

# TOWN OF BARRINGTON, NEW HAMPSHIRE Site Plan Review Regulations For Nonresidential Uses and Multi-Family Dwelling Units

Prepared by the Barrington Planning Board BSPR 2022 V1

#### **Preface** Table of Contents \_\_\_\_\_\_i Editor's Note iii History iv Introduction To Site Plan Review ......iv TABLE OF CONTENTS ARTICLE 1 GENERAL PROVISIONS...... 1 1 1 1.2 Title \_\_\_\_\_\_1 1.3 Purpose 1 1.4 1.5 General Guidance 2 ARTICLE 2 SITE PLAN REVIEW & APPROVAL PROCESS ......3 2.1 2.2 2.3 2.4 2.5 2.6 SITE PLAN SPECIFICATIONS & DOCUMENTS......11 **ARTICLE 3** 3.1 General 11 3.2 3.3 3.4 Improvement Plans 16 3.5 3.6 3.7 Building Renderings 18 3.8 3.9 **ARTICLE 4** DESIGN AND CONSTRUCTION STANDARDS......21 4.1 General 21 4.2 Monuments 22 4.3 Grading 22 4.4 4.5 Water System 23 4.6 4.7 Access 27 4.8 4.9 4.10 Building and General Appearance Design Standards......50 4.11 4.12 4.13 Traffic Impact Analysis and Mitigation Standards......61 4.14 4.15 ARTICLE 5 COMMERCIAL RECREATIONAL CAMPGROUNDS AND CAMPING PARKS67 ARTICLE 6 6.1 Definitions 67 6.2 6.3 6.4

6.5

ARTICLE	7	ADMINISTRATION	69
7.1		nical Assistance	
7.2		antees of Performance	
7.3		ficate Of Occupancy (CO)	
7.4		uilt Plans	
7.5		pliance With Other Codes	
ARTICLE	8	CONCURRENT AND JOINT HEARINGS	
ARTICLE		WAIVER PROCEDURE	
ARTICLE		AMENDMENTS	
ARTICLE		SEPARABILITY	
ARTICLE		DATE OF PASSAGE	
ARTICLE	13	DEFINITIONS	72
		LIST OF FIGURES	
	_	SITE PLAN LAYOUT	
		BASIC LOT DIAGRAM	
		. Preferred Frontage Road Alternative	28
TABLE4.	•••••	EXAMPLE OF DESIGN INTERSECTION CLEAR SITE DISTANCE	
		FOR 45 MPH PASSENGER CAR DESIGN SPEED	29
FIGURE 5	•••••	. STANDARD PARKING AND AISLE LAYOUT	33
FIGURE 6	•••••	. HANDICAPPED PARKING DIAGRAM	35
FIGURE 7	•••••	PREFERRED OFF-STREET LOADING DIAGRAM	37
		, PREFERRED BUFFER/SCREENING BETWEEN COMMERCIAL AND RESIDE	
		USE	
FIGURE 9		PREFERRED PARKING LOT LAYOUT	
		PREFERRED SCREENING TECHNIQUES	
		PREFERRED STREETSCAPE DESIGN CHARACTERISTICS FOR GENERAL	
FIGURE 1	<u></u>	COMMERCIAL DEVELOPMENT	
FIGURE 1	2	PREFERRED STREETSCAPE DESIGN CHARACTERISTICS FOR	31
FIGURE I	<u>4</u>	VILLAGE COMMERCIAL DEVELOPMENT	53
Everynn 1	•		
		PREFERRED LIGHT FIXTURE DIAGRAMS	
		RECESSED LIGHTING FIXTURE DIAGRAM	
Appendix	1	. TREES AND SHRUBS AND THEIR USE IN LANDSCAPING	75
Tanre 1		LIST OF TABLES	29
		INTERSECTION SITE DISTANCE	
		DESIGN STOPPING SITE DISTANCE	
		DIMENSIONAL STANDARDS FOR PARKING SPACES AND AISLES	
		. MINIMUM NUMBER OF ACCESSIBLE PARKING SPACES	
		DIMENSIONAL STANDARDS FOR DRIVEWAYS	
TABLE 6.	•••••	. MINIMUM OFF STREET LOADING REQUIREMENTS	36
		PARKING STANDARDS BY USE	
TABLE 8.	•••••	RECOMMENDED SITE LIGHTING LEVELS	54

## **EDITOR'S NOTE**

The provisions of the Zoning Ordinance and Land Use Regulations are given in hierarchical levels and numerically indexed within those levels. The numerical index is given at the left margin. The Title or Heading and the descriptive text for that numeric index is indented from the left margin by an amount that depends on the item's hierarchical level. The descriptive text (called here the Body Text) for each heading level is positioned under the Title or Heading. There is an exception to this rule; Paragraphs and Subparagraphs without emphasized lead words are presented as Body Text only. The provisions as presented in the Ordinance and Land Use Regulations are as illustrated below.

Level titles	Index (at left margin)	Tab Leader	Illustrations of the Provisions as presented in the Text.
Article	#	None	Article #Article Title (Generally no body text is given for the article's title.):
Section	#.#	.5 inch	#.#Section Heading  Body Text is directly under heading in block style.
Subsection	#.#.#	.75 inch	#.#.#Subsection Heading  Body Text is directly under heading in block style
Paragraph- with lead word(s)	#.#.# (#)	1 inch	#.#.#(#)Paragraph Lead Word(s)  Body Text is directly under lead words in block style.
Paragraph	#.#.# (#)	1 inch	#.#.#(#)Paragraph Without Lead Word(s) Body Text is presented using Hanging Indents as shown here.
Subparagraph - with lead word)s)	#.#.#(#)(a)	1.25 inch	#.#.#(#)(a) Subparagraph Lead Word(s)  Body Text is directly under lead word(s) in block style.
Subparagraph	#.#.#(#)(a)	1.25 inch	#.#.#(#)(a) Subparagraph Without Lead Word(s) is  Presented using Hanging Indents as shown here

#### \*\* Numeric Index Conventions:

The symbol # stands for a numeric identifier.

The small letter 'a' stands for any alphabetical identifier.

Numbers within parenthesis indicate paragraphs.

Small letters within parentheses indicate subparagraphs.

#### Order of Presentation

The Article and Article Number are separated from the Article Title by a .5 inch tab.

For all other indexing the numeric index is given at the left margin followed by a tab leader (.....) of the specified length followed by the appropriate heading (see illustrations above.)

A subsection (#.#.#) will be preceded by a section (#.#);

A subparagraph [#.#.#(#)(a)] will be preceded by a paragraph (#.#.#(#).

An Article, Section or Subsection may be immediately succeeded by a paragraph.

When an element of a Regulation or the Ordinance is being referenced, the Numeric Identification is used. If the intention is to reference an Article in its entirety the Article Number would be the reference, for example, Article 6. If the reference is more specific, for instance Article 6, Section.2 the reference would be given as Section 6.2. The extreme example would be Article 6, Section 2, Subsection 3, Paragraph (2), Subparagraph (b) which would be referenced as Subparagraph 6.2.3 (2)(b).

#### **HISTORY:**

## TOWN OF BARRINGTON SITE PLAN REVIEW REGULATIONS

Adopted June 23, 2005,

Amended February 21, 2008, November 3, 2011, October 22, 2013, July 7, 2020 and May 17, 2022.

#### INTRODUCTION TO SITE PLAN REVIEW

RSA 674:43, Titled Power to Review Site Plans provides the authority to establish Site Plan Review and provides for each municipality, among other things, the ability to convey to the Planning Board the power to approve or disapprove site plans for non-residential uses and multifamily dwelling units.

#### 674:43 Power to Review Site Plans. –

- A municipality, having adopted a zoning ordinance as provided in RSA 674:16, and where the planning board has adopted subdivision regulations as provided in RSA 674:36, may by ordinance or resolution further authorize the planning board to require preliminary review of site plans and to review and approve or disapprove site plans for the development or change or expansion of use of tracts for nonresidential uses or for multi-family dwelling units, which are defined as any structures containing more than 2 dwelling units, whether or not such development includes a subdivision or resubdivision of the site.
- II The ordinance or resolution which authorizes the planning board to review site plans shall make it the duty of the city clerk, town clerk, village district clerk or other appropriate recording official to file with the register of deeds of the county in which the municipality is situated a certificate of notice showing that the planning board has been so authorized, giving the date of such authorization.
- The local legislative body of a municipality may by ordinance or resolution III authorize the planning board to delegate its site review powers and duties in regard to minor site plans to a committee of technically qualified administrators chosen by the planning board from the departments of public works, engineering, community development, planning, or other similar departments in the municipality. The local legislative body may further stipulate that the committee members be residents of the municipality. This special site review committee may have final authority to approve or disapprove site plans reviewed by it, unless the local legislative body deems that final approval shall rest with the planning board, provided that the decision of the committee may be appealed to the full planning board so long as notice of appeal is filed within 20 days of the committee's decision. All provisions of RSA 676:4 shall apply to actions of the special site review committee, except that such a committee shall act to approve or disapprove within 60 days after submissions of applications, subject to extension or waiver as provided in RSA 676:4, I(f). If a municipality authorizes a site review committee in accordance with this paragraph, the planning board shall adopt or amend its regulations specifying application, acceptance and approval procedures and defining what size and kind of site plans may be reviewed by the site review committee prior to authorizing the committee.

IV The local legislative body of a municipality may by ordinance or resolution establish thresholds based on the size of a project or a tract below which site plan review shall not be required. If a municipality establishes a size limit below which site plan review shall not be required, the planning board shall adopt or amend its regulations to clearly reflect that threshold. Nothing in this paragraph shall preclude the planning board from establishing such thresholds in the absence of action by the legislative body specific conditions convey with that authority the power to Regulations.

The provisions of State Stature referenced as RSA 674:44 and titled: Site Plan Review Regulations requires the Planning Board to adopt Site Plan Review Regulations prior to exercising it authority to approve or disapprove Site Plans.

## RSA 674:44. Site Plan Regulations

- Before the planning board exercises its powers under RSA 674:43, it shall adopt site plan review regulations according to the procedures required by RSA 675:6.
- II The site plan review regulations which the planning board adopts may:
  - (a) Provide for the safe and attractive development or change or expansion of use of the site and guard against such conditions as would involve danger or injury to health, safety, or prosperity by reason of:
    - (1) Inadequate drainage or conditions conducive to flooding of the property or that of another;
    - (2) Inadequate protection for the quality of groundwater;
    - (3) Undesirable and preventable elements of pollution such as noise, smoke, soot, particulates, or any other discharge into the environment which might prove harmful to persons, structures, or adjacent properties; and
    - (4) Inadequate provision for fire safety, prevention, and control.
  - (b) Provide for the harmonious and aesthetically pleasing development of the municipality and its environs.
  - (c) Provide for open spaces and green spaces of adequate proportions.
  - (d) Require the proper arrangement and coordination of streets within the site in relation to other existing or planned streets or with features of the official map of the municipality;
  - (e) Require suitably located streets of sufficient width to accommodate existing and prospective traffic and to afford adequate light, air, and access for firefighting apparatus and equipment to buildings, and be coordinated so as to compose a convenient system;
  - (f) Require, in proper cases, that plats showing new streets or narrowing or widening of such streets be submitted to the planning board for approval;
  - (g) Require that the land indicated on plats submitted to the planning board shall be of such character that it can be used for building purposes without danger to health;
  - (h) Include such provisions as will tend to create conditions favorable for health, safety, convenience, and prosperity;
  - (i) Require innovative land use controls on lands when supported by the master plan; and

- (j) Require preliminary review of site plans.
- III The site plan review regulations which the planning board adopts shall:
  - (a) Provide the procedures which the board shall follow in reviewing site plans;
  - (b) Define the purposes of site plan review;
  - (c) Specify the general standards and requirements with which the proposed development shall comply, including appropriate reference to accepted codes and standards for construction;
  - (d) Include provisions for guarantees of performance, including bonds or other security; and
  - (e) Include provision for waiver of any portion of the regulations. The basis for any waiver granted by the planning board shall be recorded in the minutes of the board. The planning board may only grant a waiver if the board finds, by majority vote, that:
    - (1) Strict conformity would pose an unnecessary hardship to the applicant and waiver would not be contrary to the spirit and intent of the regulations; or
    - (2) Specific circumstances relative to the site plan, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations.
- IV. The site plan review regulations of the planning board may stipulate, as a condition precedent to the approval of the plat, the extent to which and the manner in which streets shall be graded and improved and to which water, sewer, and other utility mains, piping, connections, or other facilities shall be installed. The regulations or practice of the planning board:
  - (a) May provide for the conditional approval of the plat before such improvements and installations have been constructed, but any such conditional approval shall not be entered upon that plat.
  - (b) Shall provide that, in lieu of the completion of street work and utility installations prior to the final approval of a plat, the planning board shall accept a performance bond, irrevocable letter of credit, or other type or types of security as shall be specified in the site plan review regulations. The planning board shall have the discretion to prescribe the type and amount of the bond or other security, require satisfactory evidence of the financial ability of any surety or financial institution to pay such bond or other type of security, and specify a period for completion of the improvements and utilities to be expressed in the bond or other security, in order to secure to the municipality the actual construction and installation of such improvements and utilities. The municipality shall have the power to enforce such bonds or other securities by all appropriate legal and equitable remedies.
- V. The planning board may, as part of its site plan review regulations, require an applicant to pay all costs for notification of abutters and may provide for the assessment of reasonable fees to cover the board's administrative expenses and costs of special investigation and the review of documents and other matters which may be required by particular applications.

## **ARTICLE 1.... GENERAL PROVISIONS**

#### 1.1.....Authority

Pursuant to the authority granted to the Barrington Planning Board by RSA 674:43 and by the voters of the Town of Barrington, the Barrington Planning Board adopts the following Site Plan Regulations that shall govern the development or change or expansion of use of tracts for nonresidential uses or for multi-family dwelling units, which are defined as any structures containing more than two dwelling units, whether or not such development includes a subdivision or re-subdivision of the site.

# 1.2.....Title

These regulations shall be known as the Site Plan Review Regulations for Nonresidential Uses and Multi-Family Dwelling Units, Town of Barrington, New Hampshire and may be referred to as the "Site Plan Regulations" or "these Regulations."

## **1.3.....Purpose**

- 1.3.1......The purpose of these site plan regulations is to provide for the reasonable, safe, and attractive development or change or expansion of use of the site, and guard against such conditions as would involve danger or injury to health, safety, or prosperity by reason of:
- 1.3(1)(a) ......Inadequate drainage or conditions conducive to flooding of the property or that of another;
- 1.3(1)(b) ......Inadequate protection for the quality of groundwater;
- 1.2(1)(d) ......Inadequate provisions for fire safety, prevention, and control.
- 1.3.2.....Provide for the harmonious and aesthetically pleasing development of the Town and establishing site designs consistent with and/or complimentary to traditional New England design;
- 1.3.3.....Provide for open spaces and green spaces of adequate proportions.
- 1.3.4.....Require the proper arrangement and coordination of streets within the site in relation to other existing or planned streets or with features of the official map of the Town.
- 1.3.5......Require suitably located streets of sufficient width to accommodate existing and prospective traffic and to afford access for fire-fighting apparatus and equipment to buildings, and to be coordinated so as to compose a convenient system.
- 1.3.6.....Require, in proper cases, that plats showing new streets or narrowing or widening of existing streets be submitted to the planning board.
- 1.3.7......Require that the land indicated on plats submitted to the planning board shall be of such character that it could be used for building purposes without violation of the performance standards listed in the Town of Barrington Zoning Ordinance and without danger to health.

- 1.3.8.....Include such provisions that will foster the reasonable and judicious use of land for commercial and industrial purposes compatible with the community's interest, convenience, and prosperity.
- 1.3.9....Encourage non -vehicular means of access to sites.
- 1.3.10.....Encourage projects that incorporate the goals, objectives and recommendations of the Barrington Master Plan.
- 1.3.11.....Include such provisions as will tend to create conditions favorable for health, safety, convenience, and prosperity.

## 1.4......Communication Between Town and Applicant

To prevent communication problems and to ensure the flow of information is consistent between the Planning Board and the applicant, it is important for both the Board and the applicant to designate one person each to coordinate all communication.

# 1.4.1.....Applicant's Authorized Representative

The application form shall designate one person to act as the "authorized representative." All communication to the applicant shall be made through this person, and this person shall be present at all meetings with the board. In the text of these Regulations, references to the applicant shall also imply the authorized representative.

# 1.4.2.....Town's Representative

All communications to the Board shall be directed to the Town Planner unless otherwise directed by the Chairman of the Board.

## 1.5.....General Guidance

The following advice is offered to assist the applicant, especially if the applicant is unfamiliar with land development processes.

## ARTICLE 2 .... SITE PLAN REVIEW & APPROVAL PROCESS

## 2.1.....Initial Inquiry (Optional)

Anyone considering the submittal of a site plan review application is encouraged to make an initial inquiry to the Planning Board to discuss the merits of the proposed site plan and its conformance with the Town of Barrington Zoning and Site Plan Regulations. Initial inquiry discussions shall not bind either the Board or the Applicant, as stated in RSA 676:4, II.

#### 2.2.....General Procedures

## 2.2.1.....Application Procedure

There are two stages allowed for in the process of submitting a site plan application to the Planning Board consisting of the following:

- 2.2.1(1)......Pre-Application Reviews (optional); and
- 2.2.1(2).....Formal Application

## 2.2.2.....Notice to Abutters and General Public

For any meeting on any application for which notice is required, pursuant to RSA 676:4 I (d), the Board shall notify the applicant; abutters; professionals whose seals appear on the plat; and holders of restrictions under RSA 477:45 by certified mail at least ten (10) days prior to the meeting and on Town's website, posting in two (2) public spaces. The notice shall include a general description of the proposal and shall identify the applicant and location of the land.

## 2.2.3.....Specific Studies

The Board or its designees, at its discretion, may either request the Applicant to prepare specific studies related to the project, or contract with a consultant to perform these studies at the Applicant's expense.

## 2.2.4.....Review of Application

- 2.2.4(1)...........Consultants The Board may contract with consultants to review all or portions of any application, including design review and formal applications, or any requested studies. This review shall be at the Applicant's expense. The Applicant shall provide escrow for the review cost in sufficient amount estimated by the Land Use Office. The escrow account shall be reviewed periodically to assure that sufficient funds are available to cover all review costs and additional escrow provided as needed.
- 2.2.4(2)......Professional Legal Services The applicant shall be responsible for the cost of all professional legal services retained by the Town as part of a project.

#### 2.2.5.....Board's Hearing Schedule

The Planning Board monthly schedule is on file in the Land Use Department Office and on the Town's website.

#### 2.3.....Pre-Application Submission for Conceptual Site Plan Review

(This is an optional portion of the application process)

- 2.3.2.....The Applicant may discuss with the Board the procedure for site plan approval including the requirements as to general layout, reservation of lands, off-site improvements, drainage, utilities, and similar activities, as well as availability of existing services.
- 2.3.3......The Applicant may seek advice of the Board only at a scheduled Board meeting. A discussion may be sought for the purpose of discussing Board policies and standards and conclusions derived from the Master Plan, so that they may evaluate whether his/her concept is consistent with the Master Plan prior to submittal of an application.
- 2.3.4.....The Board and Applicant may discuss proposals in conceptual form only, and in general terms, such as the desirability of types of development.
- 2.3.5.....Pre-application discussions shall not bind either the Board or the Applicant, as stated in RSA 676:4 II.

## 2.4.....Pre-Application Submission for Design Review (Optional)

Pre-application discussions with the Land Use Department office staff are encouraged. Statements made during pre-application discussions shall not be binding on the applicant, the Land Use Office or Planning Board.

## 2.4.1.....Design Review

The design review submission is a tool to assist the Applicant in providing complete information for the project. The object of design review is to allow the board the opportunity to understand what is being proposed and for the developer to gather information regarding concerns from the Board, abutters and the public. The Applicant shall submit drawings and supporting information to address the requirements of the regulations and the essential characteristics of the site. The Applicant is not required to submit a full set of plans that meet the requirements of a formal submission. A completed checklist shall be provided to assist design review.

#### 2.4.2....Submission Items

The Applicant shall file a completed design review request form and checklist for design review. A complete application is one which shall:

- 2.4.2(1)......Include a design review request form available at the Land Use Office.
- 2.4.2(2)......Include a completed site plan application checklist marked design review available at the Land Use Office.
- 2.4.2(3)......The application form shall be signed by the property owner or the owner's agent. If an agent signs the application, an affidavit authorizing the agent to act on the owners' behalf shall be submitted as well.
- 2.4.2(4).....Be accompanied by an application fee.
- 2.4.2(5)............Include a list of names and addresses of all abutters provided in RSA 676:4, I (b).

- 2.4.2(6)......Include three (3) sets of full size revised drawings, twelve (12) sets of 11' x 17' drawings and a .pdf/a format file as required by Article 3, and in accordance with the requirements for design standards and improvements as outlined in Article 4.
- 2.4.2(7)......Include escrow for review cost, if applicable, in sufficient amount determined by the Planning Board. Escrow account shall be periodically reviewed to ensure that sufficient funds are available to cover all review costs and additional escrow shall be provided as needed. Deleted from Regulations on May 17, 2022. For Design Review escrow requirements are not needed.

## 2.4.3.....Notification of Design Review

Abutters and the general public shall be promptly notified in accordance with Subsection 2.2.2 that the Town of Barrington is conducting design review of the project and plans for the project are available for review by the general public at the Land Use Office.

#### **2.4.4.....Schedule**

Once it is determined that all required checklist items are provided, the plans will be reviewed by the Planning Board. The Board shall review the submitted plans within thirty (30) working days of the submittal date of the Design Review Application.

## 2.4.5.....Planning Board Comments

During the design review phase, comments which are generated by the Planning Board are forwarded to the Applicant for their use. The Applicant shall address these comments in the completed application as follows:

- 2.4.5(1)..........The Applicant is responsible to address the Board comments in writing, explaining how each comment is addressed and providing three (3) sets of full size revised drawings and twelve (12) sets of 11' x 17' drawings (with changes highlighted in yellow) and a .pdf/a file to the Planning Board with the revision block appropriately noted and dated on the drawings if a second review is desired.
- 2.4.5(2)......The applicant shall contact department heads (i.e. the Road Agent) directly to discuss any particular requirement or comments raised in the review process, and provide written verification to the Board that the comments are addressed to the satisfaction of that department head.
- 2.4.5(3)......If the Applicant elects to have a second design review meeting with the Planning Board, revised plans shall be submitted not later than seven (7) working days prior to the scheduled design review meeting with the Planning Board.

## 2.5......Formal Application Submission and Procedures

#### 2.5.1....Submission Items

An Applicant must file a completed Formal Application in order for the Planning Board to consider any request for a site plan approval. A complete application shall include the following items.

2.5.1(1)..........If pre-application design review was pursued, include a letter from the Applicant's engineer stating whether or not the Formal Application incorporates all changes called for by design review comments. If not, the letter shall explain fully.

- 2.5.1(2).....Be made on application forms available from the Land Use Department.
- 2.5.1(3)......Include a completed checklist available from the Land Use Department.
- 2.5.1(4)......The application form shall be signed by the property owner or the owner's agent. If an agent signs the application, an affidavit authorizing the agent to act on the owners' behalf shall be submitted as well.
- 2.5.1(5).....Be accompanied by the correct application fee.
- 2.5.1(6)......Include a list of the names and addresses of all abutters, as provided in RSA 676:4, I (b).
- 2.5.1(7)......Include three (3) sets of full size revised drawings, twelve (12) sets of 11' x 17' drawings and a .pdf/a format file as required by Article 3 and in accordance with the requirements for design standards and improvements as outlined in Article 4.
- 2.5.1(8).....Include applicable documents listed in Article 4.
- 2.5.1(9)......Include a materials quantity list for all street work and utility installations, and a summary total for bond estimate for the project.
- 2.5.1(10).......If the applicant requests an extension, the formal submission from the applicant can be made in a written request or by virtual attendance and will be put on the next Board's agenda.
- 2.5.1(11)......Include escrow for review cost, if applicable, in sufficient amount determined by the Town's Engineer and Land Use Department. Escrow account shall be periodically reviewed to ensure that sufficient funds are available to cover all review costs and additional escrow shall be provided as needed.

## 2.5.2....Submittal Date of Formal Application

The date of delivery of a Formal Application to the Planning Board and issue of a date stamp on the application.

## 2.5.3.....Acceptance Process

The Formal Application must be delivered at least twenty-one (21) days prior to the Planning Board meeting at which the Application is considered for acceptance. The Board shall, at the next regular meeting for which notice can be given, or within thirty (30) days following the submittal date of the Formal Application, as required by RSA 676:4, determine if the submitted application is accepted as complete.

#### 2.5.4.....Formal Acceptance Date

For the purpose of these regulations, the date of the meeting of the Board at which the Formal Application is accepted as complete shall constitute the formal acceptance date of the application.

## 2.5.5.....Time of Consideration

The Board shall have sixty-five (65) days in which to consider and act on the application, subject to extension or waiver as provided in NH RSA §676:4, as most recently amended. The sixty-five (65) days shall begin at the formal acceptance date.

#### 2.5.6.....Notification of Submission

The Board shall notify the abutters, the Applicant and other parties, in accordance with Subsection 2.2.2.

#### 2.5.7......Determination of Completeness of Application

At the meeting to consider acceptance of an application, the Board shall determine whether or not the application is complete and vote formal acceptance or rejection of the application accordingly. If the application is incomplete, the Board shall notify the Applicant under RSA 676:3 and shall specify what would be required to make the application complete. If the application is complete, the Board may, but need not, begin formal consideration of the application at the same meeting.

## 2.5.8.....Public Hearing

The Board shall hold a public hearing on an accepted application with notice as required by Subsection 2.2.2. Notice of the public hearing may be included in the notice for the meeting to consider Formal Acceptance as scheduling permits. A public hearing may be continued from meeting to meeting as needed.

## 2.5.9.....Special Studies or Reviews and Submittals

If, during the Board's consideration of the application, the Board determines that certain additional or revised information is necessary for a fully informed decision, it may request the Applicant to provide the information or may hire a professional consultant itself with expenses charged as per Section 2.2. Additional information, updated plans, and any other material submitted by the applicant or any other party with standing shall provide materials to the Land Use Department Office no later than one week prior to the meeting at which they will be discussed/considered.

# 2.5.9(1)...... Submitted Materials

All materials to be submitted to the Board for consideration shall be submitted prior to the meeting so that Board members, the public, and other Town Departments or consultants may have sufficient opportunity to review the application without unnecessarily rushing the review and/or delaying the proceedings of the meeting. The following shall apply:

## 2.5.9(1)(a).....New Materials

New materials shall be submitted to the Board at least a minimum of 15 days prior to a meeting when new materials will be considered.

# 2.5.9(1)(b).....Continued Meetings

When consideration of an application is continued and new information is required, the Board shall specify the deadline for filing this new information. In no case shall it be less than 15 days prior to the meeting. Revised materials shall be filed no less than 7 days prior to the meeting. The deadline shall be stated in the motion to continue.

#### 2.5.10.....Board Action

The Board shall act to approve, conditionally approve, or disapprove an application within the timeframe consistent with NH RSA 676:4, as most recently amended, unless it deems more time necessary, in which case the Board must either obtain a written consent from the Applicant for an extension of a specified period or obtain in writing from the Board of Selectmen an extension of time not to exceed ninety (90) days. The Board shall take action as follows:

- 2.5.10(2)...... If the Board disapproves of an application, the Board shall state the grounds for disapproval in writing.

# 2.5.11......Compliance with Conditions of Approval

In order to determine fulfillment of conditions of approval, the Board shall hold a public hearing with notice as required in Article 2.2.2 to receive evidence of compliance or non-compliance. No public hearing is required for conditions which are:

- 2.5.11(1)......Minor plan changes compliance with which is administrative and does not involve discretionary judgment; or
- 2.5.11(2)......Conditions which are in themselves administrative and which involve no discretionary judgment on the part of the Board; or
- 2.5.11(3)......Conditions with regard to the Applicant's possession of permits and approval granted by other Boards or agencies.

#### 2.5.12.....Expiration of Approved Plans

Where no active and substantial work (as defined in Article 13, Definitions) has commenced upon a site, plans that are approved and signed by the Board shall expire two (2) years from the date the plan is signed (NH RSA 674:39(2)). An extension, not to exceed one year, may be granted by majority vote of the Board so long as it is applied for at least thirty days prior to the expiration date. The Board may grant only one such extension for any proposed site plan. All other plans must be submitted to the Board for review to insure compliance with these and all other town ordinances and regulations.

## 2.5.13......Board Signature

Prior to obtaining Board signature, the Applicant shall submit two (2) complete full size and one (1) 11" x 17" paper print plan sets and supporting documents as required in Article 3 with a letter explaining how the Applicant addressed the conditions of approval. This shall include final and complete reports for all items submitted during review for the Town of Barrington's file. The Chairman shall endorse two (2) full size paper copies and one (1) 11' x 17' copy of the approved plan(s) meeting the conditions of approval upon receipt of an executed bond for all street work and utility installation. The Planning and Land Use Office shall retain a signed and approved reproducible 11"x17" and .pdf format file with supporting documents for Town records.

## 2.5.14.....Revocation of Approval

If an approval is revoked per RSA 676:4-a, which includes failure of the applicant to perform work in accordance with the conditions of approval or within the time limits stipulated in the approval, the revocation process in RSA 676:4-a shall be followed.

## 2.6.....Minor Site Plan Review

Where applicable, the Planning Board will attempt to expedite requests for site plan applications by means of an expedited Minor Site Plan Review process. In order to qualify as a minor site plan an application for development must comply with the criteria specified in Subsection 2.6.2, as applicable.

## 2.6.1.....Determination of a Minor Site Plan

The Town Planner, or the Planning Board Chair's designated appointee, shall review the submittal items and determine if the plan meets the minor site plan criteria. If it is determined that the plan is a minor site plan, and is accompanied by all necessary submittals to constitute a complete application, it shall be forwarded to the Planning Board for immediate consideration, after being duly noticed for public hearing. However, at the discretion of the Planning Board, an applicant may be required to resubmit the application for a full site plan review if conditions warrant.

#### 2.6.2.....Criteria

Minor Site Plan is a site plan which meets the following criteria:

- 2.6.2(1).........The purpose of the plan is for a change of use or expansion of present use.
- 2.6.2(2).....The site plan will have a minimum traffic impact on the surrounding road network.
- 2.6.2(3).....There is no alteration of access to public streets.
- 2.6.2(4)......Minimum lot grading.
- 2.6.2(5)......Minor drainage improvements are required to accommodate any increased drainage due to improvements.
- 2.6.2(6)......Increase in gross floor area: not to exceed 33% of the existing gross floor area up to 1,000 square feet (Expanded building shall not exceed 3,000 square feet).
- 2.6.2(7).....Expansion of pavement: not to exceed 33% of the existing paved area up to 2,000 square feet.
- 2.6.2(8).....There are no unusual or special conditions which require full Planning Board review.

#### 2.6.3....Submittal Items

The applicant shall file an application for approval of a minor site plan. An application includes:

- 2.6.3(1).....Be made on application form available from the Planning Board.
- 2.6.3(2)......Include a completed checklist available from the Planning Board.
- 2.6.3(3)......The application form shall be signed by the property owner or the owner's agent. If an agent signs the application, an affidavit authorizing the agent to act on the owner's behalf shall be submitted as well.
- 2.6.3(4).....Be accompanied by the correct application fee.
- 2.6.3(5)......Include a list of the names and addresses of all abutters, as provided in RSA §676:4, I (b).
- 2.6.3(6)...........Include fifteen (15) sets of (three (3) full size sets of plans, twelve (12) 11" x 17" plans, and a .pdf/a format file) as described in Article 3 and in accordance with the requirements for design standards and improvements as outlined in Article 4. At the discretion of the Planning Board, the requirement for fully engineered site plans may be waived for minor projects with no significant site changes.
- 2.6.3(7).....Include applicable documents listed in Article 3.
- 2.6.3(8).....Include a materials quantity list for all utility and street work, and a summary total for bond estimate for the project.
- 2.6.3(9)......The applicant shall include escrow for review cost in sufficient amount determined by the Planning Board designee after consultation with the Town's Engineer. Escrow account shall be periodically reviewed by the Board to ensure that sufficient funds are available to cover all review costs and additional escrow shall be provided as needed.

## 2.6.4.....Hearing Process

2.6.4(1)......Determination of a Completed Application - Upon receipt of the formal application, the Planning Board shall determine if the application is complete. If it is determined that the application is complete, the Planning Board shall accept the application. If it is determined that the application is incomplete, the Planning Board shall vote to find the application incomplete and shall state the reasons for such finding.

- 2.6.4(2)......Schedule If the application is determined to be complete, the Planning Board shall hold a public hearing according to a regular monthly scheduled day and time and notify abutters. If the Board cannot vote to approve or disapprove the application at the first public hearing every effort will be made to continue the meeting to the first available date in order to expedite the final decision on the application.
- 2.6.4(3)........Notification of Planning Board The Planning Board shall be notified of submissions at a regularly scheduled meeting each month. After review of the submission list the Planning Board may determine that a submission warrants full site plan review.
- 2.6.4(4)......Public Hearing The Planning Board shall hold a public hearing on the completed formal minor site plan application. Notice of the public hearing shall be given in accordance with RSA §676:4. Any abutter, member of the general public or any person with a direct interest in the matter may testify in person or in writing.
- 2.6.4(5).........Action The Planning Board shall have 65 days, from the date of acceptance, to approve or disapprove the application, subject to extension or waivers as provided in RSA 676:4,(c)1. The date of acceptance shall be the date that the Planning Board accepts the plan.
- 2.6.4(6)......Appeals The applicant shall have the right to appeal the Board's decision in accordance with RSA §674:43.
- 2.6.4(7)......Signatures The Planning Board Chair shall sign and date all plans. The Board shall endorse two (2) full size paper copies of the site plans for their records and one (1) 11' x 17' copy and .pdf/a format file format for the case file folder.

## ARTICLE 3 .... SITE PLAN SPECIFICATIONS & DOCUMENTS

#### 3.1.....General

#### 3.1.1.....Preparer

All site plans shall be prepared and stamped by a professional engineer. Boundary monuments shall be certified by a licensed land surveyor.

#### 3.1.2....Paper details

All plans shall be prepared on sheets not less than 34 inches x 22 inches.

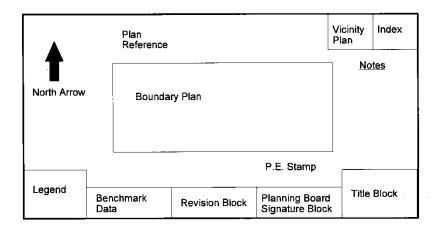
#### 3.1.3.....Scale

Horizontal:	Boundary Plans	1 inch = 100 feet ( maximum)
	All other plans	1 inch = 40 feet (maximum)
Vertical:		1 inch = 4 feet ( maximum)
Cross Section:		1 inch = 5 feet (horizontal and vertical)

#### 3.2.....Site Plan Layout

The suggested layout for proposed site plans is shown in Figure 1 below which also illustrates some of the required components for said plans.

FIGURE 1 - SITE PLAN LAYOUT



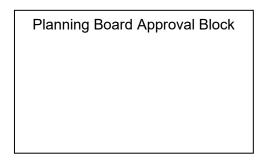
#### **3.2.1.....Title Block**

The Title Block shall be shown on each sheet of the site plans. The following information shall be shown in the title block:

- 3.2.1(1)......Drawing title
- 3.2.1(2).....Name of site plan
- 3.2.1(3).....Location of site plan
- 3.2.1(4).....Tax map and lot #s of subject parcel(s)
- 3.2.1(5)......Name and ad dress of owner(s)
- 3.2.1(6)......Date of plan
- 3.2.1(7).....Scale of plan
- 3.2.1(8).....Sheet number
- 3.2.1(9)......Name, address, and telephone number of design firm
- 3.2.1(10)......Name and address of Applicant

#### 3.2.2.....Planning Board Signature Block

The Planning Board signature block shall be placed on the cover sheet, site plan, and landscape plan. The block shall be approximately 3 inches high and 3 ½ inches wide with the words "Planning Board Approval Block" located as illustrated in the accompanying diagram.



#### 3.2.3.....Revision Block

The revision block shall be placed on each sheet of the plans. During the design process, if revisions are conducted to any sheet in the set of plans, then the revisions shall be noted in the revision block on each sheet in the entire plan set. Individual sheets which do not require revision shall be described as "no change with the revision."

#	Date	Description	Ву

## 3.2.4.....Benchmark Data

Benchmark data shall include the location, elevation reference and description of one benchmark per five acres. Benchmark data shall be shown on each sheet of the plans.

#### **3.2.5.....North Arrow**

The north arrow shall be placed on each sheet of the plans.

## 3.2.6.....Plan Reference

Plan references shall be placed on the existing conditions plan.

## 3.2.7....Legend

A legend shall be placed on the first sheet of the plans. The legend shall show and describe each symbol used on the plan. A legend with applicable symbols shall also be placed on the sheet, or the first sheet of a subset, addressing specific systems/aspects of the plans (such as utilities, drainage, landscaping, lighting, etc.).

# 3.2.8.....Vicinity Plan

The vicinity plan shall be at a required scale of 1 inch = 2,500 feet. The vicinity plan shall be placed on the site plan.

## 3.2.9....Index

An index shall be required if more than one sheet is submitted. The index shall be placed on the title sheet or existing conditions plan (top sheet of the plan set).

#### 3.2.10.....Notes

The notes shall be located on the title sheet General Notes and, if needed the Existing Conditions Notes, can be on a page two title page; and the following notes shall be shown:

- 3.2.10(1).....Purpose of plan
- 3.2.10(2)......Tax map and lot numbers of all subject parcels
- 3.2.10(3).....Area of subject parcel(s)
- 3.2.10(4).....Zoning designation of subject parcel(s)
- 3.2.10(5)......Minimum lot area, frontages and setback dimensions required for district(s)
- 3.2.10(6).....Existing and proposed use
- 3.2.10(7)......Parking requirements as outlined in the Section 4.9
- 3.2.10(8)......Lot coverage (% impervious surface) as required in the Zoning Ordinance
- 3.2.10(9)......Sanitary sewer source
- 3.2.10(10)......Water supply source
- 3.2.10(11).....Zoning variances/special exceptions with conditions
- 3.2.10(12).....List FEMA sheet(s) used to identify one-hundred (100)-year flood elevation (as applicable)
- 3.2.10(13).....List of required permits and permit approval numbers
- 3.2.10(14).....List of Planning Board waivers (if applicable)
- 3.2.10(15)......Construction Timetable
- 3.2.10(16)......Note the following: "If, during construction, it becomes apparent that deficiencies exist in the approved design drawings, the owner shall be required to correct the deficiencies to meet the requirements of the regulations at no expense to the Town."
- 3.2.10(17)......Note the following: "If, during construction, it becomes apparent that additional erosion control measures are required to stop any erosion on the construction site due to actual site conditions, the Owner shall be required to install the necessary erosion protection at no expense to the Town."
- 3.2.10(18)......Note the following: "All materials and methods of construction shall conform to Town Regulations and the latest edition of the New Hampshire Department of Transportation's Standard Specifications for Road and Bridge Construction".
- 3.2.10(19)......Note the following: "In accordance with Town Regulations and RSA 676:13, all improvements specified on these site plans shall be constructed, completed, inspected and approved by the Town of Barrington prior to the issuance of a certificate of occupancy."
- 3.2.10(20)......For sites requiring off-site improvements, note the following: "In accordance with Barrington Site Plan Review Regulations and RSA 676:12, all off-site improvements specified on these site plans shall be constructed, completed, inspected and approved by the Town of Barrington (and/or the NHDOT, if applicable) prior to the issuance of a certificate of occupancy."

## 3.3.....Existing Conditions Plan

The existing conditions plan shall show the following:

- 3.3.1.....Boundaries Existing lot boundary defined by metes and bounds. The boundary of the entire lot showing bearings to the nearest second and distances to the nearest 0.01 feet on all property lines. The error of closure for the property boundary should be stated on the plan and shall not be less than one (1) inch in ten thousand (10,000) feet.
- 3.3.2.....Surveyor's certification Stamped and signed by Licensed Land Surveyor
- 3.3.3....Existing topography At 2-foot contour interval minimum
- 3.3.4.....Boundary monuments Including monuments found and monuments to be set
- 3.3.5.....Property records Map # and Lot #, plan and deed references, owner name and addresses, and zoning of all abutting land owners
- 3.3.6.....Existing streets Name and calls, right-of-way dimensions, and pavement width dimensions
- 3.3.7.....Municipal boundaries if any
- 3.3.8....Existing easements Identified by type
- 3.3.9....Lots Area of each lot being developed (in acres and square feet)
- 3.3.11.....Zoning district boundary lines including the GR, NR, VD, and RC districts shown for the subject lot and abutting lots as applicable
- 3.3.12.....Overlay district boundaries Limits of HCO, WDO, WCO, SDO, GPO, and FDO as identified in the Barrington Zoning Ordinance
- 3.3.13......Wetland delineation including wetland delineation criteria and wetland Scientist certification
- 3.3.14.....Owner(s) signature(s)
- 3.3.15.....Setbacks All required setbacks including any applicable buffers (see Figure 2)
- 3.3.16......Existing Man-made Features Including buildings, wells, septic systems, stone walls, paved drives, gravel drives; such map shall indicate which of such features are to be retained and which are to be removed or altered
- 3.3.17.....Existing Landscaping and Natural Features Location and name (if any) of any streams, wetlands, lakes, and ponds; existing tree lines, trees greater than 15 inches in diameter, and species. Such map shall indicate which of such features are to be retained and which are to be removed or altered.
- 3.3.18.....Floodplains Location and elevation(s) of one-hundred (100)-year flood zone per FEMA Flood Insurance Study or as determined by drainage study
- 3.3.19.....Utilities Existing overhead and underground utility lines, poles, towers, and similar utility structures
- 3.3.20.....Abutting Land Uses All abutting land uses within 300 feet of the perimeter of the site with approximate location of structures thereon including roads
- 3.3.21.....Buildings and Structures The shape, size, height, and location of existing structures located on the site. Such map shall indicate which of such buildings and structures are to be retained and which are to be removed or altered.

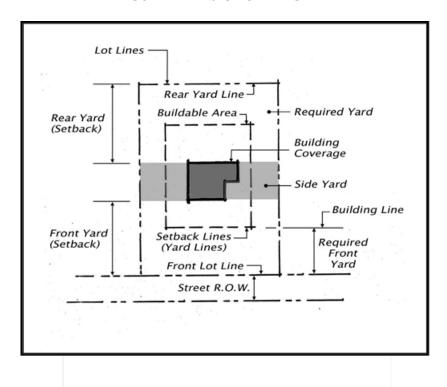


FIGURE 2 – BASIC LOT DIAGRAM

## **3.4.....Permits**

The applicant shall be responsible for obtaining the approvals and necessary permits from governmental or municipal agencies. A copy of each permit shall be submitted to the Town of Barrington and the permit number shall be shown on the plan. State or Federal Permits relating to a project are required as a condition of final approval. (See RSA 676:4Ii.)

#### 3.5.....Improvement Plans

When improvements are proposed to be constructed as part of the site plan application, the Applicant is required to submit improvement plans, including plans required for all off-site improvements. All improvement plans shall be stamped and signed by a professional engineer. The improvement plans shall include:

#### 3.5.1....Grading and General Features

All existing features shall be presented as lightly shaded or grey scale, but shall be legible to provide contrast to the proposed features:

- 3.5.1(1)......Proposed topography (two (2)-foot contour interval minimum)
- 3.5.1(2).....Existing and proposed spot elevations
- 3.5.1(3).....Existing and proposed edge of pavement
- 3.5.1(4).....Existing and proposed curb line
- 3.5.1(5).....Existing and proposed buildings and structures
- 3.5.1(6).....Existing and proposed retaining walls

- 3.5.1(7).....Existing and reconstructed stone walls
- 3.5.1(8)..........Wetland wetland limits (including areas in prime wetlands) identified, impact area in square feet for each individual location, and mitigation areas (as may be required)
- 3.5.1(9).....Existing and proposed tree line
- 3.5.1(10).....Benchmarks

#### 3.5.2....Existing and Proposed Drainage Systems

A storm drainage plan based on a 50 year storm event and plans for snow removal and storage:

- 3.5.2(1)......Pipes/culverts type, size, length and slope, inverts, end sections/head walls, minimum cover and location, and outlet erosion protection for each location
- 3.5.2(2).....Structures location, type, size, rim elevations, and inverts for existing catchbasins, drain manholes, and special structures
- 3.5.2(3)......Swales/ditches/waterways flow arrows (direction of flow), grading, spot elevations, and erosion protection (riprap, matting, etc.)

## 3.5.3.....Temporary Erosion Protection During Construction

Silt fence, hay bales, matting, mulch, etc.

## 3.5.4.....Existing and Proposed Sanitary Sewer System

Existing and proposed on-site sewage disposal systems shall be shown on the plan.

#### 3.5.5....Existing and Proposed Water System

Including pipes (type and size), dry hydrants (location approved by Fire Department), and services to each building.

## 3.5.6....Existing and Proposed Gas Lines

Reserved

## 3.5.7....Telephone/Electrical/Cable

The size and location of all proposed public and private utilities including poles, pedestals/transformers, overhead lines, underground lines, and services to each lot or building.

#### 3.5.8.....Proposed Buildings and Structures

The shape, size, height, and location of the proposed structures including any expansion of existing buildings.

## 3.5.9.....Proposed Vehicle and Pedestrian Access

Proposed streets, driveways, and sidewalks, with indication of direction of travel for one way streets and drives and inside radii of all curves. Site distance shall be at 100 feet per 10 miles of speed. The width of the streets, driveways, and sidewalks and the total number of parking spaces shall be shown. In addition, loading spaces and facilities associated with the structure on the site shall be shown.

#### 3.5.10.....Landscaping and Screening

The location, type and size, species and material type of all proposed landscaping and screening.

## 3.5.11......Parking and Circulation

- 3.5.11(1).......Parking Plan Showing all designated parking areas including surface materials, curbing, parking space and aisle dimensions, total number of spaces (including handicapped parking and shared parking areas), and off-street loading areas.
- 3.5.11(2).......Circulation Plan for the interior of the lot showing provisions for both auto and pedestrian circulation. An access plan showing means of access to the site and proposed changes to any existing public streets including any traffic control devices, pedestrian and bicycle amenities, snow storage areas, directional signage, and other features necessary in conjunction with the site development plan.

## 3.6......Construction Detail Drawings

Construction details shall conform to New Hampshire Department of Transportation Standards and Specifications for Road and Bridge Construction, Town of Barrington Highway Department requirements, and the Site Plan Review Regulations.

- 3.6.1....Typical cross-section of roadway
- 3.6.2....Typical driveway plan and profile apron detail
- 3.6.3.....Curbing detail
- 3.6.4....Guard rail detail
- 3.6.5....Sidewalk detail
- 3.6.6....Traffic signs and pavement markings
- 3.6.7....Typical under drain trench detail
- 3.6.8.....Drainage structure(s) catchbasins (including frame and grate), manhole (including frame and cover), outlet structure (detention basins), head walls, flared end sections
- 3.6.9.....Outlet protection riprap apron
- 3.6.10....Level spreader
- 3.6.11....Treatment swale
- 3.6.12.....Typical section at detention basin
- 3.6.13.....Typical pipe trench for drainage, sewerage, water, and utilities
- 3.6.14....Septic system structures
- 3.6.15......Water system structures
- 3.6.16.....Hydrants
- 3.6.17.....Erosion control details: hay bale barriers at waterways and catch basins, silt fence, stone check dam, inlet filter basket
- 3.6.18......Notes for construction sequence, erosion control, and landscaping

## 3.7.....Building Renderings

The applicant shall submit a set of renderings showing the front, side and rear view elevations of the proposed building and conform to the Building Design and Materials requirements of Article 4.

#### 3.8.....Illumination Plans

The applicant shall submit to the Town sufficient information, in accordance with Article 4, in the form of an overall exterior lighting plan, to enable the Town to determine that the applicable provisions will be satisfied. The lighting plan shall include at least the following:

- 3.8.1.....A site plan, drawn to the required scale, showing all buildings, landscaping, parking areas, and all proposed exterior lighting fixtures;
- 3.8.2.....Specification (details) for all proposed lighting fixtures including photometric data, designation as IESNA "cut-off" fixtures, Color Rendering Index (CRI) of all lamps (bulbs), and other descriptive information on the fixtures;
- 3.8.3.....Proposed mounting height of all exterior lighting fixtures;
- 3.8.4.....Analyses and luminance level diagrams showing that the proposed installation conforms to the lighting level standards in this section. Off-site lighting should be considered in the analyses; and
- 3.8.5.....Drawing of all relevant building elevations showing the fixtures, the portions of the walls to be illuminated, the luminance levels of the walls, and the aiming points for any remote light fixtures.

## 3.9.....Site Plan Documents and Reports

#### 3.9.1.....Protective Covenants

Covenants for the protection of open space or other purposes.

## 3.9.2.....Utility Clearance Letters

Certificate of approval from the appropriate utilities for extension and layout.

#### 3.9.3.....Deeds

Deeds for land to be conveyed to the Town of Barrington to be used for streets and other public purposes. Deeds shall be written in metes and bounds description.

#### 3.9.4.....Easements and Right-of-ways

Deeds of easements and right-of-way. Deeds shall be written in metes and bounds description.

# 3.9.5.....Permits

(See Section 3.4).

#### 3.9.6....Zoning Variances

Documentation of any action of the Town of Barrington Zoning Board of Adjustment relative to the site. All variances shall be listed on the plans.

#### 3.9.7....Traffic Impact Report

The applicant shall submit traffic impact information based upon the standards set in Article 4.

#### 3.9.8.....Waivers

(See Article 9).

## 3.9.9.....Notes Regarding Phasing

If the project is to be phased, the Applicant shall submit a document for review stating how the project is to be phased, work to be performed in each phase, and the schedule for each phase. Phasing shall meet the requirements and approval of the Town of Barrington Highway Department and Fire Department. The phasing shall be noted on the plans.

# **3.9.10......Agreements**

Agreements, if any, between the applicant and the Town regarding public improvements or other purpose.

## 3.9.11.....Other Documents

As required by the Planning Board.

## ARTICLE 4 .... DESIGN AND CONSTRUCTION STANDARDS

#### 4.1.....General

## 4.1.1.....Approval of Improvements

All improvements shall be designed and constructed in accordance with the Town of Barrington regulations and standards, and shall be subject to the approval of the Planning Board.

#### 4.1.2.....Installation and Maintenance

The applicant is responsible for the satisfactory installation of all required improvements and maintenance of these improvements in a satisfactory condition without cost to the Town.

## 4.1.3.....Standards and Specifications

The following standards and specifications shall be used in the design and construction of all improvements unless stated otherwise in these regulations:

- 4.1.3(1)......The Town of Barrington Zoning Ordinance
- 4.1.3(2).....Town of Barrington Subdivision Regulations
- 4.1.3(3).......Manual on Drainage Design for Highways, State of N.H., Department of Public Works and Highways, current edition
- 4.1.3(4)......Manual on Uniform Traffic Control Devices (MUTCD), U.S. Department of Transportation, Federal Highway Administration, current edition
- 4.1.3(5)......Standards and Specifications for Road and Bridge Construction, State of N.H. Department of Transportation, current edition
- 4.1.3(6)......Highway Design Manual, State of N.H., Highway Design Division, current edition
- 4.1.3(7)...........A Policy of Geometric Design of Highways and Streets, AASHTO 1990
- 4.1.3(8)......Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire, August 1992, prepared by Rockingham County Conservation District (Green Book)
- 4.1.3(9)......State of New Hampshire Standards for Design and Construction of Sewerage and Wastewater Treatment Facilities, N.H. Department of Environmental Services, Code of Administrative Rules, Env-ws 700, September 1997 (or latest revision)
- 4.1.3(10).......Subdivision and Individual Sewage Disposal System Design Rules, N.H.

  Department of Environmental Services, Code of Administrative Rules, Env-ws 1000, August 1999 (or latest revision)
- 4.1.3(11).......Design Standards for Small Public Drinking Water Systems, N.H. Department of Environmental Services, Env-ws 372, June 1997 (or latest revision)
- 4.1.3(12)......Trip Generation Handbook, Institute of Transportation Engineers, current edition;
- 4.1.3(13).......Other standards and specifications as approved by the Town of Barrington.
- 4.1.3(14)......Other standards and specifications as required under state or federal law

#### 4.2.....Monuments

The applicant shall be required to show and label all monuments. If no monuments are found, the applicant shall be required to set the monuments in accordance with the following regulations:

## 4.2.1....Location

Monuments for the lot that is being developed shall be placed not more than 300 feet apart in any straight line, and at all corners, at the beginning and end of all curves and at all angle points.

#### **4.2.2.....**Lot Corners

All lot corners shall be marked by one (1) inch diameter iron pipe or five-eighths (5/8) inch steel rebar at least 30 inches in length or a drill hole set in an existing stonewall.

## 4.2.3.....Site Plan

A note shall be placed on the Site Plan indicating that all monuments have been set in accordance with these regulations. Any monuments that are not set prior to approval by the Planning Board shall be bonded for as part of the conditions of approval and marked on the plans as "to be set."

#### **4.3.....Grading**

Grading shall be shown on the site plan with information including, but not limited to, the following:

#### 4.3.1.....Contours

Existing and proposed contours at two (2) foot contour intervals, based on USGS datum.

## 4.3.2....Spot Elevations

Spot elevations shall-be shown along all drainage facilities and adjacent streets at not more than 100 foot intervals in all directions.

#### 4.3.3....Layout

The layout of the existing and proposed streets, lots, wetlands (including square foot impact areas), and drainage facilities.

#### **4.3.4.....Buildings**

The location of all existing and proposed buildings and structures on site and within 50 feet of the property line, if possible.

#### 4.3.5....Erosion Control

The erosion control measures shall be indicated on the plans and be in accordance with best management practices of the Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire. Proper construction details shall be provided in the plan set.

#### **4.4.....** Utilities

## 4.4.1.....Locations

The Applicant shall show the location and size of all underground and overhead non-municipal utilities. The location of all manholes, transformer poles and other appurtenant facilities or structures shall be shown.

## 4.4.2....Type

Non-municipal utilities shall include but not be limited to gas, electric, solar energy generation, telephone, and cable television.

# 4.4.3.....Underground Utilities

All electric, telephone, and cable systems shall be installed below ground to the satisfaction of the specific utility. The developer shall install street lights when required by the Planning Board. Underground utilities placed within a public right-of-way shall be located a minimum of distance off the centerline of the roadway pavement as determined by the Barrington Highway Department. Utilities shall be located so as not to conflict with roadside drainage systems.

#### 4.5.....Water System

All sites shall provide adequate water supply for domestic purposes and fire protection. Provisions shall be made for on-site water supply or connection to a community water supply system. All community water supply systems and facilities shall be designed by a New Hampshire licensed professional engineer specializing in civil engineering.

#### 4.5.1....Individual Well

When a project is to be served by an individual well, the well location and protective radius shall be shown on the plan. Where the protective well radius encroaches on abutting properties, all existing features should be shown within the protective well radius. The State subdivision approval number shall be shown on the plan. Private individual wells shall be designed and constructed in accordance with the New Hampshire Department of Environmental Services Regulations and the Town of Barrington Regulations. Protective well radius shall not encroach on rights-of-way.

#### 4.5.2.....Community Water System

When a private community water supply is to be utilized, plans similar to those for municipal water supply shall be submitted indicating the source of water, details of any pumping station and other distribution (including maintenance and repair) and treatment facilities. Certification from the New Hampshire Department of Environmental Services shall be submitted. The State subdivision approval number shall be shown on the plan. Common water systems shall be designed and constructed in accordance with the New Hampshire Department of Environmental Services Regulations. The proposed ownership and operation shall be acceptable to the Town of Barrington, including all necessary easements, agreements, and licenses.

#### 4.5.3.....Fire Protection

Flow rate for fire protection and hydrant locations shall be coordinated with and approved by the Town of Barrington Fire Department. The Applicant shall provide a written report documenting the required information.

#### 4.6.....Sewage Disposal

All sites shall provide for adequate and sanitary on-site disposal of sewage. A State approved disposal system is required prior to final approval, and the approval number shall be indicated on the plat. The system shall be installed and functioning prior to the issuance of the Certificate of Occupancy.

## 4.6.1....Individual Disposal System

When a project is to be served by an individual septic system, certification from the Town of Barrington Health Officer and the New Hampshire Department of Environmental Services shall be submitted. The State subdivision approval number shall be shown on all plans. Individual disposal systems shall be designed and constructed in accordance with the New Hampshire Department of Environmental Services and the Town of Barrington Regulations.

# 4.6.2.....Privately-Owned Community Disposal Systems

Community disposal systems shall be designed and constructed in accordance with the New Hampshire Department of Environmental Services and the Town of Barrington Regulations. The design and location of the common disposal system shall be approved by the New Hampshire Department of Environmental Services and the Town of Barrington. The proposed ownership and operation shall be acceptable to the Town of Barrington, including all necessary easements, agreements, and licenses.

## 4.7.....Drainage System

#### 4.7.1.....General

The proposed development shall provide for proper surface drainage so that removal of surface waters will not adversely affect neighboring properties or the public storm water system and will conserve flooding, erosion and sedimentation.

- 4.7.1(1)......The drainage system shall be designed so that the post development runoff rate does not exceed the pre-development runoff rate. Detention/retention areas may be used to achieve this requirement.
- 4.7.1(2)......Surface water runoff shall be carried away in a system of swales, drainage-ways, culverts and channels to a natural watercourse or existing drainage facilities.
- 4.7.1(3)..........Where a site is traversed by a watercourse, drainage way, channel or stream there shall be provided an easement conforming to the lines of such watercourse.
- 4.7.1(4)......A culvert or other drainage facility shall be large enough to accommodate runoff from its entire upstream area.
- 4.7.1(5)..........When a proposed drainage system will carry water across land outside the site appropriate drainage rights must be secured and indicated on the plan.

- withhold approval of the project until provisions have been made for the improvement of said potential condition.
- 4.7.1(7)..........Where the Barrington Highway Department or Planning Board determines that the downstream, offsite drainage system is substandard, the Planning Board may require the applicant to improve the drainage system.

## 4.7.2.....Design Computations

A drainage study shall be submitted for review to the Land Use Department Office, or the Town's appointed engineer. A drainage study shall include the following information:

- 4.7.2(1).......... A description of the methodology used and results of the analyses
- 4.7.2(2)......A summary table comparing the existing and post-development rates of runoff for each individual drainage basin/watershed to abutting properties. All watersheds and drainage areas shall be consistently labeled in the tables, calculations, and plans.
- 4.7.2(3).........A summary table of each pipe indicating project location, pipe size, type, length, slope, Manning's "n" value, peak discharge, depth of flow, and peak velocity for the design storm. The summary table shall also include hydraulic grade line (HGL) elevations at each location in closed conduit piping systems.
- 4.7.2(4)......A summary table of each swale and channel indication project location, cross-section/channel width, slope, Manning's "n" value, peak discharge, depth of flow, pretreatment, and peak velocity for the design storm.
- 4.7.2(5)......The project location and watershed area shown on a USGS quadrangle or as a figure in the report
- 4.7.2(6)..........A watershed area plan for existing conditions showing topography and existing ground elevations at two (2) foot contour intervals for the project site. The plan shall clearly show the boundary of each drainage area and subarea with identifying label and the size indicated in acres.
- 4.7.2(7)..........A watershed area plan for post-development conditions showing existing and proposed topography at two (2) foot contour intervals for the project site. The plan shall clearly show the boundary of each drainage area and subarea with identifying label and the size indicated in acres. The post-development area shall be shown on a separate plan from the existing conditions.
- 4.7.2(8)......Runoff calculations shall be completed for the existing and post-development conditions using Soil Conservation Service (SCS) methods as described in the Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire for the appropriate design storms as required by the regulations.
- 4.7.2(9).......Flood routing calculations shall be provided for the design of each detention basin and pond using acceptable methods such as Modified Puls, Storage Indication, or as may be approved by the Town's appointed engineer. In addition to the design storm, a fifty (50) year storm analysis shall be conducted to establish the 50 year elevation at the detention basin.

- 4.7.2(10).........Water quality treatment facilities and pretreatment shall be designed to the NH Department of Environmental Services standards and are in addition to these regulations
- 4.7.2(11)......Riprap design calculations shall be provided to the requirements of the Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire for each pipe outfall location and where necessary for open channels and swales
- 4.7.2(12)......The report shall be stamped by a licensed professional engineer in the State of NH.
- 4.7.2(13).......The drainage system may connect to another adjacent development or discharge to an existing drainage system, those connection(s) shall be stipulated on the plans and the study shall address how the interconnected systems meet all the requirements above.

## 4.7.3......Hydraulic Grade Line (HGL)

- 4.7.3(1)......Closed Conduit Closed conduit systems shall be designed to convey the appropriate design storm required by the regulations under gravity flow conditions with no more than full flow pipe conditions.
- 4.7.3(2)......Open Channels and Swales For open channels and swales, the HGL shall be shown for the appropriate design storm required by the regulations.
- 4.7.3(3)......Detention Basins/Ponds The HGL shall be shown for the 50-year flood event.

## 4.7.4.....Flow Computations

Flow computations shall be in accordance with the following:

- 4.7.4(1)......Manning's formula shall be used to compute capacities for all open channels, swales, and closed piping drainage systems; and
- 4.7.4(2)......The capacity of cross culverts shall be computed in accordance with the Manual on Drainage Design for Highways NH Department of Transportation.

#### 4.7.5.....Design Runoff

The rainfall frequency to be used with this formula shall be as follows:

- 4.7.5(1).........Commercial Areas 50 years
- 4.7.5(2).....Industrial Areas 50 years
- 4.7.5(3).....Flood Protection Works 50 years
- 4.7.5(4).....Multi-Family Residential 50 years

#### 4.7.6.....Placement of Drain Lines

All off-site drain lines shall be placed within right-of-way dedicated for a public street unless use of easements is specifically approved by the Board.

## 4.7.7.....Pipe Size, Velocity and Type

- 4.7.7(1)......Minimum allowable pipe diameter in any storm drain system shall be 12 inches.
- 4.7.7(2).....The minimum design velocity in pipes shall be 2 feet per second and the maximum velocity shall be 10 feet per second.
- 4.7.7(3)......The minimum depth of cover for storm drain lines shall be 36 inches from the top of pipe to finished grade.

- 4.7.7(4).....Bedding and backfill shall be 3/4 inch crushed stone. Bedding shall be a minimum 6-inch depth in earth and 1 2-inch depth in ledge.
- 4.7.7(5)......Acceptable pipe material shall include ADS N12 and reinforced concrete pipe (RCP).
- 4.7.7(6).........Maximum length between drain manholes shall be 300 feet.

## 4.7.8.....Drainage structures

Manholes and other drainage structures shall be pre-cast concrete meeting H-20 loading and constructed and installed in accordance with New Hampshire Department of Transportation Standards and Specifications for Road and Bridge Construction. Drainage structures shall not exceed eighteen (18) feet in depth (rim to bottom of structure). All catch basins shall be outfitted with a polyethylene liner downspout. Outlet structures at detention basins, when necessary, shall be the typical Town of Barrington standard structure - a vertical slotted weir with overtopping grate and properly sized outlet pipe.

## 4.7.9.....Driveway Culverts

The location, length, size, material, bedding and backfill of all driveway culverts shall be approved by the Town Road Agent prior to construction. Driveway culverts shall be located a minimum distance off the edge of road way pavement as determined by the Road Agent.

#### 4.8.....Access

#### 4.8.1.....General

All access shall be designed to accommodate prospective traffic and meet requirements of the Zoning Ordinance, Subdivision Regulations, and all other applicable town and state regulations including those of the Barrington Fire Department. All sites shall have adequate provision for a safe and suitable access to a Class V or better road. Where an adjacent existing street from which access is gained is deemed to be substandard, the upgrading of said street shall be provided for. Where traffic from a proposed site will adversely impact adjacent streets or intersections, provisions shall be made for the mitigation of said impacts. If new streets are to be built as part of a site plan (e.g., for a multi-family residential site plan), then the design and submission requirements of such streets shall comply with the Barrington Subdivision Regulations. The Planning Board strongly encourages the use of joint driveways whenever feasible as provided below.

#### **4.8.2.....** Driveways

- 4.8.2(1)......Permits Applications fronting on any state road shall require a state driveway permit from the NH Department of Transportation. Applications fronting on town roads shall require a Town Driveway Permit issued by the Town of Barrington Road Agent. The applicant shall submit a copy of the permit to the Planning Board and the permit number shall be shown on the plan.
- 4.8.2(2)......Dimensional Requirements Driveways shall conform top the Barrington Subdivision Regulations.

4.8.2(3)......Separation of Access Points - Access points shall not be located closer than 50 feet from intersecting streets. Access points shall not be located closer than 75 feet from one another on the same side of the street in the Village (V) and Town Center (TC) zoning districts and 150 feet from one another on the same side of the street in all other zoning districts. Measurement shall be between the edges of the pavement of each driveway, excluding flared pavement at the apron.

## 4.8.3.....Access Management

Where the existing configuration of properties and driveways in the vicinity of the site precludes spacing of a driveway in accordance with the provisions above, the Planning Board may require that one, or a combination of, the following methods be utilized:

- 4.8.3(1)......Joint Use Driveways Wherever feasible, the Planning Board may require a joint-use driveway serving two abutting properties, with appropriate cross-access easements provided.
- 4.8.3(2)......Driveway Closings The property owner may be required to close and eliminate any pre-existing driveways, if any, on the project site at the discretion of the Planning Board after approval of a new driveway.
- 4.8.3(3).........Side Street Access The Planning Board may allow properties with frontage on a state highway and another public side street to provide a secondary access point from the side street in order to reduce turning movements onto arterial roadways such as Routes 125, 9, 202 and 4. (See Figure 3)
- 4.8.3(4)......Frontage Roads The Planning Board may require abutting properties with frontage on a state highway (such as Routes 125 and 9), to construct a frontage road for the purpose of accessing said properties and reducing the total number of access points directly to the highway. The construction standards for frontage roads shall meet the requirements of the road design standards in the Barrington Subdivision Regulations. (See Figure 3)

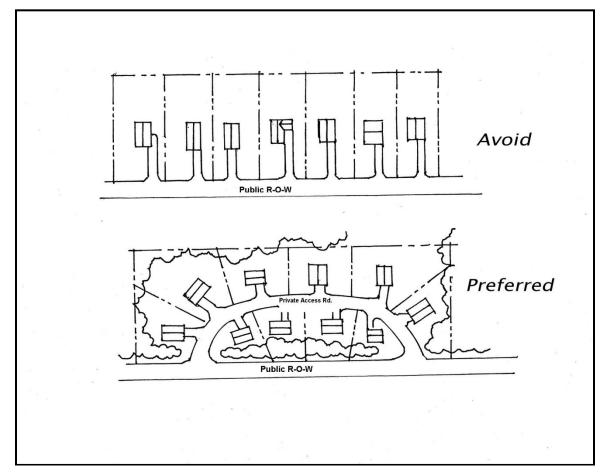


FIGURE 3 – PREFERRED FRONTAGE ROAD ALTERNATIVE

## 4.8.4.....Pedestrian and Bicycle Access

The Board may require the construction of sidewalks or pathways for pedestrian and bicycle access to schools, parks, shopping areas and transit stops. In the Village and Town Center zoning districts sidewalks may be required on both sides of the street. Construction of sidewalks and pathways shall be in accordance with the Barrington Subdivision Regulations.

#### 4.8.5.....Turn Lanes

The Board may require turn lanes off public roadways depending on the size, type and projected traffic from a given development. A turn lane shall meet the design standards specified in the Barrington Subdivision Regulations.

## 4.8.6....Intersection Site Distance

The minimum sight distance shall meet the requirements prescribed by the current edition of AASHTO's *A Policy on Geometric Design of Highways and Streets* (Green Book) unless otherwise required by the NHDOT as part of a State Driveway Permit

(see Table 1). Proper visibility easements shall be provided to meet the sight distance requirements.

TABLE 1 - INTERSECTION SITE DISTANCE						
Design Speed	Stopping Sight Distance	Design Turning Left	Design Right Turn or Across Intersection			
(mph)	(ft)	(ft)	(ft)			
15	80	170	145			
20	115	225	195			
25	155	280	240			
30	200	335	290			
35	250	390	335			
40	305	445	385			
45	360	500	430			
50	425	555	480			
55	495	610	530			
60	570	665	575			
65	645	720	625			
70	730	775	670			
75	820	830	720			
80	910	885	765			

AASHTO Green Book, 6th Edition, 2011

- 4.8.6(1)...........Height of sight distance measurements shall be 3.5' above the proposed surface.
- 4.8.6(2)......The vertex of the sight triangle shall be set 20' from the edge of traveled way on the major street. In cases where there is no white line, the vertex shall be set 20' from the edge of pavement. The vertex shall be centered on the lane subject to stop control.
- 4.8.6(3)..........A sight distance profile and plan showing intersection sight triangles, stamped by a NH Professional Engineer or Licensed Land Surveyor shall be provided, demonstrating that the recommended sight distances are achieved, and the area within the sight triangle is free of sight obstructions. The Planning Board may make exceptions for signs, utility poles, mailboxes, and fire hydrants.

Collector or Subcollector

CLEAR SITE DISTANCE

X = 500 FEET

Y = 430 FEET

Subcollector or Access

FIGURE 4 – EXAMPLE OF DESIGN INTERSECTION CLEAR SITE DISTANCE FOR 45 MPH PASSENGER CAR DESIGN SPEED

AASHTO Green Book, 6th Edition, 2011

## 4.8.7....Stopping Sight Distance

The minimum sight distance shall meet the requirements prescribed by the current edition of AASHTO's *A Policy on Geometric Design of Highways and Streets* (Green Book). The sight distance shall be measured at the point of entry onto a public road and shall meet the following standards:

TABLE 2 - DESIGN STOPPING SIGHT DISTANCE							
Design Speed	Design for Level Terrain	Downgrade			Upgrade		
(mph)	(ft)	3%	6%	9%	3%	6%	9
15	80	80	82	85	75	74	-
20	115	116	120	126	109	107	1
25	155	158	165	173	147	143	1
30	200	205	215	227	200	184	1
35	250	257	271	287	237	229	2
40	305	315	333	354	289	278	2
45	360	378	400	427	344	331	3
50	425	446	474	507	405	388	3
55	495	520	553	593	469	450	4
60	570	598	638	686	538	515	4
65	645	682	728	785	612	584	5
70	730	771	825	891	690	658	6
75	820	866	927	1003	772	736	7
80	910	965	1035	1121	859	817	7

AASHTO Green Book, 6th Edition, 2011

## 4.9.....Off-Street Parking and Loading Standards

Off-street parking and loading spaces shall be provided as set forth below. The Planning Board may require more or less parking spaces, or a different parking circulation and layout based on a review of the site and proposed use. Any increase or reduction of the parking standard for a given use must be supported with good cause by the applicant. Parking shall be designed to provide for the maximum pedestrian safety, ease in traffic flow, and access/egress on the property, while minimizing the need for impervious surfaces and maintaining the visual character of the property and adjacent areas.

### 4.9.1....Intent

It is the intent of this regulation to:

- 4.9.1(1)......Ensure there are adequate parking and loading facilities to serve the use or uses of the property.
- 4.9.1(2).......Ensure that any parking facility is so designed to provide proper circulation, reduce hazards to pedestrians, and protect the users of adjoining properties from nuisance caused by the noise, fumes, and glare of headlights which may result from the operation of vehicles parking off the street.
- 4.9.1(3)......Reduce congestion in the streets and contribute to traffic safety.
- 4.9.1(4).....Encourage alternate modes of travel that will reduce dependence upon the single-occupancy automobile.

### 4.9.2....General Standards

- 4.9.2(1)......All multi-family dwellings and non-residential parking areas shall be located behind the front-yard setback.
- 4.9.2(2)..........Unless no other practical alternative is available, parking areas shall be designed so that, without resorting to extraordinary movements, vehicles may exit such areas without backing onto a public street. This requirement does not apply to parking areas consisting of driveways that serve one (1) or two (2) family residential units, although backing onto arterial streets is discouraged.
- 4.9.2(3).......Parking areas of all developments shall be designed so that sanitation, emergency and other public service vehicles can serve such developments without the necessity of backing unreasonable distances or making other dangerous or hazardous turning movements.
- 4.9.2(4).........All parking areas shall be designed so that vehicles cannot extend beyond the perimeter of such area onto adjacent properties or public right-of-way. Such areas shall be designed so that vehicles do not extend over public sidewalks, leave a minimum of four (4) feet of clearance on internal sidewalks, and do not cause damage to any wall, vegetation, or other obstruction.
- 4.9.2(5)......Circulation areas shall be designed so that vehicles can proceed safely without posing a danger to pedestrians or other vehicles.

## 4.9.3.....Existing, Non-Complying, and Expanded Uses

4.9.3(1)......Existing Structures - Any structure or land use lawfully in existence prior to the adoption of this ordinance shall not be subject to the requirements of this Article

- so long as the kind or extent of use is not changed, and provided further that any parking facilities now serving such structures shall not in the future be reduced below such requirements.
- 4.9.3(2)...........Change or Expansion of Use Whenever there is an alteration or conversion of a structure or a change or expansion of a use which increases the parking requirements, the total additional parking requirements for the alteration, conversion, change, or expansion shall be provided in accordance with the requirements of this Article. A waiver may be requested under the provisions of Article 8 below.
- 4.9.3(3)...........Non-complying Commercial Structure Where the computed parking requirement for a nonresidential use in any Commercial District is five (5) spaces or less, the Planning Board may waive all or part of such computed requirements.
- 4.9.3(4)......Non-complying Residential Structure Where additions or conversions to existing structures add living space but do not add dwelling units, and such existing structures do not meet the parking standards of Subsection 4.9.13, one (1) parking space shall be provided for each additional room. Single detached dwellings shall be exempt from this requirement.

# 4.9.4.....Parking Space and Aisle Requirements

4.9.4(1)..........Standard Spaces and Aisle Requirement - A standard space size shall be nine (9) feet wide by eighteen (18) feet long for off-street parking spaces. On-street or parallel parking spaces shall be eight (8) feet wide by twenty (20) feet long. When possible, off-street parking spaces should be laid out on a 90 degree angle with a standard aisle width of 24 feet as shown in Figure 5. Angled on or off-street parking spaces must meet the dimensional standards shown in Table 3.

TABLE 3 – DIMENSIONAL STANDARDS FOR PARKING SPACES AND AISLES								
Table Interior dimensions are given in feet.		Figure 5 Parking Angle in Degrees						
		Dimension	Para	illel	30 Degree	45 Degree	60 Degree	90 Degree
Stall Width (In Fee	et)	-	8	ft	9 ft	9 ft	9 ft	9 ft
Stall Length (In Fee	et)	-	20	ft	18 ft	18 ft	18 ft	18 ft
Overhang (In Fe	et)	Α	0	ft	1 ft	1.41l ft	1.75 ft	2 ft
Vehicle Projection	Vehicle Projection (In Feet)		8	ft	17 ft	19 ft	20 ft	18 ft
Aisle Width	One Way	С	15	ft	15 ft	15 ft	18 ft	22 ft
(In Feet)	Two Way	C	20	ft				24 ft
Total Width Curb to	One Way	D	31	ft	47 ft	51 ft	55 ft	58 ft
Curb (In Feet)	Two Way	ט	36	ft				60 ft
Total Width Wall	One Way	Е	31	ft	49 ft	54 ft	58 ft	58 ft
to Wall (In Feet)	Two Way	_	36	ft	n/a	n/a	n/a	60 ft
Total Width for Single Loaded Aisle (In Feet)			23	ft	32 ft	34 ft	38 ft	40 ft

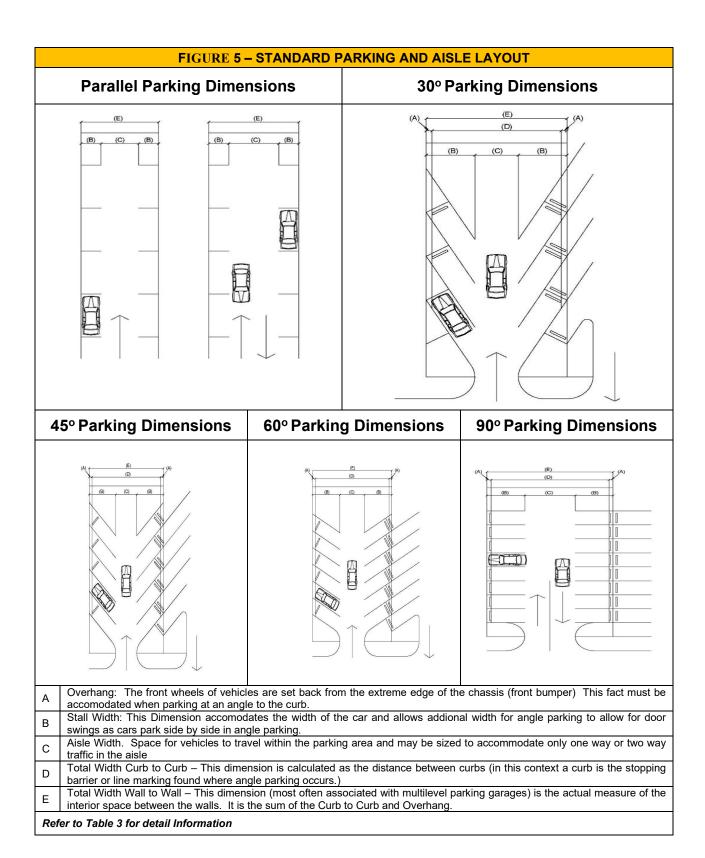
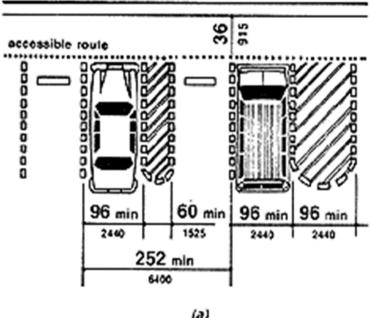


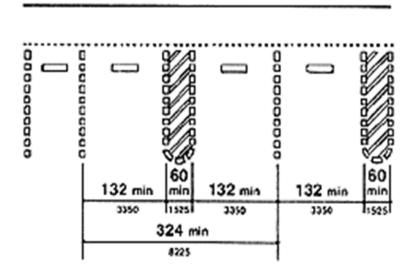
TABLE 4 – MINIMUM NUMBER OF ACCESSIBLE SPACES

Total Parking in Lot	Required Minimum Number of Accessible Spaces			
1 to 25	1			
26 to 50	2			
51 to 75	3			
76 to 100	4			
101 to 150	5			
151 to 200	6			
201 to 300	7			
301 to 400	8			
401 to 500	9			
501 to 1000	2 percent of total			
1001 and over	20 plus 1 for each 100 over 1000			

FIGURE 6 – HANDICAPPED PARKING DIAGRAM

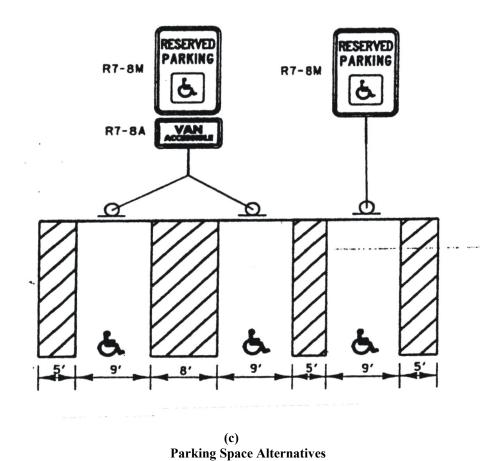


(a) Van Accessible Space at End Row



(b) Universal Parking Space Design

Amended May 17, 2022



Source: Americans with Disabilities Act Accessibility Guidelines

4.9.4(3) Tandem Parking Restriction - Parking facilities shall be designed so that each motor vehicle may proceed to and from the parking space provided for it without the moving of any other motor vehicle. This restriction shall not apply to single detached dwellings and duplexes.

### 4.9.5.....Access and Circulation Design

4.9.5(1)......Access and Driveways - Dimensional standards for driveways and access to public roads shall be as listed in Table 5.

TABLE 5 – DIMENSIONAL STANDARDS FOR DRIVEWAYS					
Land Use Type	Parking Spaces Served	Driveway Width	Curb Radius		
Residential	All Darling Change	9 Feet Min.	NA		
Residential	All Parking Spaces	18 Feet Max.	NA		
	Less Than 100	18 Feet Min.			
	Less Than 100	30 Feet Max.			
Commercial*		18 Feet Min.	60 Feet		
	100 and More	40 Feet Max	Maximum		
		(Including			
		Center Islands)			
* For commercial and industrial driveways a single lane minimum width is 11 feet and maximum 16 feet.					

- 4.9.5(2)......Pedestrian Crossings The Board may require pedestrian refuge islands on driveways depending on width of curb-cut and location of sidewalk. Pedestrian crosswalks shall be striped.
- 4.9.5(3)......Parking on Driveways Parking provided on driveway surfaces shall allow for movement of other vehicles on the driveway. Driveway parking shall be contained entirely on the driveway surface.
- 4.9.5(4)..........Internal Sidewalks- Internal sidewalk connections to an existing public sidewalk or street may be required by the Planning Board. Internal sidewalks shall be a minimum of 4 feet wide excluding vehicle overhang. They shall be located in a safe, convenient and unobstructed area for pedestrian access. Ramps and striping shall be provided where internal sidewalks cross internal aisles, and where driveways bisect public sidewalks.
- 4.9.5(5)......Internal Driveways and Frontage Roads Internal vehicle access between two or more abutting commercial properties is generally encouraged by the Planning Board. Driveway and frontage roads shall meet the dimensional standards for commercial uses in Table 5 above.

# 4.9.6.....Off-Street Loading Requirements

4.9.6(1).........Minimum Off-Street Loading Requirements - Every structure constructed after the effective date of this ordinance and used for business, trade or industry, or structure that predates this ordinance that is modified to incorporate a new loading access or dock, shall provide space on the premises to accommodate the unloading and loading of the anticipated type and number of delivery vehicles. As a minimum, the number of spaces in Table 6 shall be provided. Such space shall have access to a public alley, or if there is no alley, to a public street.

TABLE 6- MINIMUM OFF-STREET LOADING REQUIREMENTS					
Retail Business and Services	1 space of at least 250 s.f. for each 3,000 s.f. of gross floor area or part thereof				
Wholesale and Industrial	1 space of at least 500 s.f. for each 10,000 s.f. of gross floor area or part thereof				
Bus and Truck Terminal	Sufficient space to accommodate the maximum number of buses or trucks to be stored or to be loading or unloading at the terminal at any one time				

- 4.9.6(2).....Loading and unloading areas should be so located and designed that the vehicles intended to use them can:
- 4.9.6(2)(a) ......Maneuver safely and conveniently
- 4.9.6(2)(b) ............Complete the loading and unloading operations without obstructing or interfering with parking spaces or parking lot aisle.

PARKING BEHIND OR TO REAR OF BUILDING

SERVICE AREA TO THE REAR

PUBLIC R-O-W

FIGURE 7 – PREFERRED OFF-STREET LOADING DIAGRAM

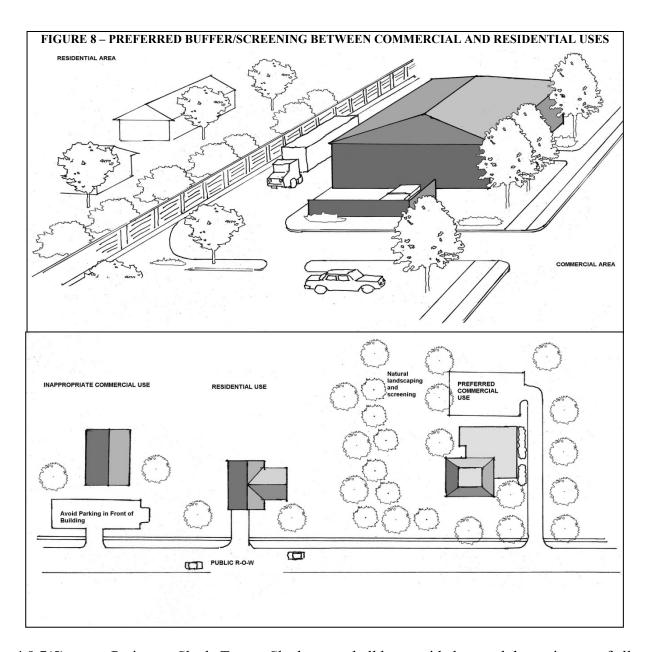
- 4.9.6(2)(c) .....Loading docks shall be situated in a manner that minimizes their visual impact from roads and public areas.
- 4.9.6(2)(d) .............No area allocated to loading and unloading facilities may be used to satisfy the area requirements for off-street parking.

- 4.9.6(3).....Loading areas shall be designed so that, without resorting to extraordinary movements, vehicles may maneuver without backing onto or off of a public street.

# 4.9.7....Landscaping in Parking Lots

Landscaping within parking areas shall provide visual and climatic relief from broad expanses of pavement and shall be designed to channel and define logical areas for pedestrian and vehicular circulation.

- 4.9.7(1)......Interior Landscaping Standards As a supplement to the parking lot landscaping standards contained in Section 4.10, a minimum percentage of the overall interior area of a parking lot (as measured by the exterior perimeter) shall be dedicated to landscaped areas (to be included on the landscape plans) with ground cover, shrubbery, and trees, as appropriate, as follows:
- 4.9.7(1)(a) ......10% on parking lots located in front of the principal building or on otherwise vacant lots.
- 4.9.7(1)(c) ...........5% on parking lots which are located at the rear of the principal building and largely obscured from the road.
- 4.9.7(2).....Truck Parking Areas Interior parking lot landscaping may be waived in truck parking areas provided they are screened and perimeter plantings, as described in items 5 through 7) below, are provided.
- 4.9.7(3)......Protection from Encroachment All landscaped areas shall be protected from encroachment by vehicles by curbing, landscaping timbers, curb stops, or other acceptable means.
- 4.9.7(4)......Internal Shade Trees Internal parking lot landscaping, as required by item 1) above, shall contain one deciduous shade tree for every 15 parking spaces. Trees shall be distributed throughout the parking lot as evenly as possible. Trees shall be set back at least 5 feet minimum from the face of the curb. Tree placement and parking lot lighting shall not conflict.



4.9.7(5)......Perimeter Shade Trees - Shade trees shall be provided around the perimeter of all parking areas at a minimum ratio of 1 tree per 40 feet of parking lot perimeter. Trees may be clustered or grouped, if desired, as long as clusters/groups are not more than 75 feet apart.

- 4.9.7(6)........Screening from Public Right-Of-Way All off-street parking areas located at the front or side of principal buildings or on vacant lots shall be screened from the public right-of-way with appropriate screening, as described in Section 4.10. Along the perimeter of parking lots with ten or more spaces, deciduous trees tolerant to the climatic conditions of Barrington shall be planted at forty (40) feet on center. Within the perimeter, shrubs shall be planted between the deciduous trees at five (5) feet on center. The shrubs shall be a mix of deciduous and evergreen species, tolerant to the climatic conditions of Barrington and shall be a minimum height of two (2) feet at the time of planting. If non-vegetative materials are used, appropriate ground cover, shrubs, and trees shall be planted (or retained) within the front area to soften the development. All trees, shrubs and landscaping materials shall be maintained in good condition so as to present a healthy, neat and orderly appearance.
- 4.9.7(6)(a).....At the discretion of the Planning Board, alternative methods of perimeter screening may be permitted.
- 4.9.7(7).......Screening from Residences All off-street parking areas shall be screened from abutting residences or vacant lots in residential zoning districts located at the side or rear of the property with a wall, fence, vegetation or other means which provides at least 75% vertical opacity up to a height of six (6) feet above grade. If vegetation is used a hedge should be planted which is reasonably expected to reach this opacity and height within one year (see Figure 10).

# 4.9.8.....Parking Lot Lighting Requirements

See Section 4.12 for outdoor lighting requirements.

### 4.9.9.....Parking Reduction Methods

- 4.9.9(1).........Demonstration of Reduced Need The Planning Board may grant a request for reduction in the standard number and/or size of spaces if the applicant can demonstrate good cause for such reduction. This request shall be made at the time of initial site plan application and must include the reasons. The Planning Board may require a portion of the lot be reserved for future parking (or on adjacent lots under Subsection 4.9.9, paragraph 4, below), and may require the construction of these spaces after Planning Board review has determined they are necessary to meet the parking demands of the use. Reduction in parking space size shall be limited to spaces specifically dedicated to employees, compact vehicles, or display vehicles.
- 4.9.9(2).......Accessible Municipal Parking The Planning Board may grant a waiver of offstreet parking if there is accessible municipal parking within three hundred (300) feet of the property. The Planning Board shall consider the practical pedestrian access to the lot in making its decision.
- 4.9.9(3)......Optimal Parking Location All nonresidential parking areas with at least 50% of the spaces located on the side or rear of the primary structure may be permitted a partial reduction from the parking standards. (Deleted 5/17/22.)

- 4.9.9(3)...........Shared Parking Where possible, shared parking is strongly encouraged and the required number of spaces may be reduced by the Planning Board if adjoining uses are compatible and can demonstrate that such a reduction would still provide adequate parking. The Planning Board shall determine the maximum reduction where shared parking is used. For abutting nonresidential uses where shared parking is used, no side or rear setback is required.
- 4.9.9(4).........Alternative Modes of Transportation Developments which provide for alternative modes of transportation as listed in Subsection 4.9.10 below may be allowed a reduction in the parking standard by the Board.

## 4.9.10......Provisions for Alternative Transportation Modes

- 4.9.10(1)......Bus Stops Where developments are located on an established transit route, the Planning Board may require a designated bus stop on site. Bus stops can be in the form of either a signed bus stop or bus shelter depending on the location and projected use.
- 4.9.10(2).......Satellite Parking for Public Transit Certain development projects or parcels may be appropriate for the siting of park-and-ride facilities to enhance public bus service. These parking areas may be established as part of a development project and the number of spaces required on site determined by the Planning Board. These areas must be well marked and separated from general parking areas.
- 4.9.10(3).......Alternative Travel Accommodations The Planning Board may require the provision of bicycle parking areas on site. Developments that provide for on-site shower facilities for employees that bicycle, jog, or walk to work may be allowed additional parking reduction.

### 4.9.11......Parking Area Surfaces

- 4.9.11(1).......Paved Surfaces Parking areas that (i) include lanes for drive-in windows or (ii) contain parking areas that are required to have more than 20 parking spaces and that are used regularly at least five (5) days per week shall be graded and surfaced with asphalt, concrete or other material that will provide equivalent protection against potholes, erosion, and dust. The Planning Board may waive this requirement under certain conditions.
- 4.9.11(2).......Non-Paved Surfaces Parking areas that are not provided with the type of surface specified in subsection 1) above shall be graded and surfaced with crushed stone, gravel, or other suitable material to provide a surface that is stable and will help to reduce dust and erosion, and prevent off-site drainage. In addition, whenever such a parking area abuts a paved street, the driveway leading from such street to such area (or, if there is no driveway, the portion of the parking area that opens onto such street), shall be paved as provided in subsection 1) for a distance of 15 feet back from the edge of the paved street. This subsection shall not apply to 1 and 2-family residences or other uses that require less than 5 parking spaces.
- 4.9.11(3)......Demarcation Parking spaces in areas surfaced in accordance with subsection 1) shall be appropriately demarcated with painted lines or other markings. Parking spaces in areas surfaced in accordance with subsection (b.) shall be demarcated however practical.

- 4.9.11(4).......Maintenance Parking areas shall be properly maintained in all respects. In particular, and without limiting the foregoing, parking area surfaces shall be kept in good condition (free from potholes, etc.) and parking space lines or markings shall be kept clearly visible and distinct.
- 4.9.11(5)......Paper Parking Lots Areas of future parking expansion and internal access to abutting properties may be designated on the site plan.

## 4.9.12.....Satellite Parking

If the number of off-street parking spaces required by this section cannot reasonably be provided on the same lot where the principle use associated with these parking spaces is located, then spaces may be provided on adjacent or nearby lots in accordance with the provisions of this section. These off-site spaces are referred to in this section as satellite parking spaces.

- 4.9.12(1)......Distance All such satellite parking spaces (except those intended for employee use) must be unobstructed and located within 300 feet of a public entrance of a principle building housing the use associated with such parking. Satellite parking spaces for employees may be located within any reasonable distance.
- 4.9.12(2)......Permission The applicant wishing to use satellite parking must present satisfactory written evidence that he has permission of the owner or other person in charge of the satellite parking spaces to use such spaces. The developer must also sign an acknowledgment that the continuing validity of his permit depends upon his ability to provide the requisite number of parking spaces.

### 4.9.13......Parking Standards by Use

Off-street parking shall be provided as set forth in Subsections 1) through 4) and Table 6, Table of Parking Standards By Use. The Planning Board recognizes that this Table cannot and does not cover every possible situation that may arise. Therefore, for uses not specifically covered, the Planning Board shall determine the parking requirements using this table as a guide.

- 4.9.13(1).......Maximum Parking Off-street parking facilities shall be limited to no more than ten (10) percent above the amount required, unless the Planning Board finds that there is a significant need for such additional parking.
- 4.9.13(2).......Minimum Parking Requirements The minimum parking spaces required by use are set forth in Table 7 below. For the purposes of the subsection, Gross Floor Area (gfa) is the total floor area of the structure for which the parking is to be used. This includes all public and nonpublic areas. When determination of the required number of parking spaces results in a requirement of a fractional space, any fraction of one-half or less may be disregarded, while a fraction in excess of one-half shall be counted as one parking space.

TABLE 7 – PARKING STANDARDS BY USE (Sheet 1 of 2)					
USES	PARKING STANDARDS*				
AGRICULTURAL					
Animal Shelter	1 space/250 s.f.				
Veterinary Clinic	1 space/200 s.f.				
RESIDENTIAL					
Bed and Breakfast	1 space/unit plus 4 spaces				
Condominium (Townhouse Style)	2 spaces/unit				
General Residential Standards	2 spaces/dwelling unit, plus appropriate visitor parking for all attached housing or cluster group housing				
Group Dwellings (Family Home, Group Home, Community Care Facility, Therapeutic Community Residence, Shelter Residence)	2 spaces plus 1 additional space/3 bedrooms or sleeping rooms				
PUBLIC ASSEMBLY/FACILITY					
Boarding House	1 space/400 s.f.				
Club or Lodge	1 space/4 persons of rated capacity				
Community Center	4 spaces/1000 s.f.				
Cultural Center (i.e. Gallery, Museum)	1 space/300 s.f.				
Day Care Facility	1 space/teacher or employee plus 1loading space/6 students				
Hospital	1.5 spaces/bed				
Nursing Home	1 space /3 beds				
Public Assembly	1 space /4 seats at maximum capacity				
School – Elementary	1 space/each 15 students of design capacity				
School – Junior High	1 space/each 10 student of design capacity				
School - High School	1 space/each 10 students of design capacity plus 1 space/400 s.f. of office space				
School – Trade	1 space/4 students				
School - College/University	3.3 spaces/1000 s.f.				
Theatre or Auditorium	1 space/4 seats				
Tourist Home	1 space/unit plus 1/permanent resident				
RECREATIONAL					
Ballfields	20 spaces or 1 space /3 fixed seats, whichever is greater				
Bowling Alley	3 spaces/Lane plus required spaces for restaurant facility				
Camp (Day or Youth)	1 space/Employee plus 1 space/camp vehicle				
Campground	1 space/Campsite plus 1 space/employee				
Golf Course or Range	5 spaces/Tee plus required spaces for restaurant facility				
Health Club	8 spaces/1000 s.f.				
Indoor Recreation - Misc.	1 space/200 s.f.				
Outdoor Courts	3 spaces/Court				

TABLE 7 – PARKING STANDARDS BY USE (Sheet 2 of 2)					
USES	PARKING STANDARDS*				
OFFICE					
Home Occupation					
Medical Office or Medical Office Building	1 space/250 s.f.				
Office or Office Building	1 space/300 s.f.				
COMMERCIAL					
Bank	1 space/250 s.f.				
Bar/Lounge or Night Club	1 space/50 s.f.				
Beauty or Barber Shop	2 spaces/beauty or barber chair				
Discount Store	1 space/300 s.f.				
Funeral Home	1 space/4 patron seats or 20 spaces, whichever is greater				
Garden & Farm Supply/Nursery	1 space/1000 s.f. plus 1space/2000 s.f. of land area				
General	1 space/250 s.f.				
Hotel/Motel with Restaurant/Lounge	1.5 spaces/sleeping room + 1 for each employee (largest shift)				
Hotel/Motel without Restaurant/Lounge	1 space/sleeping room + 1 for each employee (largest shift)				
Repair Service or Shop	1 space/600 s.f.				
Restaurant	1 space/100 s.f.				
Retail Store	1 space/250 s.f.				
Shopping Center	4 spaces/1000 s.f.				
Supermarket, Grocery Store, neighborhood Store	1 space/300 s.f.				
Storage Facility	3 spaces plus 1space/each 100 individual storage units				
ROAD SERVICE					
Automotive Services	1 space/400 s.f.				
Gasoline Service Station and Repair Garage	2 spaces/service bay; service bay is not a parking space				
Gasoline Service Station without Repair Garage	1.5 spaces/fuel nozzle				
Convenience Store	1 space/200 s.f.				
Fast Food Restaurant	1 space/75 s.f.				
Marina	1 space/3 motor boat slips				
Motor Vehicle Sales	1 space/300 s.f. plus 1 space/5000 s.f. of outdoor display area				
INDUSTRIAL					
Cottage Industry	1 space/employee				
Industry and Light Industry	1.5 spaces/1000 s.f.				
Transportation Terminal	1 space/400 s.f.				
Warehousing	1 space/1000 s.f.				

<sup>\*</sup>All square foot (s.f.) standards are measured by Gross Floor Area (GLF)

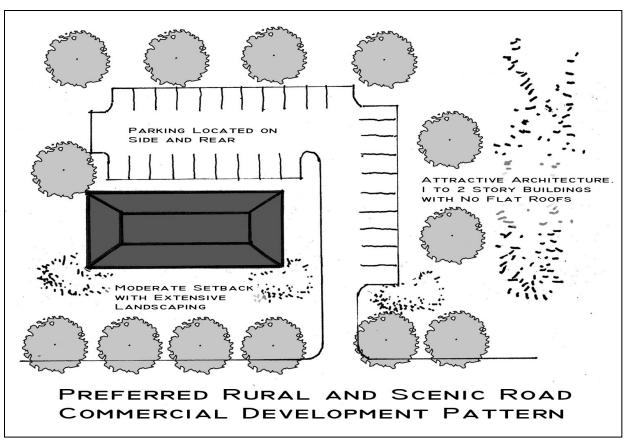


FIGURE 9 – PREFERRED PARKING LOT LAYOUT

### 4.10....Landscaping Design and Screening Standards

The existing landscape of Barrington is diverse, containing natural wooded environments, orchards and open fields, as well as wetlands and streams. New development should be respectful and sensitive to the dominant landscape character of Barrington as a whole.

### 4.10.1.....Purpose

The purpose of landscaping design standards in Barrington are to:

- 4.10.1(1)......Support the goals of the Master Plan to preserve and enhance the character of Barrington's landscape
- 4.10.1(2)......Provide attractive settings for new development. Preserve and enhance local and regional open space resources.
- 4.10.1(3)......Preserve the integrity of valuable historic resources, particularly stonewalls and historic dwellings and structures.
- 4.10.1(4)......Support and encourage the use of sustainable design principles and operating practices that preserve and enhance wildlife habitats, water quality, and overall health of the natural environment.
- 4.10.1(5)......Encourage the use of indigenous plant material to provide natural habitat and food sources and to maintain ecological diversity.
- 4.10.1(6).......Maintain a quality image of the public spaces within Barrington and high property values for present and future development.

### 4.10.2.....General Requirements

- 4.10.2(1).......All required landscaping shall be located entirely within the lot, unless agreements have been made with the Town for landscaping in the road right-ofway.
- 4.10.2(2).......Native plants shall be used in appropriate locations, such that individual plants are selected for their ability to thrive in or adapt to the particular soil and light conditions they are placed in. (For a list of recommended native plants, see Appendix 1 Recommended Native Trees and Shrubs and Their Use in Landscaping).
- 4.10.2(3).......Under no circumstances shall any plants be used that are recognized by the horticultural or agricultural industries as invasive, whether they are native or exotic (non-native). (For a list of known invasive plants, see Appendix 1-Recommended Native Trees and Shrubs and Their Use in Landscaping).
- 4.10.2(4)......All plant material shall have a minimum winter hardiness for Zone 5B as determined by the American Standards for Nursery Stock.
- 4.10.2(5)......Minimum sizes for plant material, unless indicated elsewhere in these regulations or the Zoning Ordinance, shall be as follows:
- 4.10.2(5)(a) ......Deciduous shade trees: three inch caliper,
- 4.10.2(5)(b) .......Deciduous ornamental trees: two inch caliper, and
- 4.10.2(5)(c) ......Evergreen trees: six foot height.
- 4.10.2(6)......Landscaping shall be laid out in informal drifts rather than formal rows and shall undulate with site topography. Individual clusters of trees or islands of shrub beds are acceptable as long as the tree clusters and/or shrub islands overlap. Linear solutions shall be avoided wherever possible, unless existing landscaping is so arranged.
- 4.10.2(7)......The applicant may request that the Planning Board determine that existing vegetation is suitably located, sufficiently visually impervious, and vigorous enough to be substituted for landscaping material required by these regulations.
- 4.10.2(8).......Plant material located within 20 feet of any road or other paved area shall consist of species recognized by the nursery, horticultural and botanical industries as being tolerant of roadway deicing salts.
- 4.10.2(9)......Landscaping requirements for parking lots are located in Subsection 4.9.7.
- 4.10.2(10)......Landscaping shall be maintained in good condition, and any dead vegetation shall be replaced within one year.
- 4.10.2(11)......No person shall deface, alter the location, of, or remove any stonewall which was made for the purpose of marking the boundary of, or borders, any road in the Town of Barrington, except upon written consent of the Planning Board.
- 4.10.2(12).....Landscaping shall be designed so that it does not interfere with sight distances at driveways.

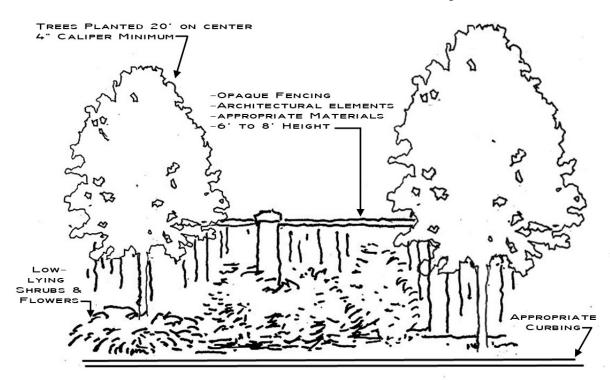
## 4.10.3......Preservation of Existing Vegetation

4.10.3(1)......Buildings, parking, loading docks, access roads, and other site elements shall be sited to preserve existing healthy mature vegetation and maintain natural topography to the maximum extent feasible.

- 4.10.3(2)......Healthy trees with a minimum 12 inch caliper, and existing wooded areas are recommended for preservation, particularly those trees located within setback areas where buildings cannot be constructed.
- 4.10.3(3).......Construction activities and site alterations shall not disturb the root zone of the trees designated for preservation. During construction, the applicant shall install and maintain tree protection fencing, or other protective measures approved by the Planning Board, located 12 inches off the drip-line of the trees to be protected. All no-cut zones shall be appropriately monumented and delineated on the site plan.
- 4.10.3(4).......The applicant shall be responsible to replace (in kind) trees designated to remain, which have been damaged, killed, or removed as a result of construction activities if they were alive and removal had a significant impact as a visual buffer.

## 4.10.4.....Screening

- 4.10.4(1)......Screening shall be a year-round visually impermeable barrier that may be existing, constructed, or a combination thereof.
- 4.10.4(1)(a) ........Existing screens may consist of natural topographic landforms, rock outcrops, or vegetation that is dense enough to be visually impermeable.
- 4.10.4(1)(b) ..........Constructed screens may consist of built screens, such as walls or fences, topographic screens, such as berms or landforms, vegetative screens consisting entirely of evergreen material, or a combination thereof.
- 4.10.4(2).......Screening is required to soften the visual impact of buildings, parking areas (see Subsection 4.9.7), loading docks, trash disposal areas, exterior storage, and other unsightly areas associated with or generated by a particular development as viewed from a public right-of-way, residential zoning districts, and the principal entrances of buildings on abutting lots.
- 4.10.4(3)......The use of existing vegetation, topography, and natural features to comply with screening requirements is encouraged.
- 4.10.4(4)......Screening may be required, at the discretion of the Planning Board, along the entire front setback or only a part of it. Screening may also be required to extend beyond the minimum setback areas or further into the lot, particularly if the building is located beyond the minimum setback or if the lot configuration is such that the visibility into side or rear setbacks is unimpaired from the public right-of-way, residences, and principal entrances on abutting lots.
- 4.10.4(5)......A minimum of 50% of built screens which face the public right-of-way, residences, and principal entrances on abutting lots shall be softened with landscaping.
- 4.10.4(6)......Vegetative screens shall achieve a minimum of 75% vertical opacity to a height of 6 feet, year-round, within one year of installation. Screens shall not be located so as to impede vehicular or pedestrian traffic.



#### FIGURE 10 – PREFERRED SCREENING TECHNIQUES

#### 4.10.5......General Maintenance

- 4.10.5(1).......The owner of any lot shall be responsible for the maintenance of all landscaped open space, natural screens, and constructed screens within the lot. Landscaping shall be maintained in good condition such that planting shall be vigorous and in good health at all times and that the parcel shall present a healthy, neat, and orderly appearance, free from refuse and debris. Any dead vegetation that is part of the approved landscaping design shall be replaced within one year.
- 4.10.5(2).....Landscaping shall be maintained so that it does not interfere with sight distances at driveways.
- 4.10.5(3)......The Planning Board may require that an escrow be set aside for the proper maintenance and, if necessary, replacement of landscaping during the first year of planting.

## 4.11....Building and General Appearance Design Standards

### 4.11.1.....Intent

These requirements are intended to encourage high quality building design which improves the aesthetic character of the community, to allow diversity of building design and architectural styles, to avoid monotonous and bland buildings typical of strip commercial development and to minimize conflicts between residential and commercial uses. The review procedures are intended to:

- 4.11.1(1).......Preserve and enhance Barrington's cultural, economic and historical resources by providing for a detailed review of changes in land use, the appearance of structures and the appearance of sites which may affect these resources; enhance the social and economic viability of the Town by preserving property values and promoting the attractiveness of the Town as a place to live, visit and shop.
- 4.11.1(2)......Encourage the conservation of buildings and groups of buildings that have aesthetic or historic significance.
- 4.11.1(3)......Prevent alterations that are incompatible with the existing environment or that are of inferior quality or appearance.
- 4.11.1(4).....Encourage flexibility and variety in future development.

### 4.11.2.....Review Process

In accordance with the provisions of NH RSA 674:43 the Planning Board shall be the designated Design Review Board for the purposes of this section. The Planning Board shall review applications for all actions that are subject to the provisions of this section and shall make recommendations to the applicant concerning the conformance of the proposed action to the design review standards contained herein.

# 4.11.3.....Reviewable Actions

- 4.11.3(1).......Site Plans in the Village (V) and Town Center (TC) districts All new structures, alterations or additions to existing structures, changes in outdoor land use or changes in site design which require Site Plan Review and which affect the exterior architectural appearance of a building or site shall be subject to review by the Planning Board.
- 4.11.3(2).......Exterior actions within 150 feet of the centerline of Routes 4, 125, 9, 126, and 202
  Any construction, alteration, demolition or removal that affects the exterior architectural appearance of a building or site shall be subject to design review by the Planning Board provided that the site is on or within 150 feet of the centerline of the roadway corridors listed above, as measured from the center of the public right-of-way.
- 4.11.3(3)......Large Retail Establishments Because of their mass and typical design characteristics, large scale retail establishments of greater than 25,000 square feet shall be subject to Subsection 4.11.6 below.
- 4.11.3(4).......Actions by Town Government Any construction, alteration, demolition or removal of a structure or site by the Town of Barrington shall be subject to design review by the Planning Board. This includes all actions throughout the Town of Barrington, except for routine maintenance of existing structures or sites. Any repair, renovation or rehabilitation which will result in substantial alteration to the form or appearance of a structure or site shall not be considered routine maintenance. Where the status of such an action by the Town is in doubt, the department or agency responsible shall request a determination from the Zoning Enforcement Officer prior to beginning work.

# 4.11.4.....Design Definitions

4.11.4(1)........."Exterior architectural appearance" shall be defined as the architectural character and general composition of the exterior of a building, including but not limited to

- the kind, color and texture of building materials, including paint color, and the type, design and character of all windows, doors, light fixtures, signs, awnings, utility and ventilation structures and all other appurtenant elements.
- 4.11.1(2)......The "appearance of a site" shall be defined as the character, layout and general composition of the site, including but not limited to the kind, color and texture of such materials as plantings, paving, benches, site lighting, free-standing signs, utility structures and all other appurtenant elements.

# 4.11.5......Design Review Principles and Standards

The design review principles and standards described in this section are intended to guide the applicant in the development of site and building design and the Planning Board in its review of proposed plan. These principles and standards are not intended to discourage creativity or innovation, or to mandate any official aesthetic style for Barrington. The design review principles and standards shall apply to all actions reviewable under this section.

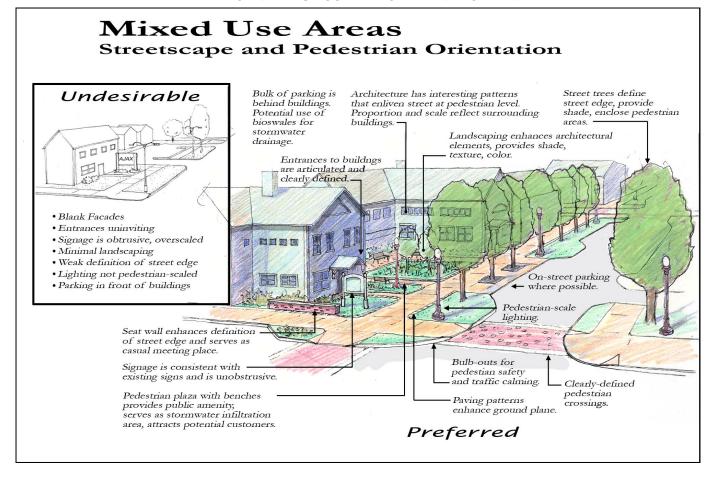
- 4.11.5(1).....General Principles
- 4.11.5(1)(a) ........Every reasonable effort shall be made to preserve the distinguishing original qualities of a historical building, structure or site and its environment. The removal or alteration of historic material or architectural features should be avoided when possible.
- 4.11.5(1)(b) ...........Stylistic features distinctive to the architecture of a specific building, structure or landscape, or examples of skilled craft which characterize a building, structure or site shall be conserved or preserved where feasible and appropriate, and may be considered for use as the basis for design of additions. Their removal or alteration should be avoided whenever possible.
- 4.11.5(1)(c) .........Contemporary design for new structures or sites, alterations or additions to existing properties shall not be permitted when, such new development, alterations or additions destroys significant historical, architectural or cultural material, and when such design is compatible with the design character of the surrounding environment.
- 4.11.5(1)(d) ........The design of alterations and additions shall, where reasonable and appropriate, strive to improve the quality, appearance and usability of existing buildings, structure and sites.

Parking organized with Numerous curb-cuts disrupt traffic flow fewer curb-cuts, shared access where possible Buildings massed in interesting patterns and moved closer to street Buildings do not define street edge; set back too far and scattered to define street edge. Lanscaping does little to Trees help define street edge and provide shade and aesthetic appeal create street edge or aesthetic appeal Unorganized Parking located behind entrance/exit conditions at parking lot buildings where possible, and landscaped. Parking in front detracts from streetscape Upper stories allow for R-0-W residential use above and reinforce traditional Unimaginative building shapes/ architecture is "boxlike" and single-use streetscape pattern. Interesting architecture reflects the best of surrounding patterns Public Public R-O-W Fences and hedges help define street edge Pedestrian-friendly sidewalks and streetscape Preffered Undesirable

Streetscape Character

FIGURE 11 – PREFERRED STREETSCAPE DESIGN CHARACTERISTICS FOR GENERAL COMMERCIAL DEVELOPMENT

FIGURE 12 – PREFERRED STREETSCAPE DESIGN CHARACTERISTICS FOR VILLAGE COMMERCIAL DEVELOPMENT



- 4.11.5(2) Design Review Standards The Planning Board shall consider, at a minimum, the following standards in the course of the design review of a proposed action:
- 4.11.5(2)(a) .........Height The height of any proposed alteration should be compatible with the style and character of the building, structure or site being altered and that of the surroundings.
- 4.11.5(2)(b) .......Proportions The proportions and relationships of height to width between windows, doors, signs and other architectural elements should be compatible with the architectural style and character of the building or structure and that of the surroundings.
- 4.11.5(2)(c) ........Relation of Structures and Spaces The relation of a structure to the open space between it and adjoining structures should be compatible with such relations in the surroundings.
- 4.11.5(2)(d) ..........Shape The shape of roofs, windows, doors and other design elements should be compatible with the architectural style and character of a building or site, and that of its surroundings.

- 4.11.5(2)(e) .......Landscape Any proposed landscape development or alteration should be compatible with the character and appearance of the surrounding area. Landscape and streetscape elements, including topography, plantings and paving patterns, should provide continuity and definition to the street, pedestrian areas and surrounding landscape.
- 4.11.5(2)(f)...........Scale The scale of a structure or landscape alteration should be compatible with its architectural or landscape design style and character and that of the surroundings. The scale of ground-level design elements such as building entryways, windows, porches, plazas, parks, pedestrian furniture, plantings and other street and site elements should be determined by and directed toward the use, comprehension and enjoyment of pedestrians.
- 4.11.5(2)(g) .........Directional Expression Building facades and other architectural and landscape design elements shall be compatible with those of others in the surrounding area with regard to the dominant vertical or horizontal expression or direction related to use and historical or cultural character, as appropriate.
- 4.11.5(2)(h) .......Architectural and Site Details Architectural and site details including signs, lighting, pedestrian furniture, planting and paving, along with materials, colors, textures and grade shall be treated so as to be compatible with the original architectural and landscape design style of the structure or site and to preserve and enhance the character of the surrounding area. In the downtown business districts, these details should blend with their surroundings to create a diverse, functional and unified streetscape.
- 4.11.5(2)(i) .......Signs The design of signs should reflect the scale and character of the structure or site and its surroundings. Signs should simply and clearly identify individual establishments, buildings, locations and uses, while remaining subordinate to the architecture and larger streetscape. The choice of materials, color, size, method of illumination, and character of symbolic representation on signs should be compatible with the architectural or landscape design style of the structure or site, and those of other signs in the surroundings. Signage will only be reviewed as part of an overall site plan; approval shall be per Article 20 of the zoning ordinance. (Deleted 5/17/22; Signage is found in Article 20 of the Barrington Zoning Ordinance.)

## 4.11.6.....Supplemental Retail Design Standards

For existing and proposed retail establishments that meet the review thresholds established in Subsection 4.11.3 above the following supplemental design review standards apply:

- 4.11.6(1).......Preserve Historic and Aesthetic Resources Each building or man-made structure, including stone fences shall be reviewed with the Planning Board for historic significance and aesthetic importance. To the extent possible, such features will be preserved.
- 4.11.6(2).......Avoid long unbroken expanses of walls Use facade divisions, such as building jogs, architectural detailing, and changes in surface materials, colors, textures and roof lines. Uninterrupted facades should not exceed 50% of the building wall,

and in no case should exceed 1000 feet in length. Ground floor facades that face public streets should have arcades, display windows, entry areas, awnings, or other features along no less the 60% of their length. All facades of a building which are visible from public streets should feature characteristics similar to the front facade.

- 4.11.6(3)......Incorporate Architectural Features Use architectural features and details such as porches, awnings, columns, towers, turrets, skylights and arches, to create interesting buildings.
- 4.11.6(4)......Roof Features Avoid long unbroken expanses of roofs though use of dormers, skylights, chimneys and changes in ridge line.
- 4.11.6(5).......Proper Fenestration Make door and window openings proportional to facade length and height. Create a sense of entry into the site and into major businesses within the site through landscaping, facade treatment and signage.
- 4.11.6(6).......Screening Screen rooftop and ground-level mechanical equipment from public view. Screen areas for outdoor storage, truck parking, trash collection, loading and other such uses from view of abutting properties and streets.
- 4.11.6(7)........Harmonize Site Amenities Harmonize the location, size, material and lighting of signs with the building design.

### 4.11.7......Back and Facade Guideline

All facades of a building which are visible from adjoining properties and/or public streets should contribute to the pleasing scale features of the building and encourage community integration by featuring characteristics similar to the front facade.

## 4.12.....Outdoor Lighting Design Standards

# 4.12.1.....Purpose

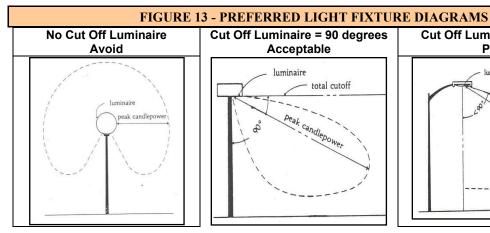
It is the goal of this section to provide guidance to developers in implementing the Barrington Master Plan and Zoning Ordinance by establishing minimum requirements for lighting for all non-residential projects (including multi-family proposals). This section recognizes that inappropriate and poorly designed or installed outdoor lighting causes unsafe and unpleasant conditions, limit residents ability to enjoy the nighttime sky, and results in unnecessary use of electric power. Conversely, it is also recognized that some outdoor lighting is appropriate in areas such as civic, commercial and industrial centers. To ensure appropriate lighting while minimizing its undesirable side effects, the following regulations are established.

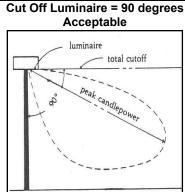
### 4.12.2.....General Requirements

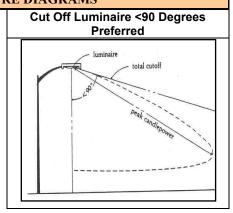
All exterior lights and illuminated signs shall be designed, located, installed and directed in such a manner as to prevent objectionable light, and glare across, the property lines and disability glare at any location on or off the property. The "maintained horizontal illuminance recommendation" set by the illuminating Engineers Society of North America (IES) shall be observed. (See Table 8 below)

TABLE 8 - RECOMMENDED SITE LIGHTING LEVELS							
Doubing I at I and of A stights Formula.	Maintained Horizontal Illuminance in Footcandles						
Parking Lot Level of Activity Examples	Maximum	Minimum	U-Ratio	Average			
High: Civic Recreational Facilities, Major Cultural or Civic Centers, Regional Shopping Centers, Fast Food Restaurants, Gas/Convenience Store	3.6	0.9	4:1	2.0			
Medium: Community Shopping Centers, Office Parks, Hospital Parking Lots, Transportation Parking (Airport, Commuter Lots, Etc.), Residential Complex Parking	2.4	0.6	4:1	1.0			
Low: Neighborhood Shopping, Industrial Employee Parking, Educational Facility Parking, Church Parking	0.8	0.2	4:1	0.5			

\*IES States: "This recommendation is based on the requirement to maintain security at any time where there is low level of nighttime activity.'







- 4.12.2(1) Parking Area Fixtures All parking area lighting will be full cut-off type fixtures.
  - 4.12.2(2)......Externally-Lit Signs Uplighting is prohibited. Externally lit signs, display, building and aesthetic lighting must be shielded to prevent direct glare and/or light trespass in excess of 0.2 footcandles. The lighting must also be, as much as physically possible, contained to the target area. Internally lit signs are acceptable provided that they meet the requirements of the Barrington Zoning Ordinance.
  - 4.12.2(3) Building Lighting All building lighting for security or aesthetics will be full cut-off or a shielded type, not allowing any upward distribution of light. Flood lighting is discouraged, and if used, must be shielded to prevent:
  - 4.12.2(1)(a) .......Disability glare for drivers or pedestrians,
  - 4.12.2(1)b).....Light trespass beyond the property line, and
  - 4.12.2(1)(c) ......Light above a 90 degree, horizontal plane. Unshielded wallpack type fixtures are not acceptable.

- 4.12.2(4).......Visibility at Property Boundary Adjacent to residential property, no direct light source will be visible at the property line at ground level or above.

  4.12.2(5) Security Lighting All non-essential lighting will be required to be turned off
- 4.12.2(5)......Security Lighting All non-essential lighting will be required to be turned off after business hours, leaving only the necessary lighting for security. ("Non-essential" can apply to: display, aesthetic, parking and sign lighting).
- 4.12.2(6)......Installation When outdoor lighting installation or replacement is part of a development proposal for which site plan approval is required under these regulations, the Planning Board shall review and approve the lighting installation as part of its site plan approval.
- 4.12.2(6)(a) ..........When an outdoor lighting installation is being modified, extended, expanded or added to, the entire outdoor lighting installation shall be subject to the requirements of this section;
- 4.12.2(6)(b) .......Expansion, additions, or replacements to outdoor lighting installations shall be designed to avoid harsh contrast in color and or lighting levels.
- 4.12.2(7).....Lighting of Gas Station/Convenience Store Aprons and Canopies All of the above standards shall apply, as well as the standards listed below:
- 4.12.2(7)(a) .......Lighting levels on gas station/convenience store aprons and under canopies shall be adequate to facilitate the activities taking place in such locations.

  Lighting of such areas shall not be used to attract attention to the businesses.
- 4.12.2(7)(b) ........Areas on the apron away from the gasoline pump islands used for parking or vehicle storage shall be illuminated in accordance with the requirements for parking areas set forth elsewhere in this section. If no gasoline pumps are provided, the entire apron shall be treated as a parking area.
- 4.12.2(7)(c) .......Areas around the pump islands and under canopies shall be illuminated in accordance with Table 8 of these regulations.
- 4.12.2(7)(d) ......Light fixtures mounted on canopies shall be recessed so that the lens cover is recessed or flush with the bottom surface (ceiling) of the canopy and /or shielded by the fixture or the edge of the canopy so that light is restrained to no more than 85 degrees from vertical, as shown in FIGURE 14 below:

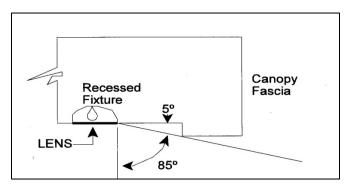


FIGURE 14 - RECESSED LIGHTING FIXTURE DIAGRAM

- 4.12.2(8).......Underground Service Electrical service to outdoor lighting fixtures shall be underground.
- 4.12.2(9).......Mounting Height For the purposes of these regulations, the mounting height of a lighting fixture shall be defined as the vertical distance from the grade elevation of the surface being illuminated to the bottom of the lighting fixture (i.e. luminaire). Maximum mounting height shall be no more than the height of the primary building unless a waiver is granted by the Planning Board under Article 8.
- 4.12.2(10) ......Temporary Lighting Holiday lighting during the months of November,

  December and January shall be exempt from the provisions of this section,
  provided that such lighting does not create dangerous glare on adjacent streets or
  properties.
- 4.12.2(11) ......Modifications and Variations The Planning Board may modify the requirements of this section if it determines that in so doing, it will not jeopardize the intent of these regulations. Proposed lighting installations that are not covered in this section may be approved if the Planning Board finds that they are designed to minimize glare, do not direct light beyond the boundaries in excess of 0.2 footcandles of the area being illuminated or onto adjacent properties or streets, and do not result in excessive lighting levels. The U-Ratio for any site may not be greater than 4:1.

#### 4.13....Environmental Protection Standards

### 4.13.1......Wetlands

All wetlands impacting the project shall be field delineated in accordance with the standards prescribed in the Wetlands Overlay District contained in the Town's Zoning Ordinance. Any Prime Wetlands or vernal pools located on the site should be specifically noted in the wetland delineation.

# 4.13.2.....Special Flood Hazard Areas

In addition to the requirements specified in Floodplain Management District Overlay of the Zoning Ordinance, the following provisions shall also apply to all site plans that involve land designated as "Special Flood Hazard Areas" (SFHA) by the National Flood Insurance Program (NFIP):

- 4.13.2(1)......The Planning Board shall review the proposed development to assure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution 2) Control Act Amendments of 1972, 33 U.S.C. 1334.
- 4.13.2(2)......The Planning Board shall require that all proposals for development greater than 50 lots or 5 acres, whichever is the lesser, include Base Flood Elevation (BFE) data within such proposals (i.e. floodplain boundary and 100-year flood elevation).
- 4.13.2(3)......The Planning Board shall require the applicant to submit sufficient evidence (construction drawings, grading and land treatment plans) so as to allow a determination that:
- 4.13.2(3)(a) .......all such proposals are consistent with the need to minimize flood damage; and 4.13.2(3)(b) ......all public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage; and
- 4.13.2(3)(c) .......adequate drainage is provided so as to reduce exposure to flood hazards.

## 4.13.3.....Preservation of Natural Features

To the extent practical, natural features shall be preserved on the site. Where appropriate, areas shall be left undisturbed to minimize impacts on the site and to abutters. Excessive cutting, filling, and grading should be avoided. All cut trees, debris, rubbish, junk, and other waste materials shall be removed from the site for lawful disposal. On-site stump disposal may be permitted if it will not interfere with the proper function of the site, and if the State standards are met.

### 4.13.4.....Sediment and Erosion Control

As pertains to this regulation, a State Alteration of Terrain (AoT) permit is required for the following:

- 4.13.4(1).......An alteration of terrain permit is required whenever a project proposes to disturb more than 100,000 square feet of terrain (50,000 square feet if *any* disturbance is within the protected shoreline as defined by RSA 483-B). Or if the project disturbs any area having a 25% or steeper land slope *and* is within 50 feet of any surface water, then a permit is also required. The program applies to both earth moving operations, such as gravel pits, as well as industrial, commercial and residential developments.
- 4.13.4(2).......Construction, earth moving, or other significant alteration of the characteristics of the terrain as defined in Env-Ws 415.02 when a contiguous area of 100,000 or more square feet will be disturbed, or 50,000 or more square feet within 250 feet of public waters will be disturbed (except that 1st- through 4th order streams are excluded). (Deleted 5/17/22.)
- 4.13.4(2)......For sites which do not require an AoT permit, the application shall document reasonable controls provided to prevent erosion on the site during construction, following construction but before permanent vegetation is reestablished, and on the finished site. Total suspended solids leaving the site should be limited to near pre-development levels.

# 4.13.5......Hydrogeologic Studies

The Planning Board may require the applicant to provide a hydrogeologic study where deemed necessary. Such studies shall be consistent with the requirements of the Barrington Subdivision Regulations.

# 4.14.....Traffic Impact Analysis and Mitigation Standards

Applicants shall contact the Planning & Land Use Office early in the project design regarding the scoping of any traffic studies, including consideration of the study area boundary, and the type of mitigation, if any, which are likely to prove appropriate. Impact studies shall be submitted at the time of application for site plan review, to allow review prior to the public hearing or meeting at which the project will be presented to the Planning Board. All design and construction standards shall be shown and presented on the proposed site plan and related documentation. The Road Standards of the Barrington Subdivision Regulations shall be used as the minimum road construction requirements. More stringent standards may be required by the Planning Board if applicable.

#### 4.14.1.....Analysis Thresholds

All projects creating 5,000 square feet or more of new non-residential floor space or creating 15 or more new multi-family dwelling units must provide a report meeting the requirements outlined for a Short Traffic Impact Analysis.

If any of the following conditions apply, then a Full Traffic Impact Analysis must be completed:

- 4.14.1(1).......All applications creating 10,000 square feet or more of new non-residential floor space or creating 20 or more new multi-family dwelling units.
- 4.14.1(2).....Trip generation exceeding 1,000 average daily trips or 100 peak hour trips. Peak hour is defined as any of the following:
- 4.14.1(2)(a) .......AM peak hour (7-9 AM)

- 4.14.1(2)(b) ......PM peak hour (4-6 PM)
- 4.14.1(2)(c) .........Saturday midday peak hour (11AM-1PM)
- 4.14.1(2)(d) .........Peak hour generator for certain land uses (e.g., school, movie theater) if it falls outside the three previously listed periods. Analysis of Saturday midday peak only applies to retail uses.
- 4.14.1(3)......The Planning Board may require a Full Analysis because of special circumstances.

# 4.14.2.....Requirements for Short Traffic Impact Analysis

The Short Analysis has two primary objectives: First, to justify that a Full Analysis is not required, and, second, to determine the appropriate impact fee (as required in Article 14 of the Zoning Ordinance) imposed on the applicant. At a minimum, the Short Analysis must include the following:

- 4.14.2(1).......Description of Site A brief narrative of the character of the site and adjacent properties, including land uses and other pertinent facts.
- 4.14.2(2)......Description of Roadways A brief narrative of the study area roadway facilities, including the number of lanes, speed limit, major intersections, and locations of existing driveways. A description of pedestrian amenities such as sidewalks, crosswalks, and handicap ramps should also be completed.
- 4.14.2(3)......Sight Distance Measurements shall be provided for each driveway. A comparison of the available sight distance at each study intersection with Town of Barrington standards shall be included.
- 4.14.2(4)......Trip Generation In all cases, the analysis shall include trip generation based upon the ITE Trip Generation Handbook latest edition. Where the applicant feels the ITE trip generation is not representative of the proposed development, justification must be provided for alternative trip generation methodology. If counts are performed to determine trip generation rates, the applicant must conduct two separate counts and provide full details of the count locations, including the size of the facility, percent occupancy, location, adjacent road Average Daily Traffic (ADT), time, and date of count.
- 4.14.2(5)......Trip Distribution In the analysis, trip distribution shall be described in a report that demonstrates knowledge of area-wide land uses, roadway facilities, and predominant traffic flows by time of day. The analysis shall contain a percentage distribution of trips (by direction) to the adjacent roadway facilities and any relevant assumptions. All assumptions made shall be outlined, with justification, in the report.

### 4.14.3......Requirements for Full Traffic Impact Analysis

4.14.3(1).......General Requirements - All information described in the Short Analysis must also be contained in the Full Analysis. The report shall be prepared and stamped by a NH licensed professional engineer specializing in civil engineering. This analysis shall be prepared to meet, at a minimum, the "Guideline for Traffic Impact Analysis" (by the Strafford Regional Planning Board). Where the board is concerned about traffic impact, it may require this analysis for smaller projects.

- 4.14.3(2).......Existing Traffic Counts In no case shall existing traffic counts used in the analysis be more than two years old (from date of count to date of analysis submittal). If a significant change (e.g., new roadway or development) has occurred within the last two years, the Planning Board and/or Highway Department can, at their discretion, require that new counts be conducted. Traffic counts shall include information on date, time, day of week, and name of the firm or individual who performed the counts. Traffic counts shall be seasonally adjusted to average and peak conditions.
- 4.14.3(3)......Design Year Traffic Projection The design year for traffic projections shall be 10 years from the current year.
- 4.14.3(4)......Build/No-Build Analysis The applicant shall obtain a list from the Town of Barrington containing all proposed developments permitted to date within the study area. The traffic generated by these projects shall be added to the no-build and build analyses. Additionally, the background growth rate should be determined based upon information obtained from the NH Department of Transportation or the Strafford Regional Planning Commission. The calculated background growth rate should be completely documented and included in the study for review.
- 4.14.3(5).....Trip Generation Traffic projection for trip generation growth is described in the Short Analysis section.
- 4.14.3(6)......Trip Distribution The applicant shall provide justification for the assumed trip distribution. The trip distribution methodology should be representative of the type of development. Data may be obtained from employee zip code analysis, studies of similar sites, analysis of ADT on adjacent roadways, US Census journey to work and home-based work/non-work trips, or other sources. Graphic presentation shall be provided showing 1) peak hour trips added by the development, and 2) study area peak hour traffic volumes under each of the following scenarios:
- 4.14.3(6)(a) ......Existing conditions
- 4.14.3(6)(b) ......Existing conditions with proposed development
- 4.14.3(60(c).........No build for design year
- 4.14.3(6)(d) ......Build for design year
- 4.14.3(7)......Peak Hour Capacity Analysis Capacity analysis is to be performed at all study intersections (including driveways) using the most current Highway Capacity Manual Level of Service methodology for signalized and unsignalized intersections. Each of the four scenarios listed above must be analyzed at a minimum. A gap acceptance analysis should be provided in the case of adjustment to the default critical gap in the capacity analysis.
- 4.14.3(8).......Safety Analysis Accident data for the roadways and intersections included in the study area shall be obtained from the Barrington Police Department. Accident history for the three most recent years available shall be summarized and compared to the Statewide or national rates established for the corresponding facility type (e.g., rural two-lane highway, urban arterial, etc.).

- 4.14.3(9).......Site Distance The minimum all season sight distance shall be three -hundred sixty-five (365) feet in all directions meeting the requirements for roadway and intersection design of the Barrington Subdivision Regulations.
- 4.14.3(10)......Trucks The location of loading docks and/or delivery drop-off areas shall be given in the analysis. The estimated frequency of trucks by time of day shall be provided when the number of daily truck trips exceeds 30 percent of the ADT on any roadway in the study area.
- 4.14.3(11)......Parking There should be a defined correlation between estimated trip generation and parking space requirements. The proposal shall contain a comparison of daily and peak hour trip generation estimates to the number of proposed parking spaces on site.
- 4.14.3(12)......Narrative Discussion of the following shall be provided:
- 4.14.3(12)(a) ....... Travel safety characteristics of any streets substantially impacted by allowing the "build" alternative, considering such things as sight distance limitations, width limitations, horizontal or vertical alignment deficiencies, and surface conditions
- 4.14.3(12)(b) .......Street side safety of any streets substantially impacted, considering such things as the amount and type of development along such streets, presence of sidewalks, vehicle speeds, and any outstanding limitations in sight distance or road configuration
- 4.14.3(12)(c) ......Impact on pedestrian safety and convenience
- 4.14.3(12)(d) Noise impacts on residential premises
- 4.14.3(13)......Mitigation Any mitigating measures proposed shall be described in detail and included in the analysis. It is imperative that the applicants identify improvements to intersections even if they don't fund them fully. Transportation Demand Management (TDM), non-vehicular transportation and mass transit should be strongly considered as mitigating strategies.
- 4.14.3(14)......Regional Transportation Facilities Possible impacts and mitigation measures of the site plan development on regional transportation facilities and planned improvements shall be considered and identified in the traffic impact analysis.

## 4.14.4.....Traffic Standards and Mitigation

Traffic control signals and signs, turning lanes, pavement widening, eliminating certain turning movements, and other improvements, may be required as determined by the Board if the site plan meets or exceeds the following standards:

- 4.14.4(1).......Intersection Delay If not more severely limited under other provisions of other laws or regulations, the absolute increase in calculated intersection delay, under "build" conditions, shall be no more than 10 to 20 seconds.
- 4.14.4(2)......Average Daily Traffic Average daily traffic volumes shall not be increased by more than one-third above the "no-build" level on any street.
- 4.14.4(3).......Safety of Bicycles and Pedestrians Traffic access to the site shall be such as to ensure the safety of vehicles and pedestrians. Adequate provisions shall be made to accommodate pedestrians and bicyclists:

- 4.14.4(3)(a) ........To accommodate and expand alternative transportation connections between residential, civic and commercial areas the Planning Board may require site plans to include pathways, particularly along major local arterials including Routes 125, 9, 4, 126, and 202.
- 4.14.4(3)(b) .........All sites shall have sidewalks from the main entrance to the parking area(s), as applicable.
- 4.14.4(3)(c) ............In large parking lots with multiple aisles, driving aisles shall be oriented generally perpendicular to the building to reduce the number of traffic aisles which pedestrians must cross to reach the building. Sidewalks in the middle of aisles may be required if appropriate.
- 4.14.4(3)(d) .........All sites shall provide lockable bicycle parking/storage. The number of bicycles which must be facilitated shall equal not less than 5% of the site parking demand, but not be less than 2.

### 4.15.....Additional Standards

## **4.15.1.....Snow Removal**

Snow removal shall be reviewed for all sites, and the general plan for snow removal shall be indicated in a note on the plat. Areas suitable for snow storage shall be designated on the plat, and removal from the site may be necessary if insufficient storage area is available. Landscaping in the snow storage area shall be such that it can withstand the snow pile. Snow shall not be pushed onto adjacent lots or rights-of-way without the owner's consent.

## 4.15.2.....ADA Compliance

Adequate provisions shall be made to ensure compliance of sites with the Americans With Disabilities Act of 1990 (ADA).

## **4.15.3......**Safety Review

- 4.15.3(1)........A letter describing each application shall be sent by the Applicant to the police chief and to the fire chief, alerting them of the pending application. Approval of the chiefs is not required, except as provided below. The board may require modification of the site design to enhance public safety.
- 4.15.3(2).......For a site which will receive, handle, store, process, sell, or discharge hazardous or toxic materials, written approval of the fire chief shall be required. Floor drains shall be directed into a sanitary sewer with sufficient on-site treatment and be State approved.

### 4.15.4.....Construction Standards

It shall be the responsibility of the Professional designing the site to specify that construction standards for all site improvements shall meet or exceed the standards set by the Town of Barrington through its Site Plan Review and/or Subdivision Regulations and all other applicable requirements. Such specifications shall be provided to the Board for its review and approval.

# ARTICLE 5 ... RESERVED

# ARTICLE 6 .... COMMERCIAL RECREATIONAL CAMPGROUNDS AND CAMPING PARKS

#### 6.1.....Purpose and Intent

This article is enacted to provide standards for the development and use of commercial recreational campgrounds and camping parks so that they are safe and attractive, do not unduly impact nearby residential uses or the environment, and promote growth of the Barrington economic base.

All commercial recreational campgrounds or camping parks shall be subject to the Barrington Site Plan Review.

#### 6.2.....Definitions

Moved to Article 13: Definitions and Section 6.2 is reserved.

#### 6.3.....General

#### 6.2.1.....Compliance with all Laws

All commercial recreational campgrounds must comply with all applicable federal, state, and local laws, including RSA 216-I. Whenever a conflict exists between these regulations and another law, the stricter provision shall apply.

### 6.2.2....Applications

The Planning Board shall have authority to accept applications, impose application fees, review site plans, and approve or deny applications for any new or proposed commercial recreational campground or camping park and/ or the expansion of an existing commercial recreational camping park.

# 6.2.3.....General Conditions

A commercial recreational campground or camping park shall adhere to the following requirements:

- 6.2.3(1).........Campsite Size. The minimum campsite for a tent shall be six hundred square feet (600 sq. ft.) and one thousand square feet (1000 sq. ft.) for a recreational vehicle or a recreational camping cabin.
- 6.2.3(2).......Placement. No site within the commercial recreational campground or camping park shall be located within one hundred feet (100 ft.) of any boundary line. All campsites must be screened from adjacent properties by a naturally vegetated buffer, or other screening approved by the Planning Board.
- 6.2.3(3)......Internal Setbacks. All setbacks within the commercial recreational campground or camping park shall be as follows:
- 6.2.3(3)(a) .............Campsite perimeters shall be setback 75 feet from surface water and 50 feet from jurisdictional wetlands.
- 6.2.3(3)(b) .............Cabins or cottages shall be setback 20 feet from other cabins or cottages.
- 6.2.3(3)(c) .......Minimum campsite a frontage of fifteen feet (15 ft).
- 6.2.3(4).......Marking. Each site shall be clearly marked in accordance with the Town of Barrington's current numbering system.

6.2.3(5)......Permanent Residence and/ or Office: One residential home/office occupied by the commercial recreational campground or camping park owner or manager and his or her immediate family will be permitted. This building will be required to meet the full lot requirements for a residence based on the Zoning District in which the commercial recreational campground or camping park is located, as well as to comply with local building and other codes and regulations.

# 6.4.....Performance Standards (General)

These standards must comply with Article 7 – Supplemental Regulations of the Barrington Zoning Ordinance which includes: Noise, Vibration, Odors, Air Quality, Heat, and Waste Disposal

# 6.4.1.....Performance Standards Under the Jurisdiction of the Shoreland Protection Act for Areas Within 250 Feet of a Lake or Pond

In addition to the requirements of RSA Chapter 483-B - Comprehensive Shore Land Protection Act, the following shall apply:

- 6.4.1(1)......Construction of steps, and associated rest areas, shall be permitted as required to negotiate steep slopes to the shoreline.
- 6.4.1(2)......Rest areas shall not occur more often than once every 30 steps, or 20 feet in vertical drop, whichever is less, and shall not exceed 50 square feet each.

# **6.5......Conflicting Provisions**

Wherever there is a conflict between RSA Chapter 483-B and these requirements, the more restrictive standard shall apply.

#### **ARTICLE 7 .... ADMINISTRATION**

#### 7.1.....Technical Assistance

In the event that the Board requires technical assistance and/or special studies to adequately and properly evaluate an application or perform subsequent inspections, it may secure such professional assistance. This may include technical assistance, special studies, legal review of aspects of the application which are unique or specific 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.

#### 7.2.....Guarantees of Performance

- 7.2.1......Pursuant to RSA 674:44, in lieu of the completion of street work and utility installations prior to the final approval of the site plan, the planning board may accept a performance bond, irrevocable letter of credit, or other type or types of security as shall be agreed, subject to the approval of the Board of Selectmen and town counsel.
- 7.2.2......The planning board shall have the discretion to prescribe the type and amount of the bond or other security, require satisfactory evidence of the financial ability of any surety or financial institution to pay such bond or other type of security, and specify a period for completion of the improvements and utilities to be expressed in the bond or other security, in order to secure to the Town of Barrington the actual construction and installation of such improvements and utilities. The Town of Barrington shall have the power to enforce such bonds or other securities by all appropriate legal and equitable remedies.

# 7.3.....Certificate of Occupancy (CO)

Every approval pursuant to this Regulation is granted subject to the issuance of a Certificate of Occupancy (CO) upon completion of building construction and site work. Issuance of the CO shall be the responsibility of the Code Enforcement Officer.

7.3.1......The CO may be issued with the condition that certain site improvements be completed at a specified later date where weather or other reasons outside the applicant's control would cause obvious problems. Where the CO is conditioned on subsequent work, the Town may require the applicant to provide financial securities per Section 6.2.

#### 7.4.....As-Built Plans

The Board may require as-built site plans to ensure that a site is developed in accordance with the approved plans and to accurately document the location of underground utilities. All such as-built plans shall meet the current standards as set forth by the New Hampshire Board of Licensure and the New Hampshire Land Surveyors Association.

# 7.5.....Compliance With Other Codes

The Site Plan Review Regulations in no way relieve an applicant from compliance with the Zoning Ordinance, the Subdivision Regulations, or any other code adopted by the Town or any other governmental unit. In the event that the requirements of this Regulation are in conflict with the other codes, the more stringent shall apply. This is also required by RSA 676:14.

# ARTICLE 8 .... CONCURRENT AND JOINT HEARINGS

The Planning Board may hold a hearing on site plan review in conjunction with a subdivision hearing if both are required for a project. A hearing for site plan review by the planning board may be held at the same time and place that a hearing for a special exception is held for the project by the board of adjustment.

# ARTICLE 9 .... WAIVER PROCEDURE

The owner of a development may submit a proposed site plan and request the Planning Board to waive specific requirements for the plan and supporting data. The Planning Board may agree to such requests provided that the Board has determined that such waiver of requirements will not affect the purpose and intent of these regulations.

# **ARTICLE 10 .. AMENDMENTS**

Amendments to these site plan review regulations shall be made in the same manner in which amendments to subdivision regulations are made.

#### **ARTICLE 11.. SEPARABILITY**

If any provision herein shall be held to be invalid for any reason by a Court, such holding shall not invalidate in any manner any other provision contained herein.

#### **ARTICLE 12.. DATE OF PASSAGE**

These Regulations shall take effect on date of passage.

#### **ARTICLE 13.. DEFINITIONS**

Active and Substantial Development or Building Shall mean the expenditure of at least twenty-five percent (25%) of the infrastructure costs required for a development proposal, as indicated by a subdivision or site plan approved by the Planning Board, within twenty-four (24) months of said approval, where the approved plans have been properly recorded at the Registry of Deeds, if recording of site plans is required. Infrastructure shall mean in this instance, the construction of roads, storm drains, water and sewer facilities, driveways and parking lots to a minimum of gravel base and utilities placed in underground conduit. Compliance with this definition shall also necessitate that a bond or other security to cover the costs of said infrastructure requirements has been posted with the Town prior to the beginning of construction, if required as a condition for subdivision or site plan approval. (Reference RSA 674:39)

Applicant - the owner of land to be developed or his agent or representative as he may be authorized by a signed notarized statement.

Approved Street - a Class V or better highway, or a street that corresponds in lines and location with a street shown on a subdivision plan approved by the Planning Board.

**Board** - The Planning Board of the Town of Barrington, N.H.

<u>Campground</u> - A campground or camping park means a parcel of land on which 2 or more campsites are occupied or are intended for temporary occupancy for recreational dwelling purposes only, and not for permanent year-round residency.

<u>Campsite</u> - A parcel of land in a commercial recreational campground or camping park rented for the placement of a tent, recreational vehicle, or a recreational camping cabin for the overnight use of its occupants as defined in RSA 216-I.

<u>Certified Soil Scientist</u> - a person qualified in soil classification and mapping, who is certified by the State of New Hampshire.

<u>Certified Wetland Scientist</u> - a person qualified in wetland classification and mapping, who is certified by the State of New Hampshire.

<u>Commercial Recreational Campground and Camping Parks</u> - A parcel of land on which people stay temporarily in tents, recreational vehicles, or recreational camping cabins containing two (2) or more campsites as described under RSA 216-I:1. This definition excluded manufactured housing parks, as defined in RSA 205-A.

<u>Commercial Recreation Facility</u> - A privately owned and/or operated land use, provided for gain or profit, either indoors or outdoors, where the main purpose is to provide the public with recreation. Examples of such facilities include skating rinks, water slides, gymnasiums, sports fields, miniature golf, driving ranges, swimming pools, race tracks, and stadiums.

<u>Community Wastewater System</u> A non-municipal wastewater disposal system that serves more than one lot. When this type of system is proposed, the design and specifications for the same shall be submitted and shall have been certified by a professional engineer qualified and registered under applicable New Hampshire statutes.

<u>Dedicated</u> - a gift by the owner of his property to another party. The dedication must be by written instrument. The transfer of property is completed upon written acceptance of the gift. <u>Disability Glare</u>- The eye's Line-of-Sight contact with a direct light source, which causes a partial blindness.

<u>Disturbed Area</u> – The area of land covered by buildings, parking areas, driveways, sidewalks, and other paved or graveled areas.

**Easement** - recorded authorization by a property owner for the use by another, and for a specified purpose, of any designated part of his property.

<u>Flood Protection Works</u> - any detention pond, basin, or swale (including man-made facilities and natural valley storage or wetlands) used for the purpose of mitigating stormwater runoff to downstream drainage facilities.

<u>Footcandle</u>- A unit of measure for illuminance. A unit of illuminance on a surface that is everywhere one foot from a uniform point source of light of one candle and equal to one lumen per square foot.

<u>Full cut off type fixture</u> - A luminaire or light fixture that; by design of the housing, does not allow any light dispersion or direct glare to shine above 90 degree, horizontal plane from the base of the fixture. Full cut-off fixtures must be installed in a horizontal position as designed, or the purpose of the design is defeated, and disability glare will result.

<u>Horizontal Illuminance</u>- The measurement of brightness from a light source, usually measured in footcandles or lumens, which is taken through a light meter's sensor at a horizontal position. <u>Immediate Property</u> - The building or structure wherein, or ground upon which, the use corresponding to the sign is located. This definition includes all land as described by deed that is held with the building or structure in which the use is located.

<u>Licensed Land Surveyor</u> - a land surveyor properly licensed in the state of N.H.

<u>Light Trespass</u> - The shining of artificial light beyond the boundaries of the property on which the light source is located in such a way that the light unreasonably interferes with the use and enjoyment of the affected property.

<u>Master Plan</u> - a comprehensive plan consisting of documents, maps and reports for development of the Town of Barrington, prepared and adopted by the Board, pursuant to NH RSA. 67 4:2 and including any part of such plan separately adopted and any amendment or parts to such a plan.

<u>Multifamily Structure (Housing)</u> A structure containing three or more dwelling units, or apartments, each of which shall contain separate living, sleeping, cooking, and bathroom facilities for the persons residing there. For example, triplexes (three-family dwellings) and quadraplexes (four-family dwellings) are considered multifamily structures.

Off-Site - any premises not located within the area of the subject lot.

<u>Owner</u> - any person, group of persons, firm or firms, corporation or corporations, or other legal entity having title to the land sought to be developed.

<u>Planning Board</u> - the Town of Barrington's planning board established in (date) in accordance with NH RSA 673:1.

**Professional Engineer** - an engineer properly licensed in the State of N.H.

<u>Recreational Vehicles</u> - A recreational vehicle, as defined in Article 18, shall not be construed as a dwelling unit under the provisions of this Ordinance. Occupancy of a recreational vehicle by any individual, group, or household, for more than 180 days in any calendar year shall not be permitted in Barrington.

**Recreational Camping Cabins** - A structure on a campsite that is four hundred (400 sq. ft.) square feet or less as measured by the exterior of the cabin, including all siding, corner trim, molding, and area enclosed by windows, but not including the overhang of the roof or porch or the log overhang at the corners.

<u>Right-of-way (ROW)</u> - a strip of land that is reserved for the location of a street, walkway, utility line, or other access way. The area of a ROW is not to be used in calculating the dimensions or areas of any lots or parcels that may adjoin and use said right-of-way as a means of access or for other purposes.

<u>Sign</u> - Any structure, device or representation designed or used to identify, advertise or call attention to or direct a person to any business, association, profession, commodity, product, institution, service, entertainment, person, place, thing or activity of any kind whatsoever and intended to be visible from a public road.

<u>Sign, Agricultural</u> - A seasonal sign to be displayed during the growing season for fresh produce and other farm products when the product would be available for sale.

<u>Sign, Auxiliary</u> - A special sign which provides information such as direction, price, sales information, hours of operation, or warning which does not include names, brand names, or information regarding product lines or services. Examples of such signs include directories of tenants in buildings, "no trespassing" signs, and signs which list prices of fuel.

Sign, Awning - That portion of an awning, canopy or similar device used for sign purposes. The sign area of an awning shall be counted as wall signage and may be used in conjunction with a wall sign. However, the total signage of the awning and wall must not exceed that for wall purposes. Only one awning sign is permitted when used in conjunction with a wall sign.

Sign, Changeable Copy - A sign designed so that characters, letters or illustrations can be changed or rearranged without altering the face or the surface of the sign. Time and temperature

signs are not included under this definition, provided they have no other changeable message.

Sign, Construction - A temporary sign that gives the name or names of principal contractors, architects and lending institutions responsible for construction on the site where the sign is

placed, together with other information included thereon.

<u>Sign, Directional</u> - Signs limited to directional messages, principally for pedestrian or vehicular traffic, such as "one-way", "entrance", and "exit".

<u>Sign, Directory</u> - A special sign on which the names or locations of occupants or the use of the building is given. This shall include office buildings and churches.

<u>Sign, Freestanding</u> - Any permanent sign or sign structure securely attached to the ground by structures or supports independent of support from any building.

<u>Sign, Graphic</u> - A special sign which is an integral part of a building façade. The sign is painted directly on, carved in, or otherwise permanently embedded in the façade. Any sign displayed in a window in such a manner that the wall or window becomes the supporting structure for, or forms the background surface of the sign is also considered a graphic sign.

<u>Sign, Integral</u> - Memorial sign or tablet; or name of building and date of erection when cut into any masonry surface or when constructed of bronze or other incombustible materials mounted on the face of a building. A building name is one which will carry on despite changes in tenants, not a company name for a building which will change with each tenant.

<u>Sign, Marquee</u> - A sign, which may be a changeable copy sign, attached to and made part of a theater, auditorium, fairground, or museum, which advertises present and scheduled events. A marquee is typically a permanent roof-like structure projecting beyond a building wall and generally designed and constructed to provide protection from the weather. The marquee must not extend or project beyond the confines of the entrance. Signs hanging below or to the side of marquees are not permitted. No signs shall be placed on the roof of a marquee.

<u>Sign, Neighborhood Name</u> - A special sign for the name of a new residential subdivision or other established neighborhood.

<u>Sign, Off Premise</u> - A sign that directs attention to a business, commodity, service, or entertainment conducted, sold, or offered at a location other than the premises on which the sign is located.

<u>Sign, Portable</u> - Any sign not permanently set in the ground or attached to a building or other structure.

<u>Sign, Projecting</u> - Any sign other than a wall sign affixed to façade of any building or wall whose leading edge extends beyond such building or wall. Projecting signs shall be securely attached to the building by bolts, anchors, chains, guys, or to posts, poles, or angle irons attached directly to the building.

<u>Sign, Public</u> - Any sign of public nature: community services information, public transit service, public utility information and scenic or historical points of interest.

<u>Sign, Real Estate</u> - Any sign used to offer the property upon which it is placed for sale, lease or rent.

<u>Sign, Roof</u> - A sign that is mounted on the roof of a building or that is wholly dependent upon a building for support and that projects above the walk or edge of a building with a flat roof, the eave line of a building with a gambrel, gable, or hip roof, or the deck line of a building with a mansard roof.

<u>Sign, Seasonal</u> - A special sign used to advertise the sale of agricultural products, Christmas trees, civic, and seasonal activities that depends on a specific time or season of the year.

<u>Sign, Special Event</u> - Any temporary sign used at grand openings and other special events that relates to the event, not the ongoing activity of the use.

<u>Sign, Temporary</u> - A sign or advertising display constructed of cloth, canvas, fabric, paper, plywood, or other light material and intended to be displayed for a short period of time (no more than thirty (30) consecutive days). An example of a temporary sign may include a retailer's sign temporarily displayed for the purpose of informing the public of a sale of "special" offer.

<u>Sign, Use</u> - Only for purposes of Article 5: Sign Regulations the word "use" employed to define a business, office, store, agency, industry or other activity or enterprise that uses signs to bring attention to it or the goods, services or products it makes, sells, stores, distributes or displays.

<u>Sign, Wall</u> - Any sign painted on, attached to, erected parallel to the face of, or erected and confined within the limits of, the outside wall of any building and supported by such wall or building and displaying only one advertising surface. Wall signs shall not exceed the highest point of the building roof. The area of an awning, canopy or similar device used for sign purposes is counted in wall signage.

<u>Sign, Window</u> - Any sign placed inside or upon a window facing the outside and intended to be seen from the exterior. (Deleted 5/17/22; Signage is found in Article 20 of the Barrington Zoning Ordinance.)

<u>Site Plan</u> - a plan, meeting all specifications and requirements of these regulations and the Zoning Ordinance.

<u>Street Banner</u> - A temporary sign hung across and over a public right-of-way with special permission from the Board of Selectmen. (Deleted 5/17/22; Signage is found in Article 20 of the Barrington Zoning Ordinance.)

**Temporary** - A maximum number of days per calendar year anywhere in the Town of Barrington, as provided by Article 3.3.1 of the Barrington Zoning Ordinance. **Uplighting-** Any light source that distributes illumination above a 90 degree horizontal plane. **Uniformity Ratio (U-Ratio)** - Describes the average level of illumination in relation to the lowest level of illumination for a given area. Example: U. Ratio =4:1 for the given area, the lowest level of illumination (1) should be no less than 25% or "4 times less" than the average (4) level of illumination.

<u>Vertical Opacity</u> - A rough calculation within a buffer area of the overall percent of the vertical plane which is visually opaque, as delineated by a fence, wall, shrubbery, or other materials and as measured from the ground to a line a certain distance above (e.g., six feet) and parallel to the ground. When shrubs are used for screening the calculation is based upon reasonable projections of shrub size, shape, and density at maturity when those shrubs are maintained and pruned in an appropriate manner.

**Zoning** - refers to the Zoning Ordinance of the Town of Barrington, N.H.

#### APPENDIX 1 - NATIVE TREES AND SHRUBS AND THEIR USE IN LANDSCAPING

RECOMMENDED NATIVE TREES							
Common Name	Latin Name	Low Maintenance	Salt Tolerance	Screen	Interest	Notes	
Arborvitae	Thuja occidentalis		Intermediate	Yes			
Ash, Black	Fraxinus nigra					Wet Areas	
Ash, White	Fraxinus americana		Intermed./Tolerant		Fall Color		
Basswood, Am. Or Linden	Tilia americana		Sensitive				
Beech, American	Fagus grandifolia		Sensitive			Large/Long lived	
Birch, Paper	Betula papyrifera		Intermed./Tolerant		Fall Color/White Bark		
Black Gum	Nyssa sylvatica	Yes			Fall Color/Winter Shape	DRED suggests to try more	
Cedar, Eastern Red	Juniperis virginianus		Intermediate	Yes		Disturbed areas	
Cottonwood, Eastern	Populus deltoides		Tolerant			Disturbed, wet sites	
Dogwood, Pagoda	Cornus alterniflora				Flowers/nice shape/Fruits	Wet areas/Mod. Sun	
Fir, Balsam	Abies balsmifera		Sensitive	Yes			
Hawthorne, Fleshy	Crataegus succulenta		Intermediate		Fruits/Fall Color	One of the best Hawthornes	
Hopthornbeam, American	Ostrya virginiana		Sensitive		Winter Interest	Winter Tolerant, DRED suggests to try more	
Hornbeam, American	Carpinus caroliniana	Yes	Sensitive		Fall Color	Wet areas, DRED suggests to try more	
Juniper, common	Juniperis communis					Ground cover	
Larch, American	Larix laricina		Tolerant			Good in masses	
Maple, Red	Acer rubrum	Yes	Sensitive		Fall Color		
Maple, Sugar	Acer saccharum		Sensitive			Needs large areas	
Oak, Scarlet	Quercus coccinea				Fall Color		
Oak, Red	Quercus rubra		Tolerant			High Maintenance tree	
Oak, Swamp White	Quercus bicolor		Sensitive			Wet areas	
Pine, Jack	Pinus banksiana					Sandy, disturbed areas	
Pine, Pitch	Pinus resinosa		Sensitive			Harsh, sandy soils	
Pine, White	Pinus strobus		Sensitive	Yes		Handsome native	
Plum, Canadian	Prunus nigra				Flowers/Fruit		
Shadbush	Amelanchier arborea		Sensitive		Flowers/Fruit	Wet areas	
Shadbush	Amelanchier candensis		Sensitive		Flowers/Fruit	Natural settings	
Spruce, White	Picea glauca		Intermed./Tolerant	Yes		Winter Tolerant	

APPENDIX 1 - NATIVE TREES AND SHRUBS AND THEIR USE IN LANDSCAPING							
RECOMMENDED NATIVE SHRUBS							
Common Name	Latin Name	Low Maintenance	Salt Tolerance	Screen	Interest	Notes	
Arrowwood	Viburnum dentatum		Tolerant		Flowers/Fruit/Fall Color	Withstands adverse city conditions.	
Bayberry	Myrica pensylvanica	Yes	Tolerant		Semi-Evergreen	No serious insect or disease problems	
Blueberry, Highbush	Vaccinium corymbosum		Tolerant		Flowers/Fruit/Fall Color, colorful winter twigs	Withstands adverse city conditions/attractive to birds.	
Cranberry. Highbush or American Cranberrybush	Viburnum trilobum	Yes	Unknown		Showy white flowers, glossy red berries	generally free of insect and disease problems; attractive to birds	
Dogwood, Panicle	Cornus racemosa		Sensitive		Flowers/Fruit/Colored Stalks/fall color	Will tolerate adverse city conditions.	
Dogwood, Red Osier	Cornus sericea		Sensitive		Red stems, whit e berries	Tolerant of most adverse city conditions	
Elderberry	Sambucus canadensis		Unknown		White flowers, purple berries	Tolerates adverse city conditions; attractive to birds.	
Spicebush	Lindera benzoin	Yes			Yellow flowers/red fruits	no serious insect or disease problems	
Mountain Laurel	Kalmia latifolia		No	Yes	Evergreen/Flowers		
Rhododendron, Rosebay	Rhododendron maximum			Yes	Flowers/Evergreen	some pollution tolerance	
Viburnum, Sweet	Viburnum lentago		Sensitive		Flowers/Fruit/Fall Color	tolerates adverse city conditions	
Viburnum, Maple leaf	Viburnum acerifolium		Sensitive		Fall Color	withstands adverse city conditions	
Winterberry, Black Alder	Ilex verticillata	Yes	Intermediate		Gorgeous red berries in fall	cool, moist, acid soils; shade OK; relatively free of insect and disease; need male and female plants.	
Witch Hazel	Hamamelis virginiana	Yes					
INVASIVE NON-NATIVE TREES AND SHRUBS TO BE AVOIDED IN LANDSCAPING							
Common Name	Latin Name	Reason					
Autumn Olive	Eleagnus umbellata	Crowds out native vegetation.					
Bayberry, Common	Berberis vulgaris	Forms thorny thickets preventing native herbaceous and shrub growth.					
Bayberry, Japanese	Berberis thunbergii	Forms thorny thickets preventing native herbaceous and shrub growth.					
Buckthorn, Common	Rhamnus cathartica	Buckthorn invading drier areas.					

APPENDIX 1 - NATIVE TREES AND SHRUBS AND THEIR USE IN LANDSCAPING						
Buckthorn, Glossy	Rhamnus frangula	Tolerant of dense shade and invades wet areas.				
Euonymus, Winged**	Euonymous alatus	Dense shade and dense root system crowd out everything but own seedlings.				
	Lonicera morrowii and tatarica					
Honeysuckle	Lonicera morrown and tatarica	Form impenetrable thickets and displace vegetation in young forests and floodplains.				
Honeysuckle, Japanese	Lonicera japonica	Vine that chokes supporting trees and shrubs.				
Locust, Black	Robinia pseudoacacia	Crowds out native vegetation.				
Maple, Norway**	Acer platanoides	Crowds out native vegetation.				
Rose, Multiflora	Rosa multiflora	Crowds out native vegetation.				
	NATIVE TREES NOT REC	OMMENDED BY DRED OR COOPERATIVE EXTENSION LITERATURE				
Common Name	Latin Name	Reason				
Box Elder	Acer negundo	Brittle wood, subject to snow and wind breakage.				
Dogwood, Flowering	Cornus florida	Disease problem.				
Elm, American	Ulmus americanus	Disease problem.				
Hemlock, Eastern	Tsuga canadensis	Wooly adelgid heading north; recommend not to plant as there is no solution to the adelgid problem at this time.				
Maple, Silver	Acer saccharinum	Disease problem, structurally weak wood.				
Mulberry	Morus sp.	Abundant fruit is a litter problem.				
Sycamore	Plantanus occidentalis	Disease problems make it very unattractive.				
Willow, Weeping	Salix sp.	Root problems, tree litter, attracts beetles.				
Aicantus	Salix sp. altissima	Crowds out native vegetation, toxin in bark, leaves and bark in soil endanger other plants.				
NON-NATIVE TREES NOT RECOMMENDED BY DRED OR COOPERATIVE EXTENSION LITERATURE						
Common Name	Latin Name	Reason				
Birch, European White	Betula pendula	Disease problems make it very unattractive, spring, summer and fall.				
Elm, Siberian	Ulmus pumila	Weak wooded, susceptible to wind breakage. Invasive in some locations.				
Pear, Bradford Callery**	Pyrus calleryana 'Bradford'	Serious structural splitting at branch junctions.				
Plane Tree, London	Plantanus X acerfolia	Disease problems.				
Poplar, Lombardy	Populus nigra	Insect and disease problems make it short lived.				

<sup>\*</sup> These may not be invasive in all locations, however it is not recommended that they be used as part of any landscaping plans.

\*\* These plants occur regularly on plans and should be replaced with alternative plants.