directly from the lamp or indirectly from the fixture is projected at angles above the horizontal, as determined by photometric test or certified by the manufacturer.
- **Portable Sign** - A sign not designed or intended to be permanently affixed into the ground or to a structure. Movable directional signs are not considered to be portable signs.
- **Projecting Sign** - An outdoor sign which is attached to a wall at an angle.
- **Roof Sign** - A sign located upon or over a roof of a building.
- **Sign:** A sign is a name, identification description, display or illustration or any other visual display which is affixed to, painted, or represented directly or indirectly upon a building, structure or piece of land and which directs attention to an object, product, place, activity, person, institution, organization or business. However, a sign shall not include any display of official court or public office notices nor any official traffic control device, nor shall it include the flag, emblem or insignia of a nation, state, county, municipality, school or religious group.
- **Sign Area** - The area of one (1) side of a NOT MORE THAN TWO (2) SIDED SIGN. The area of the square, rectangle, triangle, circle, or combination thereof, which encompasses the facing of a sign, including copy, insignia, background and borders. The structural supports of a sign are to be excluded in determining the signable area. Where a supporting structure bears more than one sign, all such signs on the structure shall be considered as one sign, and so measured.
- **Sign, external lighting.** Any sign the facing of which reflects light from a source intentionally directed upon it.
- **Sign Face** - The surface of a sign visible from the public way. Each sign face counts as one sign except that a sign with two sign faces shall be counted as one sign.
- **Sign, Internal lighting.** Any sign which has the source of light entirely enclosed within the sign and not directly visible to the eye.

- Temporary Lighting. Lighting which does not conform to the provisions of this ordinance and which will not be used for more than one thirty (30) day period within a calendar year, with one thirty (30) day extension. Temporary lighting is intended for uses which by their nature are of limited duration; e.g. holiday decorations, civic events, or construction projects.
- Temporary Sign: Any sign that is not permanent or is without permanent frost resistant anchoring to the ground.
- Wall Area - The area of the facade of a building up to the roof line. The façade includes the gable areas for pitched roofed buildings.
- Wall Sign - An outdoor sign which is attached flat to, painted on, or pinned away from a building wall or part thereof, and does not project more than 18 inches from the wall.
- Watt. The unit used to measure the electrical power consumption of a lamp.
- Window Sign – A sign that is affixed to a window or hanging inside a window that is visible from outside of a building. A window sign shall be considered and regulated as a sign that is affixed to a building.
- Visible - Capable of being seen without visual aid by a person of normal visual acuity.

II. Lighting

It is the intent of this section to encourage lighting practices and systems which will: minimize light pollution, glare, light trespass; conserve energy and resources while maintaining night-time safety, utility, security and productivity; and curtail the degradation of the night time visual environment.

- A. New Uses, Buildings And Additions: All proposed new land uses, developments, buildings, structures, or building additions of twenty-five (25) percent or more in terms of additional dwelling units, gross floor area, seating capacity, or other units of measurement specified herein, either with a single addition or cumulative additions subsequent to the effective date of this regulation, April 19, 2007, shall meet the requirements of this Section for the entire property. This includes additions which increase the total number of required parking spaces by twenty-five (25) percent or more. For all building additions of less than twenty-five (25) percent cumulative, the applicant shall only have to meet the requirements of this Section for any new outdoor lighting provided.
- B. Security / Off-use Hours of Operation. Uses shall be required to reduce their lighting output during night hours when the site is closed. The level of lighting, hours of operation, and number of fixtures used shall be set by the Planning Board during the approval process. If no specific approval provisions are delineated, all lights must be turned off until an application is filed with the Planning Board for security /off hours are specified.
- C. General Requirements:
 - 1. Outdoor floodlighting by flood light projection above the horizontal plane is prohibited.
 - 2. All light fixtures that are required to be shielded shall be installed in such a manner that

the shielding is effective as described in Section (II)(E).

3. All light fixtures, except street lights, shall be located, aimed or shielded so as to minimize stray light trespassing across property boundaries.
4. The installation or use of any mercury vapor light fixture or lamp for use as outdoor lighting is prohibited.
5. Search lights, laser source lights, or any similar high-intensity light shall not be permitted, except in emergencies by police and fire personnel or at their direction; or for meteorological data gathering purposes.
6. Class 1 and 2 lighting may continue only until 9:00 pm or for as long as the area is in active use. Reduced lighting specifications shall only be permitted as part of a Planning Board approval.
7. Illumination for outdoor recreation facilities must conform to the shielding requirements of Section (II)(E), except when such shielding would interfere with the intended activity. Where fully-shielded luminaires are required, the light fixtures must minimize any light trespass.
8. Sites with multi-class lighting must conform to each classification requirement.
9. Illumination for signs, including internal and external lighting and lighting elements of signs, such as neon, LEDs, or any other conceivable use of lighting as signage, shall conform to the provisions of the Sign Regulations.
10. On projects where an engineer or architect is required, the developer shall verify in writing to the Town that all outdoor lighting was installed in accordance with the approved plans.
11. Outdoor Light Output, Total. The maximum total amount of light, measured in lumens, from all outdoor light fixtures. For lamp types that vary in their output as they age (such as high pressure sodium), the initial output, as defined by the manufacturer, is the value to be considered. For determining compliance with this section, the light emitted from all outdoor light fixtures is to be included in the total output as follows:
 - a. Outdoor light fixtures installed on poles (such as parking lot luminaires) and light fixtures installed on the sides of buildings or other structures, when not shielded from above by the structure itself as defined in paragraphs b and c below, are to be included in the total outdoor light output by simply adding the lumen outputs of the lamps used.
 - b. Outdoor light fixtures installed under canopies, building overhangs, or roof eaves where the center of the lamp or luminaire is located at least five (5) feet but less than ten (10) feet from the nearest edge of the canopy or overhang are to be included in the total outdoor light output as though they produced only one-quarter (1/4) of the lamp's rated lumen output.

- c. Outdoor light fixtures located under the canopy and ten (10) or more feet from the nearest edge of a canopy, building overhang, or eave are to be included in the total outdoor light output as though they produced only one-tenth (1/10) of the lamp's rated lumen output.
- d. Service Station Canopy Lighting. In addition to the calculations above, the following requirements apply to service station canopies:
 - i. All luminaires mounted on the under surface of service station canopies shall be fully shielded and utilize flat glass or flat plastic (acrylic or polycarbonate) covers.
 - ii. The total light output used for illuminating service station canopies, defined as the sum of all under-canopy initial bare-lamp outputs in lumens, shall not exceed fifty (50) lumens per square foot of canopy. All lighting mounted under the canopy, including but not limited to luminaires mounted on the lower surface of the canopy and auxiliary lighting within signage or panels over the pumps, is to be included toward the total.

D. Limitation on Lumens and Footcandles: The following charts show required limitation and some recommendations for outdoor light output in lumens and footcandles for each site is calculated on a point by point basis from a photometric plan and a per acre basis using the calculation of the lumen output of the "fixture" at initial installation strength from manufacturer's specification sheets. There shall be no modification of plans for maintenance factors. All plans shall be submitted using IESNA standards unless specified differently in these regulations.

To calculate lumens-per-net-acre, the application must show the sum of the initial lumens from each fixture on the property and divide it by the net acreage of the property. The lumen output from each fixture can be found in lamp manufacturer's catalogs.

1. Requirements. Compliance with this chart is mandatory.

Requirements			
Zoning District	Mounting Height	Lumens per acre	Footcandle Maximum
Industrial - Commercial:	24 feet	200,000	10
Highway - Commercial:	24 feet	250,000	12
Residential - Commercial:	24 feet	125,000	7
Central Business:	20 feet	75,000	5
West Epping Business District:	20 feet	75,000	5

2. Recommendations. Compliance with this chart is recommended as part of overall site design but are secondary to meeting the above.

Recommendations	Goal	Issue
Ratio of Maximum to Minimum	4.0 or less	Even Lighting
Distance between Mounts	2x mounting height	Balanced fixtures

Example Calculation: Consider a 200 ft. by 110 ft. property with four 150w HPS pole-mounted luminaires and one 70w MH wall-mounted luminaire. First, we determine the size of the property in acres. Given that an acre equals 43,560 sq. ft., our 22,000 sq. ft. property equals approximately a half an acre. We've looked up the lumen output from the 150w HPS and the 70w MH lamps to determine that they produce roughly 16,000 lumens and 5,500 lumens, respectively, for a total of 69,500 lumens. Dividing that number by our one-half acre and we find that 139,000 lumens-per-acre are being applied to this property.

E: Lamp Source And Shielding Standards

LAMP TYPE

Class 1 & 2 lighting:

Low-pressure Sodium above 4,050 lumens	F
Others above 4,050 lumens	F
All types below 4,050 lumens	P

Class 3 Lighting (Decorative):

Low-pressure Sodium above 4,050 lumens	F
Others above 4,050 lumens	F
All types below 4,050 lumens	A

- A: Unshielded lights allowed; shielding not required but highly recommended.
 F: Allowed, fully shielded
 P: Partially shielded lights allowed.

Examples of lamp types of 4050 lumens and below are (the acceptability of a particular light is decided by its lumen output, not wattage; check manufacturer's specifications):

1. 200 watt Standard Incandescent
2. 150 watt Tungsten-Halogen (quartz)
3. 50 watt High Pressure Sodium
4. 50 watt Cool White Fluorescent
5. 30 watt Low Pressure Sodium

F. Specific Regulations.

1. Architectural lighting. Neon lights, LEDs, channel lighting, or any other conceivable means of lighting structures, architectural details, or installations other than signage are prohibited unless the lighting is indirect and fully shielded from view.
2. The installation of such lighting shall require approval to insure compliance with these

regulations.

3. Internally lit transparent and semi-transparent building elements or panels are prohibited.

G. Application Requirements.

1. Any site plan application required by these regulations shall include the following:
 - a. A site plan indicating the proposed location of all outdoor lighting fixtures and signs.
 - b. a description of each illuminating device, fixture, lamp, support and shield. This description may include, but is not limited to, manufacturer's catalog cuts and drawings (including sections where required), lamp types and lumen outputs.
 - c. Photometric data, such as that furnished by manufacturers, or similar, showing the angle of cut-off of light emissions for the proposed luminaire(s).
 - d. Any other information as the Planning Board may determine is necessary to ensure compliance with this Section.

III. Sign Regulations

A. General Provisions

1. Purpose - The purpose of regulating signs is to promote and protect the public health, safety and welfare by regulating existing and proposed outdoor advertising, outdoor advertising signs, and outdoor signs of all types; to protect property values; enhance and protect the physical appearance of the community; preserve the scenic and natural beauty and provide a more enjoyable and pleasing community; to reduce sign or advertising distractions and obstructions that may contribute to traffic accidents; reduce hazards that may be caused by signs overhanging or projecting over public right of way; provide more open space, and curb the deterioration of natural beauty and community environment.
2. Sign Approval Required - Except as otherwise herein provided, no person shall erect, modify or move any signs visible from the public way without first applying for and obtaining from the Planning Board a site plan review approval for the signage. Applications shall be on forms prescribed and provided by the Planning Board. Site Plan Approvals that include signage information and specifications shall be considered to be approved signs. Separate approval shall be required for newly installed signs or expanded signs in the following zones:
 - Industrial Commercial
 - Highway Commercial
 - West Epping Commercial Business District
 - Residential Commercial
 - Central – Business

Changes in sign lighting shall require review. Reductions in sign area shall not require review or approval. Changes in language or fascia shall not require review unless the change also increases the signage, changes the lighting, or represents a new signage area not previously approved.

3. Maintenance and Conformance of Signs - No sign shall be erected or altered except in conformity with the provisions herein. The sign must be kept clean, neatly painted and free from all hazards such as, but not limited to, faulty wiring and loose fastenings, and must be maintained at all times in such safe condition so as not to be detrimental to the public health or safety or constitute a distraction or obstruction that may contribute to traffic accidents.
4. General Safety Standards for Signs - No sign, whether new or existing, shall be permitted that causes a sight, traffic, health or welfare hazard or results in a nuisance due to illumination, placement, display, or manner of construction.
5. Exceptions - For the purpose of this ordinance, the term "sign" does not include signs erected and maintained for public safety and welfare or pursuant to and in discharge of any governmental function, or required by law, ordinance or governmental regulation.

B. Temporary Signs

The following temporary signs are permitted:

1. Temporary Signs. Signs of a temporary nature such as advertisements and other commercial signs of a similar nature, are permitted for a period not to exceed thirty (30) days and shall be removed by the person(s) who posted the signs within forty-eight (48) hours after fulfilling its function. Temporary signs specified in this section shall not be attached or painted to fences, trees, or other natural features, utility poles, or the like and shall not be placed in a position that will obstruct or impair vision or traffic or in any manner create a hazard or disturbance to the health and welfare of the general public. Temporary signs shall be no larger than 32 square feet.
2. Residential Real Estate Developments. Signs located at the entrance for residential developments may be installed until the roadway is accepted by the Town or the last lot is developed, whichever is earlier. The sign may be 32 square feet in area and shall not be lit.

C. Regulations.

The following provisions relating to signs are applicable in all districts.

1. One sign identifying the name, address and profession of a permitted home occupation or a lawfully existing nonconforming home occupation is allowed provided such sign does not exceed 12 sq. ft. in area.
2. A bulletin board or similar sign in connection with any church, museum, library, school or similar public structure not exceeding 12 sq. ft. is allowed. The sign may only be externally lit.

3. No sign shall have visible moving parts, blinking, moving or glaring illumination, or any part consisting of banners, pennants, ribbons, streamers, spinners or other similar devices. This regulation does not prohibit a wall name sign consisting solely of a rectangular banner made of a flexible cloth-type material, attached at all corners either perpendicular or flat, and conforming to all provisions of these regulations. In addition, one "Open" flag is permitted per lot.
4. A string of lights shall not be used for the purpose of advertising or attracting attention unless as an integral part of a permitted sign.
5. Illuminating signs whose specific purpose is outlining any part of a building, such as a gable, roof, sidewalk or corner, are prohibited.
6. Illumination of signs shall be permitted only between the hours of 7:00 a.m. and 11:00 p.m., except that this time restriction shall not apply to the illuminated signs of emergency facilities and retail, commercial and industrial establishments during such hours as the establishments are lawfully open to the public.
7. District setback requirements shall not apply to signs; however, no sign shall project over the public right-of-way. No ground or portable signs shall be permitted in the public right-of-way.
8. In addition to the maximum number and size of signs permitted, directional signs indicating ingress and egress placed at driveway locations, containing no advertising material, having a display area not exceeding five (5) square feet, and not extending higher than seven (7) feet above ground level, are permitted.
9. Nonconforming signs may continue but may not be altered, rebuilt or relocated on the same premises unless they are brought more into conformance with these regulations. Normal maintenance and repairs are permitted.
10. In addition to the maximum number and size of permitted signs, identification signs may be erected over or by the doorway or entrance to such portion of the building. The sign area shall not exceed ten percent (10%) of the area of such doorway or entrance to such portion of the building.
11. Roof signs are prohibited.
12. Projecting signs are considered free standing signs for regulation within the Industrial Commercial and Highway Commercial Districts, and as building signs in all other districts.

D. Specific Standards

The standards of this Section for maximum number and maximum square footage of signage are maximum limits, but which do not create any right or entitlement to the maximums.

The standards of this Section apply on a per building basis. In calculating allowable signage,

each principal building together with its accessory buildings or structures, if any, shall count as one building.

1. The following signs are not regulated by this section:

- a. Temporary signs;
- b. Signs displayed within the border of a window of a building if the sign or grouping of signs does not occupy more than 10 percent of the surface area of such window;
- c. Directional signs as described in Section III(C)(8).
- d. Identification signs as described in Section III(C)(10).

2. Free Standing Signs. Are permitted as follows.

Free standing signs shall conform to the following table.

Free Standing Signage

District	Height	Size	Setback Front/Side
Industrial Commercial	15 feet	40 sq ft	10 ft / 25 ft
Highway Commercial	15 feet	40 sq ft	10 ft / 25 ft
West Epping Comm/Bus	15 feet	20 sq ft	10 ft / 20 ft
Residential Commercial	15 feet	20 sq ft	10 ft / 25 ft
Central-Business	Not Allowed	Not Allowed	Not Allowed

3. Building Signage.

Signage on a building is permitted provided that is placed on a building in conformance with the following table. Signs in windows that exceed 10 % of the individual window area shall be considered building signage.

The more restrictive measurement of area shall apply regarding the area of signage permitted.

Building Signage

District	Sign Area/ perSign	% Wall Area	Total Area
Industrial Commercial	100 sq ft	10%	400 sq ft
Highway Commercial	100 sq ft	10%	400 sq ft
West Epping Comm/Bus	16 sq ft	10%	32 sq ft
Residential Commercial	81 sq ft	10%	120 sq ft
Central-Business	16 sq ft	10%	16 sq ft

4. Sign Lighting.

- a. Signs that use lighting as text are prohibited. This includes but is not limited to LEDs, neon, and any other conceivable method of generating a light source for signage.

- b. Mechanical changeable face and text signs are permitted, provided the text changes are limited to one change per 12 hour period.
- c. Sign lighting shall utilize high-efficiency fluorescent, CFL, or other energy efficient fixtures. LEDs can be utilized for internal lighting or external lighting of the sign face provided the light source is fully shielded.
- d. External lighting shall be fully shielded and lit from above the sign or incorporated into the signage frame construction so that the fixture is not visible.

Sign Lighting

District	Internal	External
Industrial Commercial	Yes	Yes
Highway Commercial	Yes	Yes
West Epping Comm/Bus	Yes	Yes
Residential Commercial	Yes	Yes
Central-Business	No	Yes

5. Multi-tenant Developments.

- a. Facilities or developments that have 3 or more separate tenants or businesses may provide for additional signage in accordance with the following table.

Multi-tenant Developments

District	Identification Kiosk	Height	Size / Sign	Total Area
Industrial Commercial	Yes	30 feet	16 sq ft	80 sq ft
Highway Commercial	Yes	30 feet	16 sq ft	80 sq ft
West Epping Comm/Bus	Yes	20 feet	6 sq ft	24 sq ft
Residential Commercial	Yes	25 feet	12 sq ft	36 sq ft
Central-Business	No	N/A	N/A	N/A

- b. Facilities or developments that have 5 or more separate tenants or businesses and 2 or more buildings on a site may be entitled to additional signage in accordance with Section (F) - Waivers.

E. Validity and Severability

Should any provision of this regulation be declared by the courts to be invalid, the decision shall not invalidate any other provision of this regulation which can be given effect without the invalid provision, and to this end the provisions of this regulations are severable.

F. Waiver Provision

All sections of these regulations may be waived by the Planning Board where strict conformity would pose an unnecessary hardship to the applicant and the waiver would not be contrary to the spirit and intent of the regulations particularly with respect to intent of the Board to limit impacts

to safety and aesthetics from unregulated and excessive signage, lighting, and confusion.

Waivers, with respect to height, number, and size of signs, are provided for in the spirit of providing flexibility to applicants who respect the intent of the Board to develop a balanced commercial opportunity for all versus a highly competitive and confusing atmosphere that is inconsistent with the aesthetically pleasing environs of Epping, interferes with the peace and quiet enjoyment of other properties, and is dangerous to the traveling public.

1. Waivers. The Planning Board may consider the following guidelines for granting waivers to sign requirements.
 - a. Integration of the site and building architecture and materials into the sign design.
 - b. Quality of the lighting with respect to even muted tones versus harsh spot illuminations.
 - c. Use of regionally relevant materials, such as stone, brick, and wood.
 - d. Greater consideration should be given to sign designs that achieve and maximize these elements.

Lighting of sites shall be designed to prevent off-site disturbance, nuisance or hazard. All outdoor light sources shall be designed, directed and/or shielded such that the nighttime lighting is primarily contained on the site, shielding to the extent necessary abutting properties and roads. No light source shall be permitted if that light causes glare or other safety problems on an adjacent street. Outdoor lighting fixtures shall not be mounted higher than 30 feet. The Board may reduce the permitted heights to reduce or eliminate undue adverse impacts.

Indirect lighting shall be used on signs, advertising goods or services offered on the premises. Moving, fluttering, blinking or flashing lights or signs are not permitted.

Section 30. Storm Drainage.

Storm drainage of the site shall be designed with provisions for detention/retention and gradual release of stormwater. This shall include provisions for upgrading the existing drainage system if it is inadequate. All additional stormwater and runoff which results from the proposed development shall be retained on-site and shall not drain onto adjacent properties, roads or waterways. Drainage plans and calculations, prepared and certified by a licensed NH Professional Engineer, shall be submitted with the application. Drainage facilities shall be designed to accommodate 2, 10, 25 and 100 year storm events. Where drainage is being calculated for a compacted gravel surface such as a parking lot, the calculations shall reflect a paved surface so that future paving of the lot does not significantly alter the drainage of the site.

Section 31. Utilities.

To enhance the design of the site and the Town, all utility systems for new development and new buildings shall be placed underground in conformity with the terms and specifications of the utility company involved. A waiver may be granted from this requirement provided that the utility company makes the recommendation that the placement of underground utilities is not feasible.

Section 32. Landscaping.

Every lot shall comply with the following standards in order to: enhance site design; enhance privacy; separate, screen and shield potentially conflicting land uses or abutters from undue impact; reserve a portion of the lot to remain undeveloped, permeable, and vegetated; control excessive storm water runoff; prevent soil erosion and pollution of water bodies; reduce heat, glare and dust; not detract from the Town's aesthetic qualities; and help integrate the built environment with the natural environment.

- A. Buffer Areas. Every lot shall reserve a buffer area along and within its perimeter boundaries in accordance with the following:
 - 1. The buffer area shall be defined as that area within the front, sideline, and back lot line setbacks as specified the Epping Zoning Ordinance;
 - 2. The buffer area shall be vegetated, except for driveways and other features approved by the Board;
 - 3. The buffer area shall not be used for merchandise display, vehicle parking or storage, or any other use which conflicts with the purpose and standards of this landscaping section;
 - 4. Driveways shall cross the buffer areas at an angle of 90 degrees +/- 15 degrees to the perimeter boundary;
 - 5. A buffer of at least twenty-five feet (25') shall be required for portions of the development abutting existing residential property.
- B. Greenspace. In all zoning districts, greenspace shall comprise no less than 25% of the total lot area, exclusive of wetlands, waterbodies, 100 year floodplain.
- C. Trees. The use of trees in the landscaping plan shall be required. Preservation of existing trees are encouraged to the extent possible. Trees located within buffer areas shall be preserved unless the need for removal can be demonstrated. Where traffic control islands are used, pursuant to Section 25, trees shall be utilized for landscaping.
- D. General Standards. The following general standards shall apply to all lots:
 - 1. Landscaping shall not obstruct the line of sight, or create other hazards for vehicular and pedestrian traffic;
 - 2. Snow storage shall not be allowed in areas where the trees could be damaged or destroyed; and
 - 3. Shrubs, flower beds and other vegetative landscaping shall be permitted at the property owner's discretion. Suitable vegetative ground cover shall be maintained to ensure soil stability.

Section 33. General Appearance Criteria.

In order to "... provide for the harmonious and aesthetically pleasing development of the municipality and its environs..." (NHRSA §674:44,II(b)), the Planning Board will use the following criteria in its review of the architectural design of proposed commercial structures.

The purpose of these guidelines is to provide design standards with which to assist with the development, renovations and restorations of commercial properties to complement the overall New England-style ambiance of the community. The guidelines are directed towards, but not limited to, assisting corporate

franchises and commercial developments in the design of structures, and related properties, which reflect the small town, rural, and agricultural atmosphere that is unique to Epping.

The objective of these regulations is not intended to restrict imagination, innovation or variety in the new construction, restoration and renovation of commercial buildings and related property, but rather to enhance the visual appearance of the community, conserve property values, and to further encourage continued economic development. These regulations ARE intended to discourage routine franchise architecture, strip mall vistas and urban blight.

These architectural design regulations do not apply to industrial buildings, however additional screening may be required for industrial buildings. The regulations contained herein do not expect to foresee all possible proposed building situations. Decisions concerning such unforeseen situations will be made with these regulations in mind.

- A. Factors for evaluation. The evaluation of the following appearance factors will govern the Planning Board's decisions on whether the proposed site and building designs are acceptable.
 - 1. Conformance to this section - General Appearance Criteria;
 - 2. Architectural character;
 - 3. Building materials and subdued color considerations;
 - 4. Vehicular and pedestrian circulation and parking;
 - 5. Harmony and compatibility of project compared to existing site and neighborhood;
 - 6. Lighting design;
 - 7. Integration of landscaping and buffer areas; and
 - 8. Retention, alteration, or removal of existing structures and site features;
- B. Site Development. The development of the site must address various elements in providing a total design plan for the proposed construction. The building's orientation, setback, alignment with the street, and relative spacing with respect to other structures will be considered in the overall design. Long, strip-mall type development should be avoided. "U-shaped", "L-shaped", etc. structures are encouraged. The reuse of existing structures and landscape features is encouraged. The overall architectural theme for the site development will create a positive image for the project.
- C. Site Organization. All existing natural and man-made features of the site should be carefully considered for integration into the overall site design. It is important to cluster buildings within a development wherever feasible to encourage open space. A compact building arrangement provides savings in grading, paving, utilities and other costs and conserves natural site features and open space. Separation of vehicular and pedestrian pathways is important to the overall safety of the site.
- D. Architectural Requirements
 - 1. Roofs. Monotony of design or warehouse style structures shall be avoided. Variation in detail, form and siting shall be used to provide visual interest. In order to prevent the construction of warehouse style buildings (i.e. long horizontal roof lines), all new buildings and additions shall have pitched roofs of 3:12 or greater, or gabled roofs, where practical. Shed, gambrel and barn style roofs are also acceptable. Dormers are encouraged. Roofs must have appropriate overhangs.

In large commercial structures over 200 feet in length where pitched roofs are not practical, the use of false building fronts shall be used to imitate pitched roofs to vary the horizontal lines along portions of the facade to create the appearance of multiple attached buildings. Additionally, changes in building elevations may be used in conjunction with pitched roofs to give the appearance of multiple attached buildings.

All sides of a structure shall receive design consideration. A facade unrelated to the rest of the building is not acceptable.

2. Building materials. Exterior surfaces of building shall be covered with traditional materials or products which simulate natural materials, including but not limited to clapboards, shingles, stone, brick, or architectural CMU's. Exposed plain cinder block, corrugated steel, sheet plastic or sheet fiberglass are prohibited. Pitched roofs shall be constructed of shingles, metal roofing or other materials traditionally used in this region.
3. Awnings. Awning covers designed for shade should be made of fabric or simulated fabric-like material. The use of muted color tones is encouraged for awning fabric.
4. Architectural details. Balconies, decks, covered porches, decorative shingles, bracketed eaves, columns, balustrades, towers, turrets, skylights and arches are among the details to be considered and encouraged. All features and details should be in proportions with the building.
5. Windows and doors. Windows shall comprise no less than 5% of the exterior wall surface of the portions of the building facing a public right-of-way, parking area, or a developed area - on or off site. Windows may be used for either interior illumination or for display purposes. All windows and doorways shall be encased with trim; decorative trim is preferred. This guideline can be waived if it is shown that the windows will serve no useful function and will interfere with an otherwise acceptable architectural design or are shown to present a safety hazard.
6. Fencing. Fences made of traditional New England materials are encouraged. (i.e. picket, split rail, wrought iron, brick, stone). Chain link security fences may be allowed where appropriate, but their use is generally discouraged.
7. Lighting. Site lighting must conform to the specifications in these Regulations, with no light spilling or reflecting onto adjacent properties.
8. Intercoms. Use of amplified PA or drive-thru type intercoms is prohibited if the site abuts developable residential property or property in residential use unless the applicant can demonstrate that no noise from these devices will leave the confines of the site. Permissible amplified systems should be designed using components that minimize the radiation of sound and use noise blocking design techniques and site elements that prevent radiation of noise (i.e. landscaping and fencing).
9. Color. Exterior colors of buildings and accessories are encouraged to be muted. Bright colors are not acceptable.

10. Mechanical Equipment. All rooftop mechanical units shall be located so as not to be visible from the street level or from other public areas on the ground level. Wall or ground mounted equipment shall be screened from public view with fences or vegetation.

E. Outdoor Storage and Site Activity.

1. There shall be no outdoor storage, sales, or activity related to storage or sales of any goods, supplies, products, or other equipment associated with the business unless specifically approved during the site plan review application process.
2. Accessory storage buildings must be constructed of materials similar to those used in the principal building.
3. Additional outdoor on-site uses such as vending machines, vending facilities, and other similar activities are prohibited.
4. Temporary events, sidewalk sales, and similar events shall only be permitted in locations and at frequencies approved by the Planning Board as part of the site plan review process.

Section 34. Patron Rest Rooms.

Any business or group of businesses on one lot, with 5,000 or more square feet of floor space open to the public shall provide rest rooms for its guests, invitees and customers. Multiple commercial businesses on the same lot may have common rest rooms reasonably located, so long as adequately designed to serve all guests, invitees and customers for all such commercial businesses on said lot.

Section 35. Solid Waste Recycling and Disposal.

All sites shall provide solid waste facilities for both recycling and disposal as are necessary to serve the site. All such facilities shall be screened from sight from abutting properties and streets by means of a fenced or landscaped enclosure, and the type of facility shall be labeled on the plan. In all cases, facilities shall be selected and operated to minimize windblown litter problems.

Section 36. Historic Sites and Structures.

It is requested, though not required, that applicants make every reasonable attempt to preserve, enhance and re-use historic structures. Buildings located within the Historic District may, at the Board's discretion, be subject review by the Epping Historic District Commission for comment.

Section 37. Water Supply.

- A. In areas not served by municipal water, provisions for on-site water supply shall be indicated. The well location and its protective radius as required by the State shall be indicated on the plat. Areas within the protective radius which do not fall within the lot shall require wellhead protection easements, recorded at the Rockingham County Registry of Deeds, prior to approval, and the book and page number of these easements shall be indicated on the plat.
- B. 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.

Section 38. Sewage Disposal.

In areas not served by municipal sewage disposal, provisions for on-site sewage disposal shall be indicated. A State approved septic system design is required prior to final approval, and the approval number shall be indicated on the plat.

- A. In areas not served by public sewage disposal systems at the time of development, it shall be incumbent upon the applicant or his agent to adequately demonstrate that the lots will meet all current state and local septic system disposal standards. No site plan of land will be approved which cannot meet these standards.
1. The applicant 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 the lot(s) for on-site sewage disposal.
 2. In no case shall the Planning Board grant final approval of a proposed site plan 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.
 3. The location of and pertinent data on sufficient test pits and percolation tests to show that the regulations can be met on the lot(s). 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. The location of reserve leach field areas if available shall also be shown. (Local septic system requirements must be met prior to obtaining approval from the N.H. Water Supply and Pollution Control Division.)
 4. The bottom of the proposed leachfield, trench system, or dry well shall be a minimum of four (4) feet above any seasonal high water table and eight feet above any impermeable substratum (six feet with municipal or New Hampshire Water Supply and Pollution Control Division approved community water supply).
 5. Impermeable substratum is defined as any soil with a percolation rate of less than one (1) inch per 60 minutes. Clay and hardpan layers will be assumed impermeable unless shown to be permeable by a properly conducted percolation test. Bedrock, shale and rotten ledge are considered impermeable. (RSA 149-E)
 6. Where there is less than five (5) feet of natural soil over ledge, or other impermeable substratum, the disposal system must be designed by a licensed civil or sanitary engineer

registered in the State of New Hampshire and having a valid N.H. septic designers license. This does not, however, guarantee that the lot will be approved. (RSA 149-E)

7. Any soil with a seasonal high water table less than eighteen (18) inches from the surface shall not be used for the disposal of septic tank effluent.
 8. All new on-site waste disposal systems are to be located so as to avoid impairment to them or contamination from them during flooding.
 9. All on-site waste disposal systems must be located seventy-five (75) feet from the location of a private well, two hundred (200) feet from a community well and four hundred (400) feet from a public well.
 10. Any land area having a natural slope of fifteen percent (15%) or greater shall not be altered or used for the disposal of septic tank effluent.
 11. The lot(s) shall contain an area of land sufficient in size and site characteristics to be used as an auxiliary septic system absorption field. Said area shall be reserved for this use and must be capable of meeting the pertinent minimum standards as set forth above. The location of the auxiliary absorption field area shall be indicated on the subdivision plan and at final siting of system.
 12. Planning Board approval is subject to all septic requirements of the Epping Health Regulations.
- B. 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.

Section 39. Wheelchair Access.

Adequate provisions shall be made to provide for wheelchair access on the site and into structures and site uses, unless the applicant can document that such access is not required by the Americans with Disabilities Act of 1990 (ADA). This shall include the following:

- A. Curb ramps shall be provided as necessary;
- B. Access aisles adjoining handicap parking spaces shall be paved (with asphalt, concrete or other suitable material for wheel-chair travel) flush to the ground, and the pavement shall extend all the way to the nearest wheelchair accessible entrance. Handicap parking spaces shall be located adjacent to wheelchair accessible entrances;
- C. Handicap parking spaces shall be identified by painted marking on the surface of the pavement, and by a separate permanent sign posted in front of or next to the space, with the sign height of at least five feet but not more than eight feet;

- D. Wherever practical, the main entrance shall be wheelchair accessible;
- E. It is recommended, though not required, that a "drop-off" area be located at wheelchair accessible entrances;
- F. Where necessary, wheelchair ramps shall be provided, with a slope not to exceed one foot of rise per 12 feet of run, and a width as required by ADA;
- G. The slope of a handicap parking space and adjoining access aisles shall not exceed one foot of rise per 20 feet of run.

Section 40. Floodplain Construction.

For sites within the 100 year floodplain, provisions shall be made to minimize flood damage and exposure to flood hazards on and off site in accordance with the Zoning Chapter, if any development is permitted at all.

Section 41. Site Construction Standards.

Construction requirements for roads, parking areas, bridges, sidewalks, and drainage facilities shall be in accordance with the Standard Specifications for Road and Bridge Construction, as published by the State of New Hampshire Department of Transportation, and the road standards of Epping's Subdivision Regulations. In cases where alternative construction specifications are suggested by the applicant, the Planning Board shall determine which shall be applicable.

Section 42. Nuisance.

In unique circumstances where these regulations do not address specific site design matters which, if not regulated, would constitute a serious nuisance to abutters or the public, the Planning Board may, solely at its option, place reasonable restrictions on the site design to prevent or reduce the nuisance. The burden of proof shall be on the complainant to adequately document the nuisance condition prior to any action of the Board. The Board must then weigh the significance of the nuisance against the affect which corrective measures would have on the applicant. Any time this provision of the Chapter is invoked by the Board, a written explanation of the facts, circumstances and findings of the Board shall be accepted by a formal vote of the Board, and this shall be retained in the file in case of future legal actions.

Section 43. Public Health and Safety.

In unusual circumstances where these regulations do not address specific site design matters which, if not regulated, would constitute a threat to public health or safety, the Planning Board may place reasonable restrictions on the site design to prevent or reduce the threat. Any time this provision of the Chapter is invoked by the Board, a written explanation of the circumstances and findings of the Board shall be accepted by a formal vote of the Board, and this shall be retained in the file in case of future legal actions.

Section 44. Plat notes required.

The following plat notes shall be required to be placed on all site plans prior to final approval:

- A. The landscaping of the site depicted on this plan is integral to the approval by the Epping Planning Board and shall be reasonably maintained and when dead or removed, must be reasonably replaced.
- B. The owner has represented to the Epping Planning Board and depicted or noted hereon all known restrictions and easements applicable to this land. All applicable restrictions and easements of record for this land, whether or not depicted or noted heron, shall not be affected or modified by the approval hereunder.
- C. The applicant has designed this site to safely accommodate maximum length vehicles and trucks, either delivering to, or using the facility.
- D. All snow shall be stored in the area(s) depicted on this plan as snow storage areas. In the event that the area(s) approved for snow storage become full, the owner shall reasonably remove excess snow from the site, and shall not allow snow to be stored within parking lots or travel aisles.
- E. All waste materials and recyclables shall be contained within the building(s) or approved storage facilities and shall not be otherwise stored on the property.

ARTICLE IV: ADMINISTRATION

Section 45. Waivers and Substitutions.

- A. The Board may grant a waiver of any design requirement or plat standard of this chapter in accordance with the following:
 - 1. The applicant shall provide a written request for waiver. The request shall indicate the exact section for which the waiver is requested, the extent of the waiver, and the justification.
 - 2. In evaluating the request, the Board shall not grant the waiver unless it finds, based upon evidence presented to it, that:
 - a. granting of the waiver shall not be detrimental to the public health, safety or general welfare;
 - b. granting of the waiver shall not, in the opinion of the Board, be injurious to other parties;
 - c. granting of the waiver shall not have the effect of nullifying the intent and purpose of this chapter; and
 - d. strict compliance with the regulations would cause a hardship to the applicant solely because of the unique physical characteristics of the site (financial hardship shall not be considered); or
 - e. the Board determines that granting the waiver would result in substantial public benefit.
 - 3. A waiver request shall be considered only at or after a noticed public hearing by the Board on the subject application, and at which the waiver request is presented or discussed, so that abutters have an opportunity to be made aware of all waiver requests.

4. The Board may condition any waiver granted so as to secure the objectives of this chapter.
 5. The request for waiver shall be granted only when a motion to grant the request, duly seconded, is carried by a majority of the members present and voting. If the motion is not carried, the request is denied and no further motion is required. If no action is taken on the waiver request, it shall be deemed to be denied.
- B. In the event that alternative design standards which are independently and scientifically derived are provided to and accepted by the Board, the Board may permit their substitution for the Town design standard. Such substitution shall be permitted at the Board's option only when, in the Board's opinion, the alternative standard would better accomplish the intent of this chapter for this case. Substitution shall require a formal motion of the Board, and the minutes of the meeting should indicate the Board's reasoning for future reference. No waiver is required for design standard substitution.

Section 46. Technical Assistance.

In the event that the Board requires technical assistance and/or special studies to adequately and properly evaluate an application, it may secure such professional assistance. This may include technical assistance, special studies, legal review of aspects of the application which are unique to or specific only to this case (but excluding general legal advice) and other such assistance. The applicant shall reimburse the Town for the cost of such assistance, but the individual or company engaged shall work for, and report directly to the Town.

Section 47. Legal Representation at Meetings.

If the applicant will have an attorney present at a Planning Board meeting, written notice shall be provided to the Board at least seven days in advance of the scheduled meeting so that the Board may arrange to have the Town Attorney present if so desired. Failure to provide such notice shall be sufficient cause to continue the meeting to a later date if the Board so chooses.

Section 48. Recording Approved Plans.

Upon stamping and signing a final plan for a Full Review approval, the Town shall send this plan to the Rockingham County Registry of Deeds to ensure that there is no tampering with the plans prior to recording, and to ensure that there is no delay in recording the plan such that the delay would extend the protection period under NHRSA §674:39.

Section 49. Bonding.

The applicant may be required to provide bonding for site improvements for any application in accordance with the following:

- A. Bonding shall be provided by the applicant payable to the Town in order to ensure that the applicant will complete all site work in accordance with the plans. Bonding, if called by the Town, shall be used to stabilize the site, ensure site safety and to minimize any adverse impacts on the neighborhood and Town. In the event that bonding is called by the Town, the Planning Board shall immediately schedule and hold a public hearing to consider revocation of the Site

Plan Approval per the process of NHRSA §676:4-a. The Planning Board shall also request that the Building Permit be suspended until the matter is resolved. No further work may proceed on the site without further Board of Selectmen approval, nor shall any Certificate of Occupancy be issued without prior consent of the Board of Selectmen.

- B. The amount shall be 100% of the cost of all site work. The specific dollar amount, the form, and any associated agreements or stipulations shall be negotiated directly with the Board of Selectmen.

Section 50. Approval Required.

Prior to land clearing, site preparation, construction or any other such activity may begin on a site, and before any permit for such activities may be issued, a final approval of the Site Plan is required. All activity on the site shall be in accordance with the approval.

Section 51. Certificate of Occupancy.

Every approval pursuant to this chapter is granted subject to the issuance of a Certificate of Occupancy (CO) upon completion of construction and site work. Use of the site prior to the issuance of the CO shall be prohibited. The CO shall be issued by the Board of Selectmen or their designee. Prior to issuance of a CO for any project requiring approval under this chapter, the Planning Board or its designee must field check the completed site and sign off on the CO prior to issuance. A request for final inspection shall be made to the Town and to the Board at least 14 days prior to the anticipated final completion of construction. These inspections are required to obtain a CO.

Section 52. As-Built Plans.

The Board does not require as-built Site Plans, nor will it stamp and sign such plans. The only as-built plans which the Board will stamp and sign is the plan showing the location of structures on condominium property. Such plans shall:

- A. Be certified to be correct and stamped by a N.H. Licensed Land Surveyor;
- B. Be accompanied by Certificates of Occupancy, if applicable;
- C. Clearly identify in the title block exactly what the as-built plan is approving; and
- D. Have the following plat note printed on each sheet, "These as-built plans are pursuant to, and without modification of, the original Planning Board approval."

Section 53. Enforcement.

The Board authorizes the Board of Selectmen and its designees as the enforcement agents for this chapter. The Board also reserves the right to enforce this chapter itself if necessary.

Section 54. Reconsideration of Approval.

Any Full Review conditional approval, granted under this chapter may be reconsidered and/or rescinded by a majority vote of the Board. To do so, the Board must hold a noticed public hearing at its own

expense, and then must determine that material information on which the original approval was based was defective, incomplete or misrepresented. Any Full Review with an approved plan recorded at the Rockingham County Registry of Deeds may be revoked in accordance with NHRSA §676:4-a. A rescinded approval shall be deemed a denial of the original application. A new Notice of Decision shall be issued, which states the reason for the new decision.

Section 55. Compliance With Other Codes.

The Site Plan Review Regulations in no way relieve an applicant from compliance with the Zoning Ordinance, the Subdivision of Land Regulations, or any other code adopted by the Town or any other governmental unit. In the event that the requirements of this chapter are in conflict with other codes, the more stringent shall apply.

Section 56. Saving Clause.

If any clause, portion or section of this chapter is found invalid by a court of competent jurisdiction, the finding shall not invalidate the remainder of this chapter.

ADDENDUM A TO EPPING SITE PLAN REVIEW REGULATIONS 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, 1990" by AASHTO are incorporated by reference hereon. Specific standards set by these regulations shall be the primary design criteria, however, if in the judgement of the Board, or the Town Engineer, safety considerations warrant additional requirements, they may be required at the Board's discretion.

GENERAL STANDARDS

1) Street Layout, Plan, and Construction

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 general street development plan shall be approved prior to the construction of any phase of the plan. The proposed street plan shall show all work necessary to connect and complete improvements and utilities between the proposed street(s) and any non-improved connecting street in an existing subdivision. All streets and related improvements shall be constructed in conformance with the standards described herein. (Typical roadway sections and geometric and structural guidelines, based on expected average daily traffic volume (ADT), are illustrated in Figure One).

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.

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 Planning Board approval. The Board of Selectmen shall be responsible for approving the naming of all streets, and upon such approval and the acceptance of each such street, the municipality shall be responsible for the erection of street name signs at all street intersections. 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. Such signs may be provided and installed by the Town at the developer's expense of \$75.00 per sign. 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 cul-de-sac or dead-end streets shall be extended from another cul-de-sac or dead-end street. Dead-end streets shall terminate in a turnaround (cul-de-sac) not less than 126 feet in diameter, with a paved area 100 feet in diameter. 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. These standards are illustrated in Figure 2. A landscaped island in the center of the cul-de-sac may be required at the discretion of the Planning Board. When required, said island shall be sized to provided a street width of no less than 20' around the island.

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) Alley Ways

Alley ways shall not be permitted.

10) 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.

11) Curbs and Gutters

Street curbing and gutters may be required at the discretion of the Planning Board. When required, 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.

12) 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 and Procedure for Driveways and Other Accesses to the State Highway System", 1985. Driveways shall be defined in accordance with the definitions given in the Institute of Transportation Engineers Guidelines for Driveway Design and Location, 1985. Both of these documents are hereby incorporated into these regulations by reference.

13) Utilities

Utility poles shall be kept close to the roadway Right-of-Way line and in no case shall be placed closer to the roadway than the ditch line. Utility poles shall always be placed well back of a curb. When practicable, water and sewer mains and other underground utilities shall be constructed near the suggested positions shown on the typical cross-sections of this standard (See Typical Cross-Section in appendix of this document).

14) 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.

15) 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 completely 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.

16) 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 "New Hampshire Standard Specifications for Road and Bridge Construction, 1990" 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 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 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.

17) 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.

18) 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 (24) hours.

19) Paving Placement

No paving shall be done between November 15th and April 15th. Furthermore, the temperature of the ground surface and day shall be a minimum of 40 degrees and rising.

20) 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 concrete tile, bituminous coated galvanized steel, 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.

21) 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 "New Hampshire Standard Specifications, 1983", Section 644.

22) 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.

23) 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.

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.

STREET CONSTRUCTION STANDARDS

(FOR MATERIAL, COMPACTION, AND CONSTRUCTION STANDARDS, THIS SPECIFICATION INCORPORATES NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1990)

Right-of-Way Width

50'

(Center widths may be required if warranted by the opinion of the Planning Board)

Minimum Pavement Width

22'
24'

Minimum Shoulder Width

4'

**Minimum Distance Centerline
of Roadway to Centerline Ditch**

22'

Minimum Grade

0.5%

Maximum Grade

8%

(Grade shall be adjusted to 6% on the primary street -
fifty feet from intersections. (See Figure 3 for
representation of intent)

Minimum Subbase *

6"

12"

Minimum Paving

1" 2"

Road Crown

per 1'-0 1/4"

Maximum Cul-De-Sac Length

1200'

Minimum Cul-De-Sac Turnover Diameter
Pavement

100'

R.O.W.

**Minimum Tangent Length
Separating Reverse Curvature**

126'

Minimum Street Sight Distance

150'

Minimum Centerline Horizontal

(Larger curves may be warranted by opinion of
the Planning Board and the Town Engineer)

300'

Sidewalk Section

**8"
2"**

5'

Maximum Grade on Intersection

400'

(Minor Street)

2%

Minimum Angle of Intersection

75

Degrees

*** 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.**