Site Plan Regulations
Town of Merrimack, NH

Adopted by the Merrimack Planning Board:
September 3, 2019
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SECTION 1    GENERAL PROVISIONS

1.01  **AUTHORITY:** These regulations have been prepared in accordance with the provisions of Chapter 674, inclusive New Hampshire Revised Statutes Annotated. Pursuant to the authority vested in the Town of Merrimack Planning Board in accordance with the provisions of Chapter 674 Section 43, NH Revised Statutes Annotated, the Merrimack Planning Board adopts the following regulations governing non-residential site plans for the development or change or expansion of use of tracts for non-residential uses or for multi-family dwelling units in the Town of Merrimack, New Hampshire.

1.02  **TITLE:** These regulations shall be known and may be cited as "Site Plan Regulations,” Town of Merrimack, New Hampshire.

1.03  **PURPOSE:** The purpose of these regulations, as summarized in NH RSA § 674:44, shall be to:

   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, light trespass, odor, 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. Encourage development that is consistent with the goals of the Master Plan and is sensitive to Merrimack’s rural and agricultural heritage;

   e. Encourage sustainable development in the community;

   f. 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;

   g. 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;

   h. Require in proper cases, that plats showing new streets or narrowing or widening of such streets be submitted to the Planning Board for approval;

   i. 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;

   j. Encourage non-vehicular means of access to sites;

   k. Encourage projects that incorporate methods of Transportation Demand Management for managing impacts of traffic generated by new development; and

   l. Include such provisions as will tend to create conditions favorable for health, safety, convenience, and
1.04 Definitions: For the purpose of these regulations certain terms used herein are defined as follows:

a. Abutter - Shall mean any person whose property is located in New Hampshire and adjoins or is directly across the street or stream from the land under consideration by the Planning Board. For purposes of receiving testimony only, and not for purposes of notification, the term abutter shall include any person who is able to demonstrate that his land will be directly affected by the proposal under consideration. For the purpose of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a condominium or other collective form of ownership, the term “abutter” means the officers of the collective or association, as defined in RSA 356-B:3, XXIII. For the purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under a manufactured housing park form of ownership as defined in RSA 205-A:1, II, the term “abutter” includes the manufacturing housing park owner and the tenants who own manufactured housing which adjoins or is directly across the street or stream from the land under consideration by the local land use board. (See also NH RSA § 672:3)

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

c. Approval – Shall mean recognition by the Planning Board, certified by written endorsement on the plat, that the final plat submission and/or phasing plan meets the requirements of these regulations.

d. Approval, Conditional – Shall mean an expression by the Planning Board that the preliminary layout appears to satisfy all requirements established herein for the preliminary layout submission phase. Conditional Approval does not constitute, nor should it be construed as, approval, either implied or granted, of the final plat, nor does it bind the Planning Board to approval of the final plat.

e. 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.

f. Board - The Planning Board of the Town of Merrimack, N.H.

g. Buffer - A strip of land along a property line or zone district boundary line, which may include a combination of physical space and vertical elements, such as plants, berms, fences or walls, the purpose of which is to separate and screen different land uses, or zoning districts, from each other.

h. Building - A structure with exterior walls and having a roof which combine to form an occupiable structure, including but not limited to apartments, barns, garages, storage sheds, canopies, hotels, offices, restaurants and stores.

i. Certified Soil Scientist - A person qualified in soil classification and mapping, who is certified by the State of New Hampshire.

j. Certified Wetland Scientist - A person qualified in wetland classification and mapping, who is certified by the State of New Hampshire.

k. Contractor Storage Yard - An establishment used for the outdoor repair, maintenance, or storage of a contractor’s vehicles, equipment, or materials.

l. Dedication - A gift by the owner of his property to another party without any consideration being given for the transfer. The dedication is made by a written instrument and is completed with an acceptance.

m. Development - Shall mean the construction of improvements on a tract or tracts of land for non-residential or multi-family use and any associated off-site improvements.
n. EASEMENT – Shall mean an acquired privilege or right of use acquired in the land of another and is used to create facilities for access, space for emplacement of public utilities and right of way, both in favor of the municipality and/or in favor of its residents. It shall include, without limitation, streets and roads, electronic and telephone utilities, vehicular and pedestrian traffic, sidewalks, water, storm drainage, and sanitary sewer utilities, pipelines, street lighting, slopes, ingress and egress, construction and conservation easements.

o. FLOOD PROTECTION WORKS - 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.

p. FRONTAGE - The distance along a lot line dividing a lot from an approved street.

q. LICENSED LAND SURVEYOR - A person qualified in land surveying who is licensed in the state of New Hampshire.

r. LOT - A distinct tract of land recorded in a deed, Court decree, or subdivision plan recorded at the Hillsborough County Registry of Deeds.

s. MASTER PLAN - A comprehensive plan consisting of documents, maps and reports for development of the Town of Merrimack, prepared and adopted by the Board, pursuant to NH RSA § 674:2 and including any part of such plan separately adopted and any amendment or parts to such a plan.

t. MULTI-FAMILY DWELLING - A residential building designed for or occupied by three or more families.

u. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) – Shall mean the name of the surface water quality program authorized by Congress as part of the 1972 Clean Water Act. This is the Environmental Protection Agency’s program to regulate point sources that discharge pollutants into waters of the United States.

v. OFFICIAL MAP – Shall mean the adopted street or base map of the municipality as defined in RSA § 674:9-11.

w. OFF-SITE - Any land not located within the area of the subject lot.

x. OWNER - Any person, group of persons, firm or firms, corporation or corporations, or other legal entity having title to the land sought to be developed.

y. PARKING SPACE - A space for one motor vehicle having the minimum design standards required by these regulations.

z. PROFESSIONAL ENGINEER – A person qualified to practice engineering who is licensed in the State of New Hampshire.

aa. RIGHT-OF-WAY - A strip of land that is generally used for the location of a street, walkway, utility line, or other access way, that is separate and distinct from the lots and parcels adjoining such R.O.W. and not included within the dimensions or areas of such other lots or parcels.

bb. SITE PLAN - A plan, meeting all specifications and requirements of these regulations and the Zoning Ordinance.

cc. STREET – Means any vehicular way that: (1) is an existing state or municipal roadway; or, (2) is shown on a subdivision plan approved pursuant to law; or, (3) is approved as part of the Official Map process outlined in RSA § 674:9 and 674:10. “Street” shall include road, highway, avenue, boulevard,
lane, etc. Unless otherwise indicated, the term street shall refer to both public and private streets.

dd. STREETS, ACCESS: Shall mean minor ways designed or required to provide vehicular access to off street loading or off street parking facilities.

e. STREETS, ARTERIAL: A general term denoting a street primarily designed for through traffic, carrying heavy loads and large volumes of traffic, usually on a continuous route.

ff. STREETS, COLLECTOR: Relatively low speed, relatively low-volume streets that are intended for collecting trips from local streets and distributing them to the arterial network.

gg. STREETS, COMMERCIAL: Shall mean streets designed or required to serve industrial or mercantile concentrations and to carry traffic from these concentrations to major streets.

hh. STREETS, MAJOR: Shall mean streets designed or required to carry large volumes of traffic to, from or through the central part of the Town.

ii. STREETS, RESIDENTIAL: Shall mean streets designed or required to provide vehicular access to abutting residential properties.

jj. STREETS, SERVICE: Shall mean streets designed or required to provide vehicular access to abutting commercial properties.

kk. VERTICAL OPACITY - 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.

ll. WETLAND - An area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support and that under normal conditions do support a prevalence of vegetation typically adapted for a life in saturated soil conditions. Wetlands include, but are not limited to, swamps, marshes, bogs, and similar areas, as defined in the NH Department of Environmental Services, Env-Wt 100-800: Rules Governing Wetlands.

mm. ZONING - Refers to the Zoning Ordinance of the Town of Merrimack, N.H. as provided in the Municipal Code of Ordinances.
SECTION 2  SITE PLAN APPLICATION PROCEDURE AND APPROVAL PROCESS

2.01  GENERAL:

a. **Application Procedure:** There are two stages allowed for in the process used by the Town of Merrimack consisting of the following:

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

b. **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 verified mail at least ten (10) days prior to the meeting. The notice shall include a general description of the proposal and shall identify the applicant and location of the land.

c. **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.

d. **Review of Application:**

   1. 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 Community Development Department. 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. 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.

e. **Municipal Review of Applications:** All applications for Site Plan review will be reviewed by a representative from the following, and comments submitted to the Community Development Department for coordination/communication with the Applicant:

   1. Community Development Department;
   2. Public Works Department;
   3. Wastewater Division;
   4. Fire Department;
   5. Building Division;
   6. Assessing Department;
   7. Police Department;
   8. Conservation Commission;
   9. Merrimack Village District or Pennichuck Water Works, as applicable;
   10. Planning Board’s designated engineering peer review consultant; and
11. Any other appropriate agency or board as determined necessary by the Planning Board.

2.02 **PRE-APPLICATION REVIEWS - DISCUSSION OF CONCEPTUAL DESIGN INFORMATION (OPTIONAL):** An Applicant may make a written letter request for discussion of conceptual design information, with two (2) copies of conceptual information (no surveying or engineering required) to be scheduled for discussion of the proposal in conceptual form, in accordance with RSA § 676:4 II, only with members of the Planning Board at a public meeting.

a. 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.

b. A discussion may be sought for the purpose of discussing Board policies and standards and conclusions derived from the Master Plan, so that the Board may evaluate whether the Applicant’s concept is consistent with the Master Plan prior to submittal of an application.

c. The Board and Applicant may discuss proposals in conceptual form only, and in general terms, such as the desirability of types of development.

d. A discussion shall not bind either the Board or the Applicant, as stated in RSA § 676:4 II.

2.03 **PRE-APPLICATION SUBMISSIONS - DESIGN REVIEW (OPTIONAL):**

a. **Design Review:** The design review submission is a tool to assist the Applicant in providing complete information for the project. The Applicant shall submit complete drawings and supporting information to address the requirements of the regulations.

b. **Submission items:** The Applicant shall file a completed application checklist and indicate in writing that the submission is intended for design review. A complete application is one which shall:

1. Be signed by the property owner or the owner's agent. If an agent signs the application, documentation authorizing the agent to act on the owners’ behalf shall be submitted as well.

2. Be accompanied by an application fee (Exhibit 1);

3. Include a list of names and addresses of all abutters provided in RSA 676:4, I(b);

4. Include nine (9) full size sets of plans and fifteen (15) 11”x17” reduced size plans, as required by Section 4 and in accordance with the requirements for design standards and improvements as outlined in Section 3 (and Section 5 if applicable);

5. Include escrow for review cost in sufficient amount determined by the Community Development 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.

c. **Notification of Design Review:** Abutters and the general public shall be promptly notified in accordance with Section 2.01.b that the Town of Merrimack is conducting DESIGN REVIEW of the project and plans for the project are available for review by the general public at the Community Development Department.

d. **Schedule:** Once it is determined that all required checklist items are provided, the plans will be reviewed by the Municipal Departments and the Town’s peer review consultant. The Town shall review the submitted plans and provide comments to the applicant within fifteen (15) working days of the submittal date of the complete Design Review Application, including all items specified in Section
2.03.b.  

**Municipal Review Comments:** During the DESIGN REVIEW phase, comments which are generated during Municipal review are forwarded to the Applicant for their use.  

1. If the Applicant elects to have a design review meeting with the Planning Board, revised plans shall be submitted not later than ten (10) working days prior to the scheduled design review meeting with the Planning Board; and  

2. If the Applicant elects to not have a design review meeting with the Planning Board, the Town’s comments shall be addressed, and comments incorporated into the design prior to Formal Application.  

f. **DESIGN REVIEW MEETING (OPTIONAL):**  

1. **Submission Items:** An Applicant may make a written letter request for a public meeting with the Planning Board.  

2. **Notification:** The Board shall notify the abutters and the Applicant in accordance with Section 2.01.b of the date of the meeting. Notice will be mailed at least ten (10) days prior to the date of the meeting. A notice shall be posted at two (2) public locations.  

3. **Public Meeting:** The public meeting shall be held after receipt of the Town’s review comments so that they are available for discussion. Any abutter or person with a direct interest in the matter may discuss the proposal in person or in writing. All discussion and comment by Board members shall be non-binding.  

2.04 **FORMAL APPLICATION SUBMISSIONS AND PROCEDURES:**  

a. **Submission Items:** The Applicant shall file a completed Formal Application for consideration. A complete application is one which shall:  

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 why;  

2. Be signed by the property owner or the owner’s agent. If an agent signs the application, documentation authorizing the agent to act on the owners’ behalf shall be submitted as well.  

3. Be accompanied by the correct application fee (Exhibit 1), if not already paid under pre-application design review submittal;  

4. Include a list of the names and addresses of all abutters, as provided in RSA § 676:4, I(b);  

5. Include a narrative description of the project;  

6. Include nine (9) full size sets of plans and fifteen (15) 11”x17” reduced size plans, as required by Section 4 and in accordance with the requirements for design standards and improvements as outlined in Section 3 (and Section 5 if applicable);  

7. Include applicable documents listed in Section 4.18; and  

8. Include escrow for review cost in sufficient amount determined by the Community Development 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.
b. **Submittal date of Formal Application**: The date of delivery of a Formal Application to the Community Development Department and issue of a departmental date stamp on the application by the Community Development Department. The Applicant shall indicate the items delivered on Exhibit 4.

c. **Acceptance process**: The Formal Application must be delivered by the submission deadline listed in the Planning Board’s schedule of meetings and deadlines (available at the Community Development Department and on the Town website) that corresponds to the Planning Board meeting at which the Application is to be 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 NH RSA § 676:4, determine if the submitted application is accepted as complete.

d. **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.

e. **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.

f. **Municipal Review**: Municipal review comments will be forwarded to the Planning Board and the Applicant for consideration at the public hearing.

g. **Notification of Submission**: The Board shall notify the abutters and the Applicant in accordance with Section 2.01.b.

h. **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.

i. **Public Hearing**: The Board shall hold a public hearing on an accepted application with notice as required by Section 2.01.b. 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.

j. **Site Walks**: Site walks of properties may be scheduled at the discretion of the Planning Board. Site Walks are public meetings, and must have meeting notice and minutes as required by RSA 91-A. The procedure for site walks is as follows:

1. The site walk will commence at a specific time and location designated on the meeting notice;
2. The applicant shall ensure that the site is reasonable prepared for the site walk, by staking out major features/buildings, and ensuring that the site is traversable;
3. Members of the public are welcome to attend site walks. At the discretion of the Chair, participants should introduce themselves to the all attendees at the start of the site walk;
4. The applicant or his/her representative shall lead the group on the site walk, explaining elements of the site and the project, as appropriate and as directed by the Chair;
5. The Board members present shall refrain from discussions of the site walk with other Board members until the next regularly scheduled public hearing, but may ask questions of the applicant during the walk;
6. The Chair will adjourn the site walk, and the project shall be further discussed at a regularly scheduled public hearing of the Planning Board.

k. **Special Studies or Reviews**: If, during the Board’s consideration of the application, the Board
determines that certain additional 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 2.01.c and 2.01.d.

1. **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 Town Council an extension of time not to exceed ninety (90) days. The Board shall take action as follows:

   1. If the Board grants approval of an application as submitted, the plan shall be signed and dated by the Chair and Vice Chair; and the plan made available for filing with the Community Development Department;
   2. If the Board disapproves of an application, the Board shall state the grounds for disapproval in writing; and
   3. If the Board grants conditional approval of an application, the conditions shall be stated in writing and the plan shall not be signed until fulfillment of such conditions.

m. **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 Section 2.01.b to receive evidence of compliance or non-compliance. No public hearing is required for conditions which are:

   1. minor plan changes, compliance with which is administrative and does not involve discretionary judgment;
   2. conditions which are in themselves administrative and which involve no discretionary judgment on the part of the Board; or
   3. conditions with regard to the Applicant’s possession of permits and approval granted by other Boards or agencies.

n. **Time Limits for Fulfilling Conditions**: See Section 7.06

o. **Board Signature**: Prior to obtaining Board signature, the Applicant shall submit eight (8) complete paper print plan sets, a full set of reproducible mylar plans for the Town’s records, and one mylar copy of each sheet to be recorded at the Hillsborough County Registry of Deeds. In addition, any and all supporting documents as required by any precedent conditions of approval shall be submitted. This shall include final and complete reports for all items submitted during review for the Town of Merrimack’s file. The Chair and Vice Chair of the Board shall endorse the mylar, and paper copies of the approved plan(s) meeting the conditions of approval upon verification that all precedent conditions of approval have been addressed.

2.05 **ADMINISTRATIVE APPROVAL OF MINOR PROJECTS**:

a. Administrative Approval is intended for site plan amendments or changes of use with no impacts to the Town or surrounding properties, and requires minimal technical review to render a decision.

b. The Community Development Department shall review minor proposals for an Administrative Approval that meet the following criteria (the Planning Board Chair shall be consulted for guidance in any situation where there is doubt a project should be considered for Administrative Approval):

   1. The proposal is consistent with the approved site plan on file;
   2. The proposal may include changes in use, exterior appearance, lot coverage, building size, location, landscaping or other similar improvements;
3. Structures may not increase more than 10% in size, but shall not exceed a total of 3,000 additional square feet;
4. The expanded building footprint shall not increase the amount of stormwater run-off accommodated for by the most recent site plan approval, unless deemed insignificant by the Town Engineer;
5. Changes in plant materials including quantity, size, location, or type may be authorized by the Community Development Department;
6. Changes in the location of parking spaces may be authorized by the Community Development Department, however the number of spaces must comply with either these regulations or the most recently approved site plan (if a waiver was granted previously);
7. The Applicant shall make the request in writing (signed by the property owner) to the Community Department and submit two (2) copies of the most recent site plan or as-built plan marked up showing the proposed amendments, notes required by the Community Development Department, and all other appropriate information for an informed decision, including a letter justifying the changes.

c. The Community Development Department will review the proposal and either approve, conditionally approve, disapprove, or refer the request to the Planning Board. Administrative Approvals require are not considered final without a signature and decision letter from the Community Development Department.

d. In the event Community Development Department Staff finds the proposal requires the submission of an amended site plan or as-built plan, the Applicant will be advised within 5 working days of submission. Community Development Department Staff may also subsequently require the application to be reviewed by the Planning Board.

e. The Community Development Department shall notify the Planning Board monthly of any Administrative Approvals granted.

f. Community Development Department decisions regarding Administrative Approvals may be appealed to the Planning Board.
SECTION 3 DESIGN STANDARDS AND REQUIREMENTS FOR IMPROVEMENTS

3.01 GENERAL

a. Approval of Improvements: All improvements shall be designed and constructed in accordance with the Town of Merrimack regulations and standards, and shall be subject to the approval of the Board.

b. 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.
   1. The Planning Board may stipulate, through conditions of site plan approval, limitations on hours of construction to minimize impacts on neighboring land uses.
   2. Limitations on construction hours may be overridden by local authorities (Public Works Department, Merrimack Village District, Fire Department, etc.) when work during overnight hours is necessary for public safety or other reasons determined by the Town.

c. 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:
   1. ZONING ORDINANCE - Town of Merrimack, current edition;
   2. CONSTRUCTION STANDARDS – Town of Merrimack Public Works Department, current edition;
   3. STORMWATER ORDINANCE (Chapter 167 of the Town Code) – Town of Merrimack, as most recently amended;
   4. MANUAL ON DRAINAGE DESIGN FOR HIGHWAYS – NH Department of Transportation, current edition;
   5. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) - U.S. Department of Transportation, Federal Highway Administration, current edition;
   6. STANDARDS SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION - State of N.H. Department of Transportation, latest revision;
   9. NEW HAMPSHIRE STORMWATER MANUALS, latest editions:
      i. VOLUME 1 – STORMWATER AND ANTI DEGRADATION
      ii. VOLUME 2 – POST-CONSTRUCTION BEST MANAGEMENT PRACTICES SELECTION AND DESIGN
      iii. VOLUME 3 – EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION.
   10. STATE OF NEW HAMPSHIRE STANDARDS OF DESIGN AND CONSTRUCTION FOR SEWERAGE AND WASTEWATER TREATMENT FACILITIES - New Hampshire Department of Environmental Services, Code of Administrative Rules, Env-ws 700, latest revision;
   11. SUBDIVISION AND INDIVIDUAL SEWAGE DISPOSAL SYSTEM DESIGN RULES - New Hampshire Department of Environmental Services, Code of Administrative Rules, Env-ws 1000, latest revision;
12. STATE OF NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES, DESIGN STANDARDS FOR SMALL PUBLIC DRINKING WATER SYSTEMS, Env-ws 372, latest revision;

13. TRIP GENERATION, Institute of Transportation Engineers, current edition;
14. Other standards and specifications as approved by the Town of Merrimack.

3.02 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:

   a. **Location**: Monuments for the lot that is being developed shall be placed not more than 500' apart in any straight line, and at all corners, at the beginning and end of all curves and at all angle points.

   b. Lot corners and points of curvature along the right of way line shall be marked by a stone or concrete monument 4” x 4” x 36” (minimum). All other lot corners and angle points along property lines shall be marked by 1” diameter iron pipe or 5/8 “ steel rebar at least 30” in length or a drill hole set in an existing stonewall.

   c. **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 set prior to issuance of a Certificate of Occupancy.

3.03 GRADING: Grading shall be shown in the drawings with information including, but not limited to, the following:

   a. **Contours**: existing and proposed contours at two foot contours intervals, based on USGS datum.

   b. **Spot elevations**: spot elevations shall be shown along all drainage facilities and adjacent streets at not more than 50' intervals in all directions.

   c. **Layout**: the layout of the existing and proposed streets/driveways, lot lines, wetlands (including square foot impact areas), and drainage facilities.

   d. **Buildings**: the location of all existing and proposed buildings and structures onsite and within 50' of the property line.

   e. **Erosion control**: The erosion control measures shall be indicated on the plans and be in accordance with best management practices of the NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3 – EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. Proper construction details shall be provided in the plan set.

3.04 UTILITIES: The Applicant shall show the location and size of all existing underground and overhead non-municipal utilities. The location of all manholes, transformer poles and other appurtenant facilities or structures shall be shown. All proposed utilities shall be underground. Utilities shall be located so as not to conflict with roadside drainage systems.

3.05 WATER SYSTEM:

   a. **Municipal Water System**: When a project is to be served by public water, the Applicant shall show the location of all existing and proposed water lines and all appurtenant structures on the plan. The water system shall be reviewed by the appropriate water company (Merrimack Village District or Pennichuck Water Works) approving the proposed water plan. The municipal water system shall be designed and constructed in accordance with the appropriate water company standards and the standards of the New Hampshire Department of Environmental Services.
b. **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 Merrimack Regulations. Protective well radius shall not encroach on rights-of-way.

c. **Common Water System:** When a common private 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 Merrimack, including all necessary easements, agreements, and licenses. The Town of Merrimack will not take ownership of the common water system. It shall remain private and part of the common ownership.

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

3.06 **SANITARY SEWER SYSTEM:**

a. **Municipal Sanitary Sewer System:** When a project is to be served by municipal sanitary sewer, the Applicant shall submit a plan showing the location of all existing and proposed sanitary sewer lines and all appurtenant structures. A permit is required from the Town of Merrimack Department of Public Works (and NHDES for sewer extensions, where applicable) and the permit number shall be shown on the plans.

The municipal sanitary sewer system shall be designed and constructed in accordance with the Standards of the New Hampshire Department of Environmental Services, Town of Merrimack Sewer Ordinance, and Town of Merrimack Department of Public Works - Sewer Division requirements. See The Town of Merrimack Sanitary Sewer Construction Standards for Specific Specifications, as last revised.

b. **Individual Disposal System:** When a project is to be served by an individual septic system, certification from the Building Department 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 Merrimack Regulations. The septic area and the septic reserve areas are to remain open and unencumbered by any other uses that would restrict their usage.

c. **Privately-Owned Common Disposal Systems:** Common disposal systems shall be designed and constructed in accordance with the New Hampshire Department of Environmental Services and the Town of Merrimack 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 Merrimack. The proposed ownership and operation shall be acceptable to the Town of Merrimack, including all necessary easements, agreements, and licenses. The Town of Merrimack will not take ownership of the common disposal system. It shall remain private and part of the common ownership.
3.07 STORM DRAIN SYSTEM

a. 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.

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.

2. Surface water runoff shall be carried away in a system of swales, drainways, culverts and channels to a natural watercourse or existing drainage facilities.

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. Any culvert or other drainage facility shall be designed to be accommodating for both the upstream volume and treating the runoff created from the site development. The treatment being proposed shall be able to treat any drainage resulting from the activities on the site. For any change of use the drainage system shall be re-evaluated for the appropriate use.

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. All easements and dedications must be recorded in the Hillsborough County Registry of Deeds along with the plan.

6. Where it is anticipated that the additional runoff incidental to the development of the site will overload the existing downstream drainage facility the Board may withhold approval of the project until provisions have been made for the improvement of said potential condition.

7. Where the Department of Public Works determines that the downstream, offsite drainage system is substandard, the Planning Board may require the applicant to improve the drainage system. The system is required to meet the EPA standards for the MS4 communities if it will be discharging directly to a surface water of the State of New Hampshire.

b. Design Computations: A drainage study shall be submitted for review by the Town’s peer review consultant and Public Works Administration/Engineering Department. A drainage study shall include:

1. A table of contents;

2. The project location and watershed area shown on a USGS quadrangle or as a figure in the report;

3. A narrative statement indicating how the applicant has met the requirements of Section 3.07 and describing the methodology and results of the analyses;

4. A summary table comparing the existing and post-development rates of runoff for each catchment area and for individual drainage basin/watershed being proposed and also along the point where the runoff is leaving the site for abutting properties. All watersheds and drainage areas shall be consistently labeled in the tables, calculations, and plans;

5. 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;

6. A summary table of each swale and channel indicating project location, cross-section/channel
width, slope, Manning’s “n” value, peak discharge, depth of flow, and peak velocity for the
design storm;

7. 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;

8. 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;

9. Runoff calculations shall be completed for the existing and post-development conditions using
Soil Conservation Service (SCS) Rationale Method as described in the New Hampshire
Design for the appropriate design storms as required by the regulations;

10. 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 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. A minimum of 12 inches of
free board shall be provided above the 50-year storm to the minimum elevation of embankment
at the detention basin;

11. Water quality treatment facilities including but not limited to Water Quality Volume, Water
Quality Flow and Groundwater Recharge Volume shall be designed to meet the minimum
requirements of the NH Department of Environmental Services Alteration of Terrain standards
and are in addition to these regulations;

12. Low Impact Development (LID) “Interception Practices” may be used and encouraged for the
Overall Site Planning and preserving the vegetation along with Hydrologic Management and the
LID Structural Practices;

Practices Selection and Design shall be used to screen and select the Best Management Practices
for a particular development or re-development project. The selection of each BMP is to meet
the specific management objectives of the physical site and the proposed usage. The design
shall consider the following stormwater management objectives:
   i. Temporary Water Quality Protection During Construction;
   ii. Cold Weather Site Stabilization and performance in frozen ground conditions;
   iii. Pollutant Removal;
   iv. Ground Water Recharge & Infiltration Rates;
   v. Channel Protection;
   vi. Peak Runoff Control;
   vii. Anti-degradation Requirements;
   viii. Land Use Criteria including High-Load Areas and Water Supply Areas;
   ix. Long-Term Operations & Maintenance;

14. The report shall be prepared and stamped by a licensed professional engineer in the State of NH;

15. Long Term Operations & Maintenance Manual shall be prepared for the Pre-construction
Meeting. The reports during construction shall be reported weekly or after every rainstorm of ¼
inch or more to Community Development. After construction is completed yearly or semi-
yearly reports will be required; and
16. In addition, “High Load” areas (as defined by NHDES Alteration of Terrain requirements) will be required to provide sampling results from the runoff leaving the site.

c. **Hydraulic Grade Line (HGL):**
   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;
   2. Open Channels and Swales - For open channels and swales, the HGL shall be shown for the appropriate design storm required by the regulations; and
   3. Detention Basins/Ponds - The HGL shall be shown for the 50-year flood event.

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

e. **Design Runoff:** The rainfall frequency to be used with this formula shall be as follows:
   1. Commercial areas - 25 years
   2. Industrial areas - 25 years
   3. Flood Hazard Areas - 50 years
   4. Multi-Family Residential - 25 years

f. **Placement of Drain Lines:** All off-site drain lines shall be placed within right-of-way dedicated for public streets unless use of easements is specifically approved by the Board.

g. **Pipe Size, Velocity and Type:**
   1. Minimum allowable pipe diameter in any storm drain system shall be 15".
   2. The minimum design velocity in pipes shall be a minimum of 2 feet per second and the maximum velocity shall be 10 feet per second.
   3. The minimum depth of cover for storm drain lines shall be designed from the top of pipe to finished grade as follows:
      i. RCP pipe: 18 inches
      ii. HDPE/ADS N12 Pipe: 36 inches
   4. Bedding and backfill shall be 3/4 inch crushed stone. Bedding shall be a minimum 6-inch depth in earth and 12-inch depth in ledge.
   5. Acceptable pipe material shall include ADS N12 and reinforced concrete pipe (RCP). Use of CMP Pipe is discouraged.
   6. Maximum length between catch basins shall be 300 feet.
h. **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 Merrimack standard structure - a vertical slotted weir with overtopping grate and properly sized outlet pipe. Manholes shall be provided at all changes of direction.

i. **Driveway Culverts:** The location, length, size, material, bedding and backfill of all driveway culverts shall be approved by the Town Engineer prior to construction. Driveway culverts shall be located a minimum of 11 feet off the edge of roadway pavement. All driveway culverts shall be the responsibility of the property owners for required maintenance and replacement.

j. **Underdrains:** Underdrains shall be provided along site driveways/roads in all cut locations or as required by the Town of Merrimack.

3.08 STREETS/DRIVEWAYS

a. **General:** 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 Section 3.09 of the Merrimack Subdivision Regulations.

b. Prior to any work being performed within a Town Right of Way (ROW) the owner/contactor shall obtain a ROW Permit from the Town of Merrimack Highway Division of Public Works. Work shall include any construction/reconstruction of driveways, roads and any utility hookups or extensions.

c. **Driveways:**

1. Driveway widths and right-turn radii shall comply with the standards set forth in the Subdivision Regulations.

2. There shall only be one driveway entrance per lot unless permission is granted by the Planning Board and the Town Engineer and/or the Highway Division of Public Works.

3. When a proposed driveway is located on a State road, the applicant is also responsible for obtaining the approval and necessary permits from NHDOT. The applicant shall submit a copy of the permit to the Planning Department and the permit number shall be shown on the plan.

4. Access points shall not be located closer than 100 feet from one another on the same side of the road or 50 feet from intersecting streets (as required by the Merrimack Zoning Ordinance).

5. Proposed and existing driveways that are upgraded as part of a site plan development shall be constructed to the structural section standards as follows: 1 ½ “wearing course 2 ½ “ base course 6 “crushed gravel, 12”bank run gravel.

6. **Sight Distance.** The minimum sight distance shall be 400 feet in all directions meeting the Subdivision Regulations (Unless otherwise a shorter distance is permitted by the Public Works Department for lower speed roadways or larger distances by NH DOT as part of a State Driveway Permit). Proper visibility easements shall be provided to meet the sight distance requirements.
7. All access shall be designed to accommodate prospective traffic and meet requirements of the zoning ordinance and any additional requirements of the Fire Department.

8. Where the existing configuration of properties and driveways in the vicinity of the site precludes spacing of a driveway in accordance with Section 3.08.c.4 above, the Planning Board may require that one, or a combination of, the following methods be utilized:

   i. **Joint Use Driveways.** Wherever feasible, the Planning Board may require a joint-use driveway serving two abutting properties, with appropriate cross-access easements provided. All Easements are to be recorded in the Hillsborough County Registry of Deeds.

   ii. **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.

d. **Sidewalks:** The Board may require the construction of sidewalks for pedestrian access to schools, parks, shopping areas, etc., particularly when such pedestrian facilities are recommended by the Town’s Master Plan or other bicycle/pedestrian planning documents. Construction of sidewalks shall be in accordance with the Subdivision Regulations.

3.09 LANDSCAPING DESIGN STANDARDS

a. The landscape of Merrimack is diverse, containing developed commercial and industrial areas, residential neighborhoods, natural wooded environments, agricultural land and open fields, as well as wetlands, lakes, ponds, rivers, and streams. New development should be respectful and sensitive to the dominant landscape character of Merrimack as a whole.

b. The purpose of landscaping design standards in Merrimack are to:

   1. Preserve and enhance the character of Merrimack’s landscape;

   2. Enhance the goals of the Master Plan, the Zoning Ordinance, and provide attractive settings for new development;

   3. Preserve and enhance local and regional open space resources;

   4. Preserve the integrity of valuable historic resources;

   5. 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;

   6. Encourage the use of indigenous plant material to provide natural habitat and food sources and to maintain ecological diversity; and

   7. Maintain a quality image of the public spaces within Merrimack and high property values for present and future development.

c. General Requirements:

   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-of-way.

   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: Notes on Native Trees and Shrubs and...
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 2: Notes on Native Trees and Shrubs and Their Use in Landscaping – Prohibited Plants)

4. All plant material shall have a minimum winter hardiness for Zone 5B as determined by the American Standards for Nursery Stock.

5. Minimum sizes for plant material, unless indicated elsewhere in these regulations or the Zoning Ordinance, shall be as follows:
   i. Deciduous shade trees: three inch caliper,
   ii. Deciduous ornamental trees: two inch caliper, and
   iii. Evergreen trees: six foot height.

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.

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.

8. On parcels that are located in the Aquifer Conservation District and/or a Wellhead Protection Area, only low phosphate, slow release nitrogen fertilizers shall be used. While not required, it is recommended that the applicant utilize a soil testing facility to determine what levels and applications rates are necessary prior to applying any fertilizers to the site.

9. 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.

10. Landscaping requirements for parking lots are located in Section 3.11.f.

11. Landscaping shall be designed so that it does not interfere with sight distances at driveways.

d. Preservation of Existing Vegetation

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.

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.

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 identified and marked on the site and delineated on the site plan.
4. The applicant shall be responsible to replace any trees designated to remain, which have been damaged, killed, or removed as a result of construction activities. The Planning Board requires replacement-in-kind, per caliper inch of deciduous trees and by height for evergreens. Two inch caliper deciduous trees and 4 foot tall evergreens shall be the minimum size used for replacement. For example, if a 24-inch caliper deciduous tree is damaged or killed during construction, the applicant shall replace the tree with six 4 inch caliper trees, or any other combination that adds up to 24 caliper inches. A 36-foot tall evergreen, for example shall be replaced with six 6 foot tall evergreen, or any other combination adding up to 36 feet.

e. Screening

1. Screening shall be a year-round visually impermeable barrier that may be existing, constructed, or a combination thereof.
   
   i. Existing screens may consist of natural topographic landforms, rock outcrops, or vegetation that is dense enough to be visually impermeable.

   ii. 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.

2. Screening is required to soften the visual impact of buildings, parking areas (see Section 3.11.f), 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.

3. The use of existing vegetation, topography, and natural features to comply with screening requirements is encouraged.

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.

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.

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.

f. Maintenance

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 at all times in accordance with the approved plans, 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.

2. Landscaping shall be maintained so that it does not interfere with sight distances at driveways.

3. The Planning Board may, at its discretion, require a landscape maintenance and water management plan. The maintenance plan shall include, but not be limited to the following:
i. Integrated Turf Management: mowing schedule, weed control, pest control, soil pH management, fertilizer plan, aeration/dethatching schedule, repair/replacement plan.

ii. Shrub and Groundcover Management: mulch schedule, weed control, pruning where needed for visibility, preventative pest/disease management, repair/replacement plan.

iii. Tree Management: mulch schedule, weed control, deadwood removal, pruning schedule, particularly for trees located next to walkways or roadways, fertilizing schedule, preventative pest/disease management, repair/replacement plan.

iv. Water Systems Management: water source, system description, spring start-up, fall close-out, system testing schedule, repair/replacement plan. The applicant may install a permanent water supply system consisting of a sprinkler system and/or hose bibs placed at appropriate locations and intervals. Wherever possible, irrigation water shall be derived from sources other than the municipal water system, including “gray water,” reused water, detained stormwater, roof drainage, or water from on-site wells. “Gray water” is water from sinks, showers, dishwashers, and washing machines. On-site cisterns may be installed to store water for irrigation.

v. Rodent Control: design preventative measures, operational preventative measures, monitoring, schedule, remedial action plan.

vi. Seasonal Maintenance: Spring clean-up plan, fall clean-up plan, disposal plans for leaves and plant debris, winter plowing plan, winter deicing plan.

3.10 SOIL & WETLAND IDENTIFICATION: The applicant shall be required to identify existing soils in accordance with United States Department of Agriculture Natural Resources Conservation Service mapping for Hillsborough County. All wetlands impacting the project shall also be field delineated and certified by a Certified Wetland Scientist in accordance State law. In addition, any vernal pools should be noted in the wetland delineation.

3.11 PARKING STANDARDS

a. General off-street parking and loading standards

1. At the time any new building or structure is erected or any existing building or structure is subject to a substantial alteration or a change in use, off-street parking and loading spaces shall be provided in accordance with the minimum standards set forth below.

2. Calculation of parking and loading requirements.

   i. Where the use is not enclosed in a building, the portion of the lot so used shall be considered as part of the gross floor area for computing parking and loading requirements;

   ii. Quantity of parking and loading spaces shall comply with the minimum listed within Table 1 of this section based on allowed uses;

   iii. Loading and unloading areas shall not be considered as parking spaces;

   iv. When the schedule requires the number of spaces to be calculated per employee, the number to be used is the maximum number of employees present during the largest shift.
b. Dimensional requirements for parking spaces

1. Minimum parking space sizes and aisle widths shall conform to the following table:

<table>
<thead>
<tr>
<th>Angle to Travel Lane</th>
<th>Width of space</th>
<th>Length of space</th>
<th>Aisle width</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 degrees</td>
<td>9’</td>
<td>18’</td>
<td>24’ (2-way traffic)</td>
</tr>
<tr>
<td>60 degrees</td>
<td>10’6”</td>
<td>22’</td>
<td>18’ (1-way traffic)</td>
</tr>
<tr>
<td>45 degrees</td>
<td>13’</td>
<td>25’</td>
<td>16’ (1-way traffic)</td>
</tr>
<tr>
<td>0 degrees (parallel)</td>
<td>9’</td>
<td>22’</td>
<td>16’ (1-way traffic)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>20’ (2-way traffic)</td>
</tr>
</tbody>
</table>

2. Compact parking spaces (See Section 3.11.g.1) shall be 90 degree spaces, and measure at least 8 feet wide by 15 feet long. Compact spaces must be conspicuously designated as reserved for compact automobiles by a sign located such that it will not be obscured by a vehicle parked in the space.

3. Motorcycle parking spaces (See Section 3.11.g.2) shall be 90 degree spaces, and shall be a minimum of 4 feet wide by 8 feet long. Motorcycle spaces must be conspicuously designated as reserved for motorcycles by a sign located such that it will not be obscured by a motorcycle parked in the space.

4. ADA Accessible parking spaces shall conform to the requirements of Section 3.11.i.

c. Minimum stacking space requirements - All uses which include a drive-thru window or which are characterized by patrons remaining in their vehicles to receive service shall provide stacking spaces. Stacking spaces are not considered parking spaces and cannot be utilized to meet the parking requirements of Section 3.11.e. Stacking spaces shall be a minimum of eighteen (18) feet in length. All stacking areas must be separated from other circulation aisles and parking spaces. Drive-thru lanes should be designed to include a means for vehicles to leave the queue.

1. Restaurant drive-thru windows - A minimum of ten (10) stacking spaces (inclusive of the space at the window) shall be required for restaurants with drive-thru windows.

2. Car Washes - A minimum of four (4) stacking spaces per car wash bay (inclusive of the vehicle in the bay) shall be required.

3. Financial institution drive-thru “windows” - A minimum of four (4) stacking spaces (inclusive of the space at the “window” or terminal) shall be required for financial institutions for each drive-thru window/terminal.

4. Sales and installation of auto parts & accessories (including, but not limited to drive-thru tire, muffler, glass, and lubrication services) - A minimum of four (4) stacking spaces per bay or stall (inclusive of the space for the vehicle in the bay or stall).

5. For other uses not specifically provided herein, the Planning Board (with a recommendation from the Community Development Department) shall make a determination regarding the number of stacking spaces required.

d. Loading Space Standards

1. No on-street loading or unloading shall be permitted.

2. Off-street loading spaces shall not be counted to satisfy the off-street parking requirements.
3. Minimum dimensions for a loading space shall be determined by evaluation of the size of anticipated delivery vehicles.

e. Minimum Parking Required - Off-street parking spaces shall be provided whenever any new use is established or any existing use is enlarged. The quantity of required spaces will be determined as shown in TABLE 1, below. The gross square footage of any use is utilized to determine the minimum parking required in cases where an area measurement is used for the basis of the requirement. In the case where options are available for a particular requirement, the requirement that results in the larger number of required spaces shall be utilized. Any calculations that result in fractions of total parking spaces required for the site shall be rounded up to the nearest whole number.

<table>
<thead>
<tr>
<th>TYPE OF USES</th>
<th>REQUIRED NUMBER OF PARKING SPACES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential Uses</strong></td>
<td></td>
</tr>
<tr>
<td>Dwelling, multi-family</td>
<td>0.5 per bedroom, plus 0.5 per Dwelling Unit, plus 1 guest parking space per 10 units (guest spaces shall be reasonably dispersed among the buildings on site)</td>
</tr>
<tr>
<td>Elderly Housing</td>
<td>1.5 per Dwelling Unit</td>
</tr>
<tr>
<td>Assisted Living Facilities</td>
<td>0.5 per resident unit or bed plus one per employee (plus 1 per facility vehicle/bus, if provided)</td>
</tr>
<tr>
<td>Home Occupation (those requiring Planning Board approval only)</td>
<td>Applicant must demonstrate to Planning Board that parking is adequate for the proposed use</td>
</tr>
<tr>
<td><strong>Civic/Educational/Institutional Uses</strong></td>
<td></td>
</tr>
<tr>
<td>Public Facilities or Community center</td>
<td>1 space per 200 SF</td>
</tr>
<tr>
<td>Religious Facilities</td>
<td>1 per each 3 seats or 6 linear ft. of bench space</td>
</tr>
<tr>
<td>Funeral homes</td>
<td>1 per 3 seats in largest assembly area, plus 1 per employee, plus 1 per service vehicle</td>
</tr>
<tr>
<td>Crematorium</td>
<td>1 per 150 SF of group seating or assembly areas (5 spaces minimum)</td>
</tr>
<tr>
<td>Education and Training Facilities (intended for those age 16 and over)</td>
<td>1 per faculty member, administrator, and employee, plus 0.5 per student at peak attendance</td>
</tr>
<tr>
<td>Pre-School or private education facility (intended for those under age 16)</td>
<td>1 per faculty member, administrator, and employee, plus 1 per classroom</td>
</tr>
<tr>
<td>Membership club (other than Health Club)</td>
<td>1 per 3 persons the facility is intended to accommodate at maximum occupancy</td>
</tr>
<tr>
<td><strong>Services/Entertainment/Recreation Uses</strong></td>
<td></td>
</tr>
<tr>
<td>Daycare Facility</td>
<td>1 per employee plus 1 per 8 attendees at peak attendance</td>
</tr>
<tr>
<td>Recreational Facilities</td>
<td>1 space per 3 persons the facility is intended to accommodate</td>
</tr>
<tr>
<td>Outdoor Recreation Centers</td>
<td>Parking and loading requirements shall be determined by the Board, with recommendation from the Community Development Department</td>
</tr>
<tr>
<td>Bowling Alley</td>
<td>4 spaces per lane</td>
</tr>
<tr>
<td>Health Clubs</td>
<td>1 space per 200 SF or 1 per 3 equipment stations</td>
</tr>
<tr>
<td>Personal Service Businesses</td>
<td>2 per chair or bed</td>
</tr>
<tr>
<td>Financial institution</td>
<td>1 per 300 SF</td>
</tr>
<tr>
<td>Service establishment</td>
<td>1 per 300 SF or 2 per employee</td>
</tr>
<tr>
<td>Laundromats</td>
<td>1 per every 2 washing machines</td>
</tr>
<tr>
<td>Use Type</td>
<td>Permitted Parking Spaces Per</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Movie Theater</td>
<td>1.25 per 4 seats</td>
</tr>
<tr>
<td>Theater/Performing Arts Facility</td>
<td>1 per 4 seats</td>
</tr>
<tr>
<td>Dance, music, or martial arts school or studio</td>
<td>1 per 150 SF, plus 1 per employee</td>
</tr>
<tr>
<td>Commercial Kennel or Animal Daycare</td>
<td>1 per employee, plus 1 for every 5 animals served at the facility at maximum occupancy</td>
</tr>
<tr>
<td>Medical Service Uses</td>
<td></td>
</tr>
<tr>
<td>Nursing Home and accessory uses</td>
<td>0.5 per resident unit or bed plus one per employee</td>
</tr>
<tr>
<td>Hospitals</td>
<td>3 per bed</td>
</tr>
<tr>
<td>Medical, Dental, Veterinary and other Healthcare Providers Offices (including Urgent/Walk-In Care)</td>
<td>4 per practitioner, plus 1 per 2 other employees</td>
</tr>
<tr>
<td>Lodging/Meeting Facility Uses</td>
<td></td>
</tr>
<tr>
<td>Hotels/Conference or Convention Center</td>
<td>1 per room, plus 1 per 20 rooms, plus 1 space per 200 SF of conference/convention use</td>
</tr>
<tr>
<td>Motels</td>
<td>1 per room plus 1 per employee</td>
</tr>
<tr>
<td>Retail Uses</td>
<td></td>
</tr>
<tr>
<td>Retail Stores up to 75,000 SF</td>
<td>1 per 250 SF</td>
</tr>
<tr>
<td>Retail Stores larger than 75,000 SF</td>
<td>1 per 300 SF (must provide a minimum of 300 spaces)</td>
</tr>
<tr>
<td>Supermarket, Grocery Store or Convenience Store</td>
<td>1 per 200 SF</td>
</tr>
<tr>
<td>Office Uses</td>
<td></td>
</tr>
<tr>
<td>Office up to 50,000 SF</td>
<td>1 per 300 SF</td>
</tr>
<tr>
<td>Office larger than 50,000 SF</td>
<td>1 per 400 SF (must provide a minimum 167 spaces)</td>
</tr>
<tr>
<td>Restaurant/Hospitality Uses</td>
<td></td>
</tr>
<tr>
<td>Restaurant</td>
<td>1 per 3 seats plus 1 per employee</td>
</tr>
<tr>
<td>Restaurant, fast food</td>
<td>1 per 4 seats plus 1 per employee</td>
</tr>
<tr>
<td>Cocktail Lounges in Restaurants/Bars &amp; Nightclubs</td>
<td>1 per 2 seats plus 1 per employee</td>
</tr>
<tr>
<td>Motor Vehicle Oriented Uses</td>
<td></td>
</tr>
<tr>
<td>Gasoline Station</td>
<td>1 per employee</td>
</tr>
<tr>
<td>Motor Vehicle Maintenance, Major Repair and Painting</td>
<td>1 per 800 SF but no less than 3 per service bay</td>
</tr>
<tr>
<td>Motor Vehicle Sales/Rental</td>
<td>1 per 300 SF indoor sales/office area, plus 1 per 1,500 SF outdoor storage, plus 4 per service bay (Note: vehicles displayed for sale are considered “outdoor storage” and cannot be used to satisfy the parking requirement)</td>
</tr>
<tr>
<td>Trucking Terminal</td>
<td>1 per 200 SF plus adequate parking and loading spaces for each company vehicle operating from the premises plus 1 per employee</td>
</tr>
<tr>
<td>Car Wash</td>
<td>1 per employee (see also Section 7.03.C)</td>
</tr>
<tr>
<td>Sales and installation of auto parts &amp; accessories (including, but not limited to, tires, mufflers, glass, lubrication services)</td>
<td>1 per 250 SF</td>
</tr>
<tr>
<td>Bus/Rail Station/Terminal</td>
<td>Parking requirements shall be determined by the Board based on the type and nature of the facility, with</td>
</tr>
<tr>
<td>Use Description</td>
<td>Requirement</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Taxi Stand/Terminal</td>
<td>1 per 100 SF</td>
</tr>
<tr>
<td>Bulk fuel storage for distribution</td>
<td>Minimum of 2 plus 1 per 1,500 SF</td>
</tr>
<tr>
<td><strong>Industrial/Construction Uses</strong></td>
<td></td>
</tr>
<tr>
<td>Manufacturing, Heavy</td>
<td>1 per 800 SF</td>
</tr>
<tr>
<td>Manufacturing, Light up to 100,000 SF</td>
<td>1 per 600 SF</td>
</tr>
<tr>
<td>Manufacturing, Light larger than 100,000 SF</td>
<td>1 per 800 SF (must provide minimum of 167 spaces)</td>
</tr>
<tr>
<td>Research or Testing Laboratories up to 100,000 SF</td>
<td>1 per 600 SF</td>
</tr>
<tr>
<td>Research or Testing Laboratories larger than 100,000 SF</td>
<td>1 per 800 SF (must provide minimum of 167 spaces)</td>
</tr>
<tr>
<td>Storage, self-serve</td>
<td>1 per 250 storage units plus 2 for employees</td>
</tr>
<tr>
<td>Warehouse and Storage up to 100,000 SF</td>
<td>1 per 1,200 SF</td>
</tr>
<tr>
<td>Warehouse and Storage larger than 100,000 SF</td>
<td>1 per 1,500 SF (must provide minimum of 84 spaces)</td>
</tr>
<tr>
<td>Wholesale Businesses up to 100,000 SF</td>
<td>1 per 800 SF</td>
</tr>
<tr>
<td>Wholesale Businesses larger than 100,000 SF</td>
<td>1 per 1,000 SF (must provide minimum of 125 spaces)</td>
</tr>
<tr>
<td>Unmanned utility equipment structure</td>
<td>2 where structure less than 2,000 SF (to be determined by Planning Board for larger structures)</td>
</tr>
<tr>
<td>Building Contractor yards including outdoor storage of equipment and materials</td>
<td>1 per 5,000 SF of yard area, plus 1 per employee</td>
</tr>
<tr>
<td>Office/Warehouse/Industrial Flex use</td>
<td>1 per 400 SF</td>
</tr>
<tr>
<td><strong>Other Uses</strong></td>
<td></td>
</tr>
<tr>
<td>Parking for Company Vehicles</td>
<td>1 per company vehicle the site is intended to accommodate</td>
</tr>
<tr>
<td>Sexually Oriented Businesses</td>
<td>1 per 300 SF or 1 per 2 occupants at building capacity</td>
</tr>
<tr>
<td>All Other Uses</td>
<td>Parking and loading requirements shall be calculated for the closest similar use as determined by the Board, with recommendation from the Community Development Department</td>
</tr>
</tbody>
</table>

**f. Flexibility in off-street parking and loading standards**

1. The Board may allow deviations from the parking requirements set forth in Table 1 by issuance of a waiver when it finds that at least two of the following criteria are met (one of which must be either, but not both, subsections “i.” or “ii.” as required by NH RSA 674:44):
   
   i. Strict conformity would pose an unnecessary hardship to the applicant and the waiver would not be contrary to the spirit and intent of the regulations;
   
   ii. 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;
   
   iii. The applicant is able to demonstrate through studies of similar uses or similar facilities that the actual parking demand for the property is significantly different from the requirements of Table 1, and can document that there have been no parking shortages at such studied sites;
   
   iv. There exists the availability of alternate transportation modes, and the applicant has demonstrated to the satisfaction of the Board that the business and its employees will utilize such alternative modes of transportation;
v. A sole business (not part of a larger multi-tenant building) is primarily oriented to walk-in trade;

vi. There is available sufficient on-street parking (in conformance to Chapter 183, Sections 17-20, of the Town of Merrimack Administrative Code).

2. Whenever the Board grants a waiver for a deviation from the parking requirements set forth in Table 1, the applicant shall note on the plans the date the waiver was granted by the Board and the parking requirement that the Board allows for and/or conditions of approval as deemed appropriate by the Board. The applicant shall also note the specific number of spaces for which the Board has granted a waiver.

g. Alternative parking standards - In order to encourage alternate modes of travel that will reduce dependence upon single-occupancy vehicles, the following guidelines and standards are offered (the provisions of this subsection do not require the Board to grant a waiver, rather, the Board may permit these alternative parking standards through the approval of a site plan when these sections are applicable and requested to be considered by the applicant):

1. Compact parking spaces - For nonresidential uses, not more than ten (10) percent of the total number of required spaces may be designated for compact vehicles and marked accordingly when deemed appropriate for the particular site and use by the Board.

2. Motorcycle parking spaces - Motorcycle parking may substitute for up to five spaces or 5% of the required automobile parking spaces, whichever is less, when deemed appropriate for the particular site and use by the Board. For every four motorcycle parking spaces provided, the automobile parking requirement may be reduced by one (1) space.

3. Future parking

   i. The Board may allow a reduction in the number of parking spaces actually constructed as long as an area is clearly shown as "reserved for future parking" and a note on the plan indicates a prohibition on any structural improvement in that area.

   ii. Each plan will be reviewed on individual need.

   iii. Future parking areas shall be designed for their eventual construction (including all drainage ways and structures), and shall be required to be constructed if deemed necessary by the Community Development Department, if after initial occupancy of the building, it is determined that the future parking spaces are needed to accommodate the number of vehicles parking at the site.

   iv. The applicant shall provide a note on the recordable sheet (or other appropriate sheet containing a Planning Board signature as deemed appropriate by the Community Development Department) of the plan indicating the requirements of Section 3.11.g.3.iii above.

4. Shared parking - Where the Board determines that a proposed development consisting of two or more uses located on a single parcel (or multiple parcels part of the same application, or parcels that share common access) will generate different hourly, daily and/or seasonal parking demand due to the varied hours of operation of each use and frequencies of customer and employee occupancy of available parking spaces, the Board may approve a site plan utilizing shared parking. The applicant shall provide the parking space count and justification analysis. Approved shared parking requires the present construction of a lesser number of spaces, provided that:

   i. The location of any shared parking area shall be within 1,000 feet of the property.
containing the use the parking is intended to serve;

ii. The applicant shall provide the Board with a shared parking plan which shall be based upon the following:

A. A complete description of the proposed uses, floor areas devoted to such uses, the number of seats or rooms assigned to each use, and the days and hours of operation of each use for each day of the week and for any seasonal variations in operations.

B. A complete description of the number of employees per shift.

C. A complete description of the projected total peak hour or daily period of occupancy by patrons for each proposed use during weekdays, Saturday, Sunday and any seasonal variations in peak hour or period of occupancy.

D. Where applicable, documentation/execution of any cross-easement arrangements to allow for shared parking on multiple parcels where the parking is on parcels under separate ownership.

iii. A future parking plan may be required at the determination of the Board. The Community Development Department may order the applicant to construct future parking spaces if need arises as per Section 3.11.g.3.iii.

5. Transportation mitigation plans

i. Transportation mitigation plans may be implemented in conjunction with any use at the option of the Planning Board, exclusive of parking areas in excess of 250 parking spaces.

ii. New construction of parking areas in excess of 250 parking spaces, or any change to existing uses that requires additional parking on site of greater than 250 parking spaces, may require the applicant to employ parking mitigation to reduce the number of surface parking spaces if deemed appropriate by the Board.

iii. Qualifying parking mitigation shall include but not be limited to: structured parking, parking shuttles, employee carpool plans, incentives for employees to use alternative transportation such as bicycles, telecommuting plans for employees, shared parking, and other similar plans.

iv. The Board shall have the discretion to require parking mitigation for parking lots in excess of 250 parking spaces, as appropriate, taking into consideration stormwater, surface water impairment, the character of the neighborhood, traffic, pedestrian safety, landscaping, and circulation.

6. Alternative Transportation

i. Carpooling / vanpooling:

A. A reduction of up to ten (10) percent of required parking, based on substantiated projections of reduction in parking demand, may be granted for any building or use exceeding fifty thousand (50,000) square feet of gross floor area that institutes and maintains an approved carpooling/vanpooling program.

B. Such reduction may be terminated immediately upon failure of the owner, operator, tenant, or others responsible for such programs to maintain such programs in an ongoing and acceptable manner as determined by the Board.
C. When permitted by the Board, the applicant shall note on the plans the Carpooling/Vanpooling plan that the Board allows for and any reasons for allowing or requiring the deviation and/or conditions of approval as deemed appropriate by the Board.

D. Future parking plans may be required by the Board to be developed (in accordance with Section 3.11.g.3 for the parking spaces that are subject to the reduction allowed by the Board.

ii. Shuttle Service:

A. A reduction of up to fifteen (15) percent of required parking, based on substantiated projections of reduction in parking demand, may be granted for any building or use that institutes and maintains a continuous, personalized shuttle service.

B. Said reduction may be terminated immediately upon failure of the owner, operator, tenant or others responsible for such program to maintain such program in an ongoing and acceptable manner as determined by the Board.

C. When permitted by the Board, the applicant shall note on the plans the Shuttle Service plan that the Board allows for and any reasons for allowing or requiring the deviation and/or conditions of approval as deemed appropriate by the Board.

D. Future parking plans may be required by the Board to be developed (in accordance with Section 3.11.g.3) for the parking spaces that are subject to the reduction allowed by the Board.

h. Traffic Circulation - The parking lot design shall be such that:

1. There is safe and adequate vehicular traffic and pedestrian circulation;

2. All parking spaces can be safely accessed from the aisles, with particular attention paid to ensure that spaces near the end of an aisle have sufficient room for backing and turning;

3. Cars will not back into any public or private roadway.

i. ADA Compliance: Parking lots shall be in compliance with the Americans with Disabilities Act (ADA), as amended.

1. ADA Accessible parking spaces. All sites which provide on-site parking shall provide accessible parking spaces and accompanying access aisles as required by Federal Law.

2. At least one in every eight wheelchair accessible spaces shall be designated as "van accessible," or as otherwise provided for in ADA.

3. Each wheelchair accessible space shall be identified with appropriate pavement markings and a sign. For van accessible spaces signage shall indicate that they are van accessible. Signs shall be mounted such that they are not obscured by other parked vehicles.

j. Coordinated or Joint Parking Design: When feasible, abutting parcels may be so designed as to provide for mutually coordinated or joint parking, access and circulation systems, and shall include stub-outs and other design features as necessary to make it visually obvious that the abutting properties may be tied in to create a unified system.
1. **Development Prior to Abutting Use.** In the event that the site is developed prior to an abutting property, it shall be designed to ensure that its parking, access and circulation may be easily tied in to create a coordinated parking design at a later date.

2. **Existing Abutting Uses.** In the event that the site abuts an existing developed property, it may be so designed as to tie into the abutting parking, access and circulation to create a coordinated system unless the Planning Board finds that this would be impractical.

k. Other requirements:

1. Curbing shall be provided as needed to control traffic and to direct drainage.

2. Adequate directional signage shall be provided, per the Manual on Uniform Traffic Control Devices for Streets and Highways, as most recently published.

l. Mitigating the impacts of parking lots:

1. As a supplement to the landscaping standards contained in Section 3.09 in these regulations, 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:

   i. 10% on parking lots located in front of the principal building or on otherwise vacant lots.

   ii. 8% on parking lots located on the side of the principal building, set back from the front boundary line at least even with the front of the principal building.

   iii. 5% on parking lots which are located at the rear of the principal building and largely obscured from the road.

2. 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.

3. Internal parking lot landscaping, as required by Section 3.11.1.1, 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. Interior parking lot landscaping may be waived in truck parking areas provided they are screened and perimeter plantings, as described in items 5-7 below, are provided.

4. All landscaped areas shall be protected from encroachment by vehicles by curbing, landscaping timbers, curb stops, or other acceptable means.

5. Shade trees shall be provided around the perimeter of all parking areas at a minimum ratio of 1 tree per 20 feet of parking lot perimeter. In portions of parking areas where screening is required, shade trees shall be provided along the perimeter at a minimum ratio of 1 tree per 50 feet of parking lot perimeter in addition to the required screening. Trees may be clustered or grouped, if desired, as long as clusters/groups are not more than 75 feet apart.

6. 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 3.09.e, to provide at least 50% vertical opacity on average up to a height of 3½ feet above grade, excluding sight distance areas at vehicular entrances and exits. If vegetation is used, a hedge should be planted which is reasonably expected to reach this opacity and height within 1 year. 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.

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 Section 3.09.e).

8. **For parcels within the Aquifer Conservation District and/or a Wellhead Protection Area,** no salt or chemical de-icers are to be used for winter maintenance, and winter maintenance shall be performed by a Green Sno-Pro certified (or functional equivalent certification) contractor.

m. **Bicycle parking:** Off-street bicycle parking may be required by the Board whenever any new use is established or any existing use is enlarged for which more than 25 vehicle parking spaces are required. If required by the Board, the quantity of required bicycle stalls will be determined as shown in TABLE 2, below

```
<table>
<thead>
<tr>
<th>Vehicle Spaces Required</th>
<th>Bicycle Stalls Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-100</td>
<td>5% of vehicle</td>
</tr>
<tr>
<td>100+</td>
<td>3% of auto (minimum of 5 stalls)</td>
</tr>
</tbody>
</table>
```

1. A minimum of two (2) stalls shall be provided.

2. A bicycle "stall' shall include a delineated and safe parking area, and an appropriate structure to which bicycles can be secured.

3. Appropriate structure means a stand or other device constructed so as to enable the user to secure by locking the frame and one wheel of each bicycle parked therein. Racks must be easily usable with both U-locks and cable locks. Racks shall support the bikes in a stable upright position so that a bike, if bumped, will not fall or roll down. Racks that support a bike primarily by a wheel are not acceptable.

4. Bicycle parking racks, shelters or lockers must be securely anchored to the ground or attached to a structure.

n. **Electric Vehicle Accommodations:**

1. **Intent:** to facilitate and encourage the use of electric vehicles and to expedite the establishment of a convenient, cost-effective electric vehicle infrastructure that such use necessitates.

2. For the purposes of this Section, the following definitions shall apply:

   i. **Battery charging station** - means an electrical component assembly or cluster of component assemblies designed specifically to charge batteries within electric vehicles.

   ii. **Charging levels** - means the standardized indicators of electrical force, or voltage, at which an electric vehicle’s battery is recharged. The terms 1, 2, and 3 are the most common charging levels, and include the following specifications:

      A. **Level-1** is considered slow charging. Voltage including the range from 0 through 120
      B. **Level-2** is considered medium charging. Voltage is greater than 120 and
includes 240.3.

C. Level-3 is considered fast or rapid charging. Voltage is greater than 240.

iii. Electric vehicle charging station - means a public or private parking space that is served by battery charging station equipment that has as its primary purpose the transfer of electric energy (by conductive or inductive means) to a battery or other energy storage device in an electric vehicle.

iv. Electric vehicle infrastructure - means conduit/wiring, structures, machinery, and equipment necessary and integral to support an electric vehicle, including battery charging stations and rapid charging stations.

v. Electric vehicle parking space - means any marked parking space that identifies the use to be exclusively for the parking of an electric vehicle.

3. In order to proactively plan for and accommodate the anticipated future growth in market demand for electric vehicles, it is strongly encouraged, but not required, that all new and expanded non-residential development parking areas provide the electrical capacity necessary to accommodate the future hardwire installation of Level-2 electric vehicle charging stations. It is recommended that a typical parking lot have a minimum ratio of 2% of the total parking spaces be prepared for such stations.

4. General Requirements:

i. An electric vehicle charging station space may be included in the calculation for minimum required parking spaces required in accordance with Section 3.11.e.

ii. Battery charging station outlets and connector devices shall be no less than 36 inches and no higher than 48 inches from the surface where mounted. Equipment mounted on pedestals, lighting posts, bollards, or other devices shall be designed and located as to not impede pedestrian travel or create trip hazards on sidewalks or walkways.

iii. Adequate battery charging station protection, such as concrete-filled steel bollards, shall be used. Curbing may be used in lieu of bollards, if the battery charging station is setback a minimum of 24 inches from the face of the curb.

iv. Information shall be posted identifying voltage and amperage levels and any time of use, fees, or safety information related to the electric vehicle charging station.

v. Each electric vehicle charging station space shall be posted with signage indicating the space is only for electric vehicle charging purposes. For purposes of this subsection, “charging” means that an electric vehicle is parked at an electric vehicle charging station and is connected to the battery charging station equipment.

vi. Electric vehicle charging stations shall be maintained in all respects, including the functioning of the equipment. A phone number or other contact information shall be provided on the equipment for reporting when it is not functioning or other problems are encountered.

vii. All electric vehicle charging stations must be designed to meet all aspects of the Building (Electrical) code of the Town of Merrimack, and shall be subject to all requirements of the Building Division.
3.12 BUILDING DESIGN

a. Purpose - To encourage high quality building design and construction that enhances the visual quality of Merrimack, protects neighborhood and community character, reinforces pedestrian character where appropriate, encourages sensitively to natural, architectural, cultural and historic resources, and respects generally accepted design principles while encouraging creativity and innovation in design.

b. Applicability - The Building Design Standards of this section apply to all non-residential (including multi-family) developments requiring site plan approval from the Planning Board within the districts identified in Section 3.12.c, below. These regulations apply to new building construction, building additions, or alterations to an existing building that is visible from a public street or right-of-way, or from abutting properties (except as otherwise noted below).

1. These regulations do not apply to:
   i. any single or two-family dwellings;
   ii. routine repair or maintenance of structures;
   iii. structures for which no building permit is required;
   iv. any work on the interior of a building; or
   v. any modifications to existing buildings solely for the purpose of providing ADA compliant or emergency egress or access.

c. Design Districts

1. Town Center & Reeds Ferry Districts - Includes the area within the Town Center Overlay District, and that portion of the Reeds Ferry area fronting on Daniel Webster Highway between Rainbow Avenue and Hilton Drive

2. Industrial Design District - Includes all areas within the I-2 and I-3 Industrial Districts as well as all portions of the I-1 Industrial area except for properties lacking street frontage or with frontage exclusively on Columbia Circle, Wright Avenue, Star Drive, Herrick Street, King Street, Caron Street, Mast Road, Webb Drive and areas included within any PRD overlay District.

3. Transitional - All C-1, C-2 and PRD districts

d. Design Standards

1. Town Center & Reeds Ferry Districts: Within this district, building design compatible with the 18th, 19th and early 20th Century building styles that typify the area are encouraged for residential and commercial buildings as well as for public facilities and institutions.
   i. Site Design & Layout: Where permitted under the Zoning Ordinance, principal buildings should be sited in conformity with the building setbacks of principal buildings on abutting properties. Where the setbacks differ from one side of the property to the other, the setback most consistent with the general vicinity should be followed. Principal buildings should be oriented toward the street with parking areas situated to the side or rear. Buildings, landscaping and other site features should also be arranged with sensitivity to oncoming views from public streets, especially for sites located on prominent corners or opposite intersecting streets.

   ii. Facades: No uninterrupted length of any facade shall exceed 50 horizontal feet.
Building facades exceeding 50 feet in length, measured horizontally, shall incorporate wall plane projections or recesses having a depth of at least 10 percent of the width of the entire facade and extending for at least 20 percent of the length of the facade. Facades facing public streets shall have doorways, windows, awnings, or other similar features designed to break up the monotony of the facade along no less than 50 percent of their horizontal length. Window and doorframes, shutters, porches, porticos and other enhancements shall be counted toward the 50% requirement.

iii. *Roofing:* Pitched or hip roofed design with slopes with an average slope greater than or equal to 1 foot of vertical rise for every 3 feet of horizontal run with overhanging eaves extending not less than 18 inches beyond the supporting walls. Varied roof planes, gabled windows and other similar features are encouraged.

iv. *Materials:* Exterior building materials shall include wood, brick or other stone masonry native to the State of New Hampshire. Synthetic materials of similar appearance and durability to wood are permitted as determined by the Planning Board. Poured concrete or concrete block foundations are permitted provided that not more than three feet of any such foundation is visible above the ground line.

v. *Doorways:* All sides of any principal building that directly faces an abutting public street shall feature at least one public entrance. All public door or entry ways should be clearly defined through utilization of at least two of the following features: (1) porticos, (2) porches, (3) roof overhangs, (4) raised corniced parapets over the door, (5) peaked roof forms, (6) accent windows, (7) architectural details such as tile work or moldings, (8) planters, (9) landscaped walkways, (10) benches, or other similar features. Public entrances should be located in such a way as to minimize walking distances from parking areas, facilitate ready pedestrian access from public sidewalks and provide for safe and convenient access to differing units or buildings in multi-tenant sites.

vi. *Windows:* Windows should be of a vertical expression, arranged in a balanced pattern and suitably framed through the use accentuated trim, shutters, sills, lintels, quoins and other similar features.

vii. *Other Features:* All exterior building features or elements visible from any adjoining public right-of-way or neighboring residential property, including lighting fixtures, utility structures, mechanical equipment, drainage structures, chimneys, signs, and other similar elements, should be integrated into the building design.

2. **Industrial Design District** - The Industrial Design District is characterized by large manufacturing and warehousing facilities and office buildings situated on large tracts of land as well as smaller commercial buildings intended for various support uses. Though most sites are devoted to single users, many contain multiple buildings, often arranged in a campus style setting. Within these areas, modern architectural styles are prevalent, characterized by buildings with strong horizontal expressions, relatively unornamented facades and flat roofs. Materials typically include glass, steel, brick, and concrete, or synthetic panels.

i. *Site Design & Layout:* Principal buildings should be sited in harmony with the surrounding landscape, taking maximum advantage of site conditions including slope, existing vegetation, surface waters, rock outcroppings, views and other features, and incorporating the same into the building and site design.

ii. *Facades:* No uninterrupted length of any facade shall exceed 200 horizontal feet. Building facades exceeding 200 feet in length, measured horizontally, shall incorporate wall plane projections or recesses having a depth of at least 2.5 percent
of the width of the entire facade and extending for at least 20 percent of the length of
the facade. This requirement may be waived where it would interfere with research,
development or manufacturing processes.

iii. **Roofing:** Flat or mansard roofs on single story-buildings or buildings of less than 20
feet in height are discouraged.

iv. **Materials:** The liberal use of pre-cast or poured concrete, glass, steel or synthetic
materials consistent with a sleek modern expression is encouraged. Split,
architectural or concrete block is discouraged and where provided, may not exceed
25% of the visible exterior of any facade.

v. **Doorways:** All sides of any principal building that directly faces an abutting public
street shall feature at least one public entrance. All public door or entry ways should
be clearly defined through utilization of at least two or more of the following
features: (1) porches, (2) roof overhangs, raised parapets over doorways, (3)
recesses/projections, (4) arcades, (5) arches, (6) display windows, (7) architectural
details such as tile work and moldings, (8) planters, (9) wing walls, (10) landscaped
walkways, (11) benches or built-in seating, or other similar features. Public
entrances should be located in such a way as to minimize walking distances from
parking areas, facilitate ready pedestrian access from public sidewalks and provide
for safe and convenient access to differing units or buildings in multi-tenant sites.

vi. **Mechanical Equipment:** Rooftop or other exterior mechanical equipment shall be
screened from all abutting properties or public rights-of-way through the use of
parapets, walled or fenced enclosures, or other similar means, camouflaged, or
incorporated into the building or site as a design feature.

vii. **Decorative Elements:** The incorporation of outdoor sculpture, fountains, or other
forms of public art into building and site design is encouraged.

viii. **Other Features:** All exterior features or elements visible from any adjoining public
right-of-way or neighboring residential property including windows, lighting
fixtures, utility structures, drainage structures, chimneys, signs and other similar
elements, should be integrated into any building design.

3. **Transitional Districts:** These districts are comprised of areas located within the Limited
Commercial, General Commercial and PRD Districts situated between the Industrial Design,
Town Center and Reeds Ferry Districts. The Transitional Districts are characterized by a
wide variety of architectural styles and include numerous small-scale retail and business
establishments, shopping centers, multi-family complexes and individual single-family
dwellings. These areas are generally automobile-oriented, though pedestrian accommodations
are desired due to the large number of residences located in and around the districts. It is also
noteworthy that a number of buildings and sites of historic importance are located within
these areas along with newer construction. Given the diverse character of the transitional
areas, no dominant architectural theme is contemplated. Rather, an emphasis should be
placed on building design and site layouts that are in harmony with surrounding uses and
serve to bridge the wide stylistic gaps between the differing design districts as well as
between individual buildings and sites within the Transitional Districts. In meeting these
goals, creativity, innovation and expressiveness in design is strongly encouraged. The use of
prototypical building types common to national and regional franchises and chains, however,
is strongly discouraged.

i. **Site Design & Layout:** Where permitted under the Zoning Ordinance, principal
buildings should be sited in conformity with the building setbacks of principal
buildings on abutting properties where possible. Where the setbacks differ from one
side of the property to the other, the setback most consistent with the general vicinity should be followed. Principal buildings should be oriented toward the street with parking areas and drive-through service areas situated to the side or rear.

ii. Facades: No uninterrupted length of any facade shall exceed 100 horizontal feet. Building facades exceeding 100 feet in length, measured horizontally, shall incorporate wall plane projections or recesses having a depth of at least 5 percent of the width of the entire facade and extending for at least 20 percent of the length of the facade. Facades facing public streets shall have doorways, windows, awnings, or other similar features designed to break up the monotony of the facade along no less than 50 percent of their horizontal length. Window and doorframes, shutters, porches, porticos, wall sign areas, and other enhancements shall be counted toward the 50% requirement.

iii. Roofing: Pitched or hip roofed design with slopes with an average slope greater than or equal to 1 foot of vertical rise for every 3 feet of horizontal run with overhanging eaves extending not less than 18 inches beyond the supporting walls. Varied roof planes, gabled windows and other similar features are encouraged. Flat roofs are only permitted for buildings of two or more stories.

iv. Materials: Due to the diverse nature of the transitional districts, a wide variety of finish materials can be used appropriately, however, split, architectural or concrete block is discouraged and where provided, may not exceed 25% of the visible exterior of any facade.

v. Doorways: All sides of any principal building that directly faces an abutting public street shall feature at least one public entrance. All public door or entry ways should be clearly defined through utilization of at least two or more of the following features: (1) porticos, (2) porches, (3) roof overhangs, (4) raised corniced parapets over the door, (5) peaked roof forms, (6) accent windows, (7) recesses/projections, (8) arcades, (9) arches; (10) display windows, (11) architectural details such as tile work and moldings, (12) planters, (13) wing walls, (14) landscaped walkways, (15) benches or built-in seating, or other similar features. Public entrances should be located in such a way as to minimize walking distances from parking areas, facilitate ready pedestrian access from public sidewalks and provide for safe and convenient access to differing units or buildings in multi-tenant sites.

vi. Windows: Windows should be of a vertical expression, arranged in a balanced pattern and suitably framed through the use accentuated trim, sills, lintels, quoins and other similar features.

vii. Mechanical Equipment: Rooftop or other exterior mechanical equipment shall be screened from all abutting properties or public rights-of-way through the use of parapets; walled or fenced enclosures, or other similar means, camouflaged, or incorporated into the building or site as a design feature.

viii. Other Features: All exterior features or elements visible from any adjoining public right-of-way or neighboring residential property, including lighting fixtures, utility structures, drainage structures, chimneys, and other similar elements, should be integrated into any building design.

e. Submittal Requirements

1. The applicant shall submit nine (9) full size sets and fifteen (15) 11”x17” reduced size sets of proposed external building elevations depicting all of the design features and elements noted above, for each side of all proposed buildings, building additions, or building modifications
visible from any public right-of-way or abutting residential property at the time of application for Non-Residential Site Plan Review. Such submittals shall be considered to be a part of the full plan set pending before the Board and upon approval, shall be binding.

2. Architectural renderings shall include specifications of all finish materials, and any necessary specifications or details required to adequately describe each proposed design.

3. Photographs, material samples, color charts, sketches, models, or other materials that will assist the Board in gaining a visual understanding of the application should be provided to supplement application materials.

3.13 OUTDOOR LIGHTING DESIGN STANDARDS:

a. The following words and terms related to outdoor lighting are defined as follows:

1. **Color Rendering Index (CRI):** A measurement of the amount of color shifts that objects undergo when lighted by a light source as compared with the color of those same objects when seen under a reference light source of comparable color temperature. (Range 0-100)

2. **Disability Glare:** The eye’s Line-of-Sight contact with a direct light source, which causes a partial blindness.

3. **Dissolve:** A mode of message transition on an electronic message display accomplished by varying the light intensity or pattern, where the first message gradually appears to dissipate and lose legibility simultaneously with the gradual appearance and legibility of a second message.

4. **Fade:** A mode of message transition on an electronic message display accomplished by varying the light intensity, where the first message gradually reduces intensity to the point of not being legible and the subsequent message gradually increases intensity to the point of legibility.

5. **Footcandle:** 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.

6. **Frame:** A complete, static display screen on an Electronic Message Display.

7. **Frame Effect:** A visual effect on an electronic message display applied to a single frame to transition from one message to the next.

8. **Full cut off type fixture:** 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.

9. **Horizontal Illuminance:** 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.

10. **Illuminated Sign:** A sign lit with either an internal or external artificial light source.

11. **Light Trespass:** Light from an artificial light source that is intruding beyond the boundaries of the property on which it is located.

12. **Scroll:** A mode of message transition on an electronic message display where the message
appears to move across the display surface.

13. **Scrolling Graphics**: A mode of message transition on an electronic message display sign where the message appears to move across the display surface.

14. **Sign, Electronic Message Display**: An electronic changeable sign capable of displaying text, symbols, figures or graphics, which can be electronically or mechanically changed by remote or automatic means, and incorporates both Electronic Changeable Copy and/or Electronic Graphic Display signs.

   i. **Sign, Electronic Changeable Copy**: A sign or portion thereof that displays electronically, non-pictorial, text information in which each alphanumeric character or symbol is defined by some number of matrix elements using different combinations of light emitting diodes (LED's), fiber optics, light bulbs or other illumination devices within the display area. Electronic Changeable Copy includes computer programmable, microprocessor controlled electronic displays. Electronic changeable copy signs do not include time and temperature signs.

   ii. **Sign, Electronic Graphic Display**: A sign or portion thereof that displays electronic, static images, static graphics, or static pictures, with or without text information, defined by some number of matrix elements using different combinations of light emitting diodes (LED's), fiber optics, light bulbs or other illumination devices within the display area where the message change sequence is accomplished immediately or by means of fade, re-pixelization or dissolve modes. Electronic Graphic Display Signs include computer programmable, microprocessor controlled electronic displays.

15. **Sign, Flashing**: An illuminated sign which has intermittent flashing lights, revolving beacons, rolling marquee or exhibits a noticeable change in color or light intensity during the duration of the viewing time.

16. **Transition**: A visual effect used on an electronic message display to change from one message to another.

17. **Uplighting**: Any light source that distributes illumination above a 90 degree horizontal plane.

18. **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.

b. **Purpose** - The purpose of these outdoor lighting standards is to present requirements for non-residential site plans within the Town of Merrimack to ensure that each developed site plan will address concerns resulting from light trespass, excessive glare, and to protect the nighttime environment, while at the same time providing adequate safety, energy efficiency and security for nighttime business and industrial operations. The goal of this lighting regulation is to recognize the benefits of outdoor lighting and provide clear requirements for its installation. Appropriately regulated and properly installed outdoor lighting will maintain the Town’s character and contribute to the safety and welfare of the residents of the Town.

c. **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 appendix LIGHT 1). Additionally, the Planning Board may, when deemed appropriate by a majority vote of the Board members, require additional security measures in addition to lighting, such as security cameras or other appropriate means and methods to ensure
safety on a site.

d. Prohibitions

1. Uplighting (except in instances when illuminating an American Flag).
2. All types of flashing, blinking, moving or apparently moving light sources intended to attract attention to a business location.

e. Parking Lot Lighting - shall be designed to provide the minimum lighting necessary to ensure adequate vision and comfort in parking areas, and to not cause glare or direct illumination onto adjacent properties or streets.

1. All parking area lighting shall be full cut-off type fixtures.
2. Light poles should be incorporated within planting areas or landscape islands to avoid damage from vehicles and plows.
3. Parking lot lighting standards shall be as follows:
   i. Minimum Illumination Level (at darkest spot in the parking area) – no less than 0.3 footcandles.
   ii. Maximum Illumination Level at property lines – no more than 0.2 footcandles, (except at driveway entrances to the property).

f. Lighting of Gas Station/Convenience Store Aprons and Canopies - Lighting levels on gasoline station/convenience store aprons and under canopies shall be adequate to facilitate the activities taking place in such locations.

1. 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 in Section 3.13.e of this regulation. If no gasoline pumps are provided, the entire apron shall be treated as a parking area.
2. Areas around the pump islands and under canopies to 10 feet outside the canopy footprint shall be illuminated so that the maximum horizontal illuminance at grade level does not exceed 30 footcandles in the service area, and is at least 1.0 footcandles and no more than 8 footcandles at the edge of the service area. The uniformity ratio shall be no more than 4:1;
3. Light fixtures mounted on canopies shall be recessed so the lens cover is recessed or flush with the bottom surface (ceiling) of the canopy to ensure light is restrained to no more than 85 degrees from vertical. (See Appendix 4)
4. Lights shall not be mounted on the top or sides (fascias) of the canopy and the sides of the canopy shall not be illuminated.

g. Lighting of Exterior Sales/Display Areas - Areas designated as exterior display/sales areas may be illuminated so that the average horizontal illuminance is no more than 20 footcandles. The uniformity ratio shall be no greater than 5:1 adjacent to the roadway frontage, and 10:1 along other
rows or display areas. The average and minimum shall be computed only for that area designated as exterior display/sales area.

h. Security Lighting - If security lighting is to be installed, the purpose and need for such lighting must be demonstrated as part of an overall security plan which designates the area to be illuminated for security purposes. The use of sensor (i.e. motion, beam interrupt) activated lights in security systems and dual switching for security purposes is encouraged.

1. In addition to the application materials set forth in the general provisions of this regulation, applications for security lighting installations shall include a written description of the need and purposes for the security lighting. The site plan shall show the area to be secured and the location of all security lighting fixtures, specifications of all fixtures, the horizontal and vertical angles at which the lights will be directed, and adequate details to show how light will be directed only onto the areas to be secured.

2. All security lighting fixtures shall be shielded and aimed so that illumination is directed only to the designated area and not cast in other areas. In no case shall lighting be directed in a horizontal plane through the top of the lighting fixture and the fixture shall include shields that prevent the light source or lens from being visible from adjacent properties and roadways. The use of general floodlighting fixtures is discouraged.

3. Security lights intended to illuminate a perimeter (such as a fence line) may include motion sensors and be designed to be off unless triggered by an intruder.

4. Lighting standards in designated secure areas shall be as follows:

   i. Average Horizontal Illumination Level on Ground - no more than 1.5 footcandles.

   ii. Maximum Illumination Level at property lines - no more than 0.2 footcandles.

   iii. Average Illumination Level on Vertical Surface measured 5 feet above the ground - no more than 1.5 footcandles.


i. Illumination of Building Facades and Landscaping - In general, the exterior lighting of building facades is discouraged. When buildings are to be illuminated, the design for the illumination shall be approved by the Planning Board and the following provisions shall be met:

1. The maximum illumination on any vertical surface or angular roof surface shall not exceed 5.0 footcandles.

2. Lighting fixtures shall be carefully located, aimed, and shielded so that light is directed only on the building facade. Lighting fixtures shall not be directed toward adjacent streets, roads or properties.

3. Lighting fixtures mounted on the building and intended to "wash" the façade with light are prohibited.

4. Lighting fixtures shall be directed downward (i.e. below the horizontal) rather than upward.

5. When landscaping is to be illuminated, it shall be part of the landscaping plan approved by the Planning Board. The lighting plan shall show the location of all lighting fixtures and what landscaping features each is to illuminate, and demonstrate that the installation will not generate excessive light levels, cause glare, or direct light beyond the landscaping into the night sky.
j. Illuminated Signs

1. Intent

i. It is the intent of this section to allow illuminated signs but to ensure that they do not create glare or unduly illuminate the surrounding area and to eliminate/prevent potential hazards and/or nuisances to motorists and pedestrians.

ii. To establish standards which permit businesses a reasonable and equitable opportunity to advertise their name and service, and to ensure that signs are designed, constructed, installed, and maintained in a manner that does not adversely impact safety and unduly distract motorists.

iii. All signs in Merrimack shall meet the requirements of Section 17 of the Merrimack Zoning Ordinance. The applicant shall provide the Planning Board with sufficient technical and design information to demonstrate that the following provisions are met:

   A. The average level of illumination shining onto the vertical surface of the sign shall not exceed 10 foot-candles, and the uniformity ratio shall not exceed 5:1.

   B. The lighting fixtures illuminating signs shall be carefully located, aimed, and shielded so that the light is directed only onto the sign façade. Lighting fixtures shall not be aimed toward adjacent streets, roads, or properties.

   C. Light fixtures illuminating signs shall be of the type such that the light source (bulb) is not directly visible from adjacent roads, streets or properties.

   D. To the extent practicable, fixtures used to illuminate signs shall be top mounted and directed downward. (i.e. below the horizontal).

2. Internally Illuminated Signs - In order to prevent internally illuminated signs from becoming light fixtures in their own right, it is the intent of this section that such signs consist of light lettering or symbols on a dark background.

   i. The lettering or symbols shall constitute no more than forty (40) percent of the surface area of the sign.

   ii. The luminous transmittance for the lettering symbols shall not exceed thirty five (35) percent.

   iii. The luminous transmittance for the background portion of the sign shall not exceed fifteen (15) percent.

3. Electronic Message Displays are allowed as described in Section 17 of the Zoning Ordinance.

   i. In instances where Electronic Message Displays are located in areas where the light source/sign is visible from an abutting residentially-used property, the Planning Board shall review the location for requiring suitable screening or landscaping to block the view of the sign.

   ii. The applicant shall provide the Planning Board with sufficient technical and design
information to demonstrate that the following requirements are met:

A. Electronic Message Displays shall be located at least 100 feet from residentially zoned property.

B. The message shall have a minimum interval between changes in the text, symbols, & graphics of not less than 20 minutes, which is static for each message, with a transition between messages of not more than two seconds.

C. The message shall be limited to static displays. Messages that appear or disappear from the Electronic Message Display through dissolve, fade, travel or scroll modes, or similar transitions and frame effects that have text or images that appear to move or change in size, or be revealed sequentially rather than all at once, shall not be permitted.

D. The following displays shall not exceed the following intensity levels specified: Day: 7500 nit; Night: 500 nit. Also, all signs shall have automatic phased proportional dimmer and photocells used to reduce the illumination settings to a brightness level of 0.3 footcandles above ambient light conditions.

E. The installer is to provide written certification that the light intensity has been pre-set not to exceed the daylight and the nighttime settings and that the use of a dimmer and photocell has been properly incorporated into the operation of the Electronic Message Display.

F. The size and location of the Electronic Message Display is consistent with the requirements of Section 17.10 of the Zoning Ordinance.

4. Exemptions - Indoor Electronic Message Displays shall not require a permit.

k. Buffers, screen walls, fencing, and other landscape elements should be coordinated with the lighting plan to shield neighboring properties from light trespass.

l. Wherever practicable, lighting design should include the installation of timers, photo sensors, and other energy saving devices to reduce the overall energy required for the development and to eliminate unnecessary lighting.

m. Lamp types shall be selected for optimum color rendering index (CRI) as listed by the manufacturer. Lamps with a CRI lower than 50 are not permitted except for security lighting.

n. Adjacent to residential property, no direct light source will be visible at the property line at ground level or above.

o. All non-essential lighting will be required to be turned off after business hours, leaving only the necessary lighting for security. (“Non-essential” shall apply to: display, aesthetic, parking and sign lighting).

p. 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.

q. 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.

r. Expansion, additions, or replacements to outdoor lighting installations shall be designed to avoid
harsh contrast in color and or lighting levels.

s. Electrical service to outdoor lighting fixtures shall be underground.

t. 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.

u. 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).

v. Temporary (3 months) Holiday lighting during the months of November, December and January shall be exempt for the provisions of this section, provided that such lighting does not create dangerous glare or adjacent streets or properties.

3.14 TRAFFIC IMPACT ANALYSIS

a. SUBMITTALS: Most projects must provide an analysis meeting the requirements outlined for a “short” traffic impact analysis. If the application is for a proposed use with verified (by the Community Development Department) minimal traffic generation, a waiver of full site plan review, a site plan amendment or change of use, then a “minor” analysis may be provided. If any of the following conditions apply, then a “full” traffic impact analysis must be completed:

1. Trip generation exceeding 1,000 average daily trips or 100 peak hour trips. Peak hour is defined as any of the following:

   i. AM peak hour (7-9 AM);

   ii. PM peak hour (4-6 PM);

   iii. Saturday midday peak hour (11AM-1PM); and

   iv. 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 or recreational uses.

2. The Community Development Department may require a “Full” analysis because of special circumstances.

b. REQUIRED FOR “MINOR” ANALYSES

   1. The Applicant shall provide a Traffic Letter after confirming with Staff that the project would not be subject to a “Short Analysis”.

   2. Trip Generation: The Traffic Letter shall include a trip generation analysis 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.

c. REQUIRED FOR “SHORT” ANALYSES: The primary objective of a “Short” analysis is to justify that a “Full” analysis is not required. At a minimum, the “Short” analysis must include the
1. Description of Site: A brief narrative of the character of the site and adjacent properties, including land uses and other pertinent facts.

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 shall also be completed.

3. Sight Distance: Measurements shall be provided for each driveway. A comparison of the available sight distance at each study intersection with Town of Merrimack standards shall be included.

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.

5. Trip Distribution: At the “Short” analysis level, 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.

6. The report shall be stamped by a professional engineer.

d. REQUIRED FOR “FULL” ANALYSES

1. It is recommended that the applicant meet with the Community Development Department prior to submission of a site plan application in order to establish the study area and study area requirements.

2. General Requirements: All information described in the “Short” analysis must also be contained in the “Full” analysis.

3. 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 Community Development Department and/or Public Works 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 the peak month conditions in accordance with NHDOT requirements.

4. Design Year Traffic Projection:

   i. Design Year: The design year for traffic projections shall be 10 years from the opening year.

   ii. The applicant shall obtain a list from the Town of Merrimack 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 Nashua Regional Planning Commission. The calculated background growth rate should be completely documented and included in the study for review.

iii. Trip Generation: Traffic projection for trip generation growth is described in the “Short” analysis section.

iv. 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:

   A. No build for opening year;
   B. Opening year with proposed development;
   C. No build for design year, and;
   D. Build for design year.

5. 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.

6. Safety Analysis: Accident data for the roadways and intersections included in the study area shall be obtained from the Merrimack Police Department and/or the NH Department of Safety. 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.).

7. 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.

8. 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.

9. Narrative: Discussion of the following shall be provided:

   i. 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;

   ii. Streetside safety of any streets substantially impacted, considering such things as the amount and type of development along such streets, presence of sidewalks, crosswalks, vehicle speeds, and any outstanding limitations in sight distance or road configuration;

   iii. Impact on pedestrian safety and convenience;

10. 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.

e. STANDARDS

1. 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 45 seconds.

2. Average daily traffic volumes shall not be increased by more than one-third above the “no-build” level on any street.

f. PROCEDURE

1. Applicants shall contact the Community Development Department early in the project design regarding the scoping of any traffic studies, including consideration of the study area boundary, the definition of “alternative” where involved, and the type of mitigation, if any, which are likely to prove appropriate.

2. 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.
SECTION 4  SPECIFICATIONS FOR SITE PLANS AND DOCUMENTS

4.01  GENERAL

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

b. **Paper details:** all plans shall be prepared on 22" x 34" sheets

c. **Scale:**
   - Horizontal: Boundary Plans 1" = 100' (maximum)
   - All other plans 1" = 50' (maximum)
   - Vertical: 1" = 4' (maximum)
   - Cross Section: 1" = 5' (horizontal and vertical)

4.02  TITLE BLOCK: The title block shall be located in a consistent location on all sheets of a plan set. The Title Block shall be shown on each sheet of the site plans. The following information shall be shown in the title block:

a. **Drawing title;**

b. **Name of site plan;**

c. **Location of site plan;**

d. **Tax map and lot #s of subject parcel(s);**

e. **Name and address of owner(s);**

f. **Date of plan;**

h. **Sheet number;**

i. **Name, address, and telephone number of design firm;**

j. **Name and address of Applicant.**

4.03  PLANNING BOARD SIGNATURE BLOCK: The Signature Block shall be placed on the cover sheet, site plan, and landscape plan, and shall be in the lower right corner of the sheet.

Approved by the Merrimack, NH Planning Board on: _________

Certified by:

Chair: _______________________

Vice Chair: ____________________
4.04 REVISION BLOCK: The revision block shall be placed on each sheet of the plans.

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<th>Description</th>
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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."

4.05 BENCHMARK DATA: Benchmark data shall include the location, elevation (USGS datum) and description of one benchmark per five acres. Benchmark data shall be shown on each sheet of the plans.

4.06 NORTH ARROW: The north arrow shall be placed on each sheet of the plans.

4.07 PLAN REFERENCE: Plan references shall be placed on the existing conditions plan.

4.08 LEGEND: A legend shall be placed on the Existing Conditions Plan, Site Plan, and Landscape Plan. The legend shall show and describe each symbol used on the plan.

4.09 VICINITY PLAN: The suggested scale is 1" = 2500'. The vicinity plan shall be placed on the title sheet (or site plan if there is no cover sheet).

4.10 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 (first sheet of the plan set).

4.11 NOTES: The following notes shall be shown:

a. Purpose of plan
b. Tax map and lot #s of all subject parcels
c. Area of subject parcel(s)
d. Zoning designation (including overlays) of subject parcel(s)
e. Minimum lot area, frontages and setback dimensions required for district(s)
f. Existing and proposed use
g. Parking requirements, as outlined in these Regulations
h. Sanitary sewer source (name of provider (company) if offsite)
i. Water supply source (name of provider (company) if offsite)
j. Zoning variances/special exceptions with conditions
k. List FEMA sheet(s) used to identify flood elevations (Note if no flood zone present as applicable)
l. List of required permits and permit approval numbers

m. List of Planning Board waivers (if applicable)

n. Phasing notes, in accordance with Section 4.18.f.

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

p. 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.”

q. 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.”

r. For sites with greater than 20,000 square feet of land disturbance, note the following: “This project is subject to the requirements of the Town of Merrimack Stormwater Management Standards (Chapter 167 of the Merrimack Town Code). A pre-construction meeting with the Community Development Department and Public Works Department shall take place at least two weeks prior to commencement of earth disturbance.”

s. A note stating: “On-site drainage shall be the responsibility of the owner and a long term inspection and maintenance plan shall be provided at the time of the pre-construction meeting. Every year semi-annual or annual reports shall be submitted to the Community Development Department.”

t. For parcels within the Aquifer Conservation District and/or a Wellhead Protection Area, a note stating that no salt or chemical de-icers are to be used for winter maintenance, and that winter maintenance shall be performed by a Green Sno-Pro certified (or functional equivalent certification) contractor.

u. Note the following: “In accordance with Section 6.01 of the Merrimack Site Plan Regulations and RSA § 676:13, all improvements specified on these site plans shall be constructed, completed, inspected and approved by the Town of Merrimack prior to the issuance of a certificate of occupancy.”

v. For sites requiring off-site improvements, note the following: “In accordance with Section 6.01 of the Merrimack Site Plan 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 Merrimack (and/or the NHDOT, if applicable) prior to the issuance of a certificate of occupancy.”

4.12 EXISTING CONDITIONS PLAN: The existing conditions plan shall show the following:

a. The boundary of the entire lot showing bearings to the nearest second and distances to the nearest 0.01 feet on all property lines.

b. 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.

c. Plan requirements:

1. Surveyor’s certification stamped and signed by Licensed Land Surveyor (LLS)
2. Existing lot boundary defined by metes and bounds
3. Existing topography (2-foot contour interval minimum)
4. Boundary monuments found
5. Map # and Lot #, name, addresses, and zoning of all abutting land owners
6. Existing streets:
   i. Name labeled
   ii. Status (Class in accordance with RSA § 229:5) noted or labeled
   iii. Right-of-way dimensioned
   iv. Pavement width dimensioned
7. Municipal boundaries (if any)
8. Existing easements (identified by type)
9. Designation of each lot by Tax Map and Lot #'s
10. Area of each lot being developed (in acres and square feet)
11. North arrow
12. Locus map
13. Soil Types (shown or noted on the plan)
   i. Boundary
   ii. Type
14. Limits of wetlands
15. Wetland delineation:
   i. Wetland delineation criteria
   ii. Wetland Scientist certification
16. Owner(s) signature(s)
17. All required setbacks (including any applicable buffers)
18. Existing features:
   i. Buildings
   ii. Wells (including abutting properties, if known)
   iii. Septic systems (including abutting properties, if known)
iv. Stone walls

v. Paved drives

vi. Gravel drives

vii. Existing tree lines

viii. Trees greater than 15" in diameter, and species

19. Location and name (if any) of any streams or waterbodies

20. Location and elevation(s) of one-hundred (100)-year flood zone per FEMA Flood Insurance Study or as determined by drainage study

21. Clarify extent of existing overhead and underground utility lines, poles, towers, etc.

22. Plan and deed references

23. Zoning District boundary lines (if any) shall be shown for the subject lot and abutting lots as applicable.

24. Abutting land uses shall be noted

4.13 PERMITS: The applicant shall be responsible for obtaining the approvals and necessary permits from federal, state, or municipal governmental agencies. A copy of each permit shall be submitted to the Town of Merrimack and the permit number (if applicable) shall be shown on the plan at the time of final approval.

4.14 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:

a. Grading and Drainage:

   1. Existing topography (two (2)-foot contour interval minimum)

   2. Proposed contours

   3. Existing spot elevations

   4. Proposed spot elevations

   5. Existing edge of pavement

   6. Proposed edge of pavement

   7. Existing curb line

   8. Proposed curb line

   9. Existing buildings and structures

  10. Proposed buildings and structures
11. Existing retaining walls
12. Proposed retaining walls
13. Wetland Mapping
   i. Wetland limits identified
   ii. Impact Area in square feet for each individual location
   iii. Mitigation areas (as may be required)
14. Existing treeline
15. Proposed treeline
16. Benchmarks
17. Existing drainage systems:
   i. Pipes/culverts (size, type, length, slope & inverts)
   ii. Structures (catchbasins, drain manholes, special structures)
   iii. Swales/Ditches/Waterways
18. Proposed Drainage Systems:
   i. Pipes/culverts (size, type, length, slope & inverts)
   ii. Structures (catch basins, drain manholes, special structures)
   iii. Swales/ditches/waterways:
19. Temporary erosion protection during construction:
   i. Silt fence, straw bales, etc.
   ii. Matting, mulch, etc.
b. Utilities:
   1. Existing sanitary sewer system:
      i. Pipes
      ii. Structures
      iii. Septic tanks & leach fields
   2. Proposed sanitary sewer system:
      i. Pipes (gravity), including size, type, length, slope & inverts
      ii. Force Main
iii. Structures
iv. Service laterals

3. Existing Water System:
   i. Pipes - Type & Size
   ii. Hydrants
   iii. Valves
   iv. Bends and thrust blocks
   v. Tees
   vi. Wells

4. Proposed Water System:
   i. Pipes - Type & Size
   ii. Hydrants - Locations approved by Fire Department
   iii. Valves
   iv. Bends and thrust blocks
   v. Tees
   vi. Services
   vii. Wells

5. Existing Gas Lines:
   i. Pipes - Type & Size
   ii. Valves

6. Proposed Gas Lines:
   i. Pipes - Type & Size
   ii. Valves
   iii. Services

7. Telephone/Electrical/Cable:
   i. U-poles
   ii. Pedestals/transformers
   iii. Overhead lines
iv. Underground lines

v. Services

C. Construction Detail Drawings:

Note: Construction details to conform with New Hampshire Department of Transportation Standards and Specifications for Road and Bridge Construction, Merrimack Village District (or Pennichuck Water Works, if applicable) standards, Town of Merrimack Public Works Department Construction Standards (as most recently adopted), and the Site Plan Regulations.

1. Typical cross-section of roadway

2. Typical driveway plan and profile apron detail

3. Curbing detail

4. Guardrail detail

5. Sidewalk detail

6. Traffic signs and pavement markings

7. Typical underdrain trench detail

8. Drainage structure(s):
   i. Catch basin (including frame and grate)
   ii. Manhole (including frame and cover)
   iii. Outlet structure (detention basins)
   iv. Headwalls
   v. Flared end sections

9. Outlet protection riprap apron

10. Level spreader

11. Treatment swale

12. Typical section at detention basin

13. Typical pipe trench:
   i. Drainage
   ii. Sewer
   iii. Water
   iv. Utilities
14. Sewer structures:
   i. Manholes (including frame and cover, inverts)
   ii. Drop manholes
   iii. Special structures (pump stations, blowoffs, etc.)
   iv. Pipe manhole joint details

15. Typical sewer lateral service connection detail

16. Typical chimney detail

17. Project specific sewer details (sleeves, internal drops in manholes, etc.)

18. Typical sewer notes (as per New Hampshire Department of Environmental Services and
    Wastewater Division requirements)

19. Hydrant

20. Thrust block details

21. Valve box detail

22. Typical water connection service detail

23. Erosion control details:
   i. Straw bale barriers
   ii. Silt fence
   iii. Stone check dam
   iv. Stone construction entrance
   v. Inlet filter basket

24. Notes:
   i. Notes as required by the Town of Merrimack Public Works Department
   ii. Construction sequence
   iii. Erosion control notes
   iv. Turf establishment notes
   v. Sewer construction notes (as required by Sewer Ordinance)
   vi. Water system construction notes (as required by Merrimack Village District or
       Pennichuck Water Works)

25. Profiles shall be provided as follows:
i. Required for sewer lateral connections

ii. Optional for drain systems (however, required where there is a question of utility conflicts)

iii. Required at locations of all utility/drainage conflicts.

26. Cross-Sections (as required to clarify construction requirements):

i. Proposed pavement, crushed gravel and bankrun gravel limits

ii. Embankment slopes

iii. Underdrains

iv. Drainage piping and structures

v. Sewer piping and structures

vi. Utilities (Water lines, Gas lines, Telephone/electric/cable)

vii. Guardrail

d. Streets: If private streets are to be built as part of a site plan (e.g., for a multi-family residential site plan), then the design of such streets shall comply with all applicable requirements of the Merrimack Subdivision Regulations.

e. Landscape Plan: The applicant shall be required to submit a landscape plan indicating the location of all areas to be landscaped and proposed items to be planted in accordance with Section 3.09.

4.15 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 Section 3.12.

4.16 ILLUMINATION PLANS: The applicant shall submit to the Town sufficient information, in accordance with Section 3.13, 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:

a. A site plan, drawn to the required scale, showing all buildings, landscaping, parking areas, all proposed exterior lighting fixtures;

b. Specification (details) for all proposed lighting fixtures including photometric data, designation as IESNA “cut-off” fixtures, Color Rendering Index (CRI) of all lamps (bulbs), U-Ratio of the site, and other descriptive information on the fixtures;

c. Proposed mounting height of all exterior lighting fixtures; and

d. Analyses and illuminance level diagrams showing that the proposed installation conforms to the lighting level standards in Section 3.13. Off-site lighting should be considered in the analyses;

4.17 TRAFFIC IMPACT ANALYSIS: The applicant shall submit traffic impact information based upon the standards set in Section 3.14.

4.18 DOCUMENTS:

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


c. **Permits** - (see section 4.13).

d. **Zoning Board Actions** - documentation of any action of the Town of Merrimack Zoning Board of Adjustment relative to the site. All Zoning Board decisions shall be listed on the plans.

e. **Waivers** - (see section 7.04)

f. **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. The phasing shall be noted on the plans.

g. **Development Agreements** - agreements, if any, between the applicant and the Town regarding public improvements or other purposes deemed necessary by the Planning Board.

h. Other documents as required by the Planning Board
SECTION 5   STANDARDS FOR PARTICULAR OR UNIQUE USES

5.01 COMMERCIAL WIRELESS COMMUNICATION FACILITIES

a. **Purpose.** It is the goal of the Town of Merrimack to protect the public health, safety, and general welfare of the community while accommodating the communications needs of residents and businesses. The purpose of these regulations and the zoning provisions is to:

1. facilitate the provision of wireless communication services to the residents and businesses of the Town;
2. minimize adverse visual impacts of wireless communications facilities through design and siting standards;
3. encourage the location of facilities in non-residential areas;
4. avoid potential damage to adjacent properties from tower failure through structural standards and setback requirements; and,
5. discourage proliferation of antenna support structures through sharing requirements.

b. **Process.** In addition to the information required for site plans elsewhere in these regulations, development applications for wireless communications facilities shall include the following information:

1. A report from a NH licensed professional engineer which:
   i. specifies the facility's height and design including a cross section and elevation,
   ii. documents the height above grade for all potential mounting positions for co-located antennas and the minimum separation distances between antennas;
   iii. describes the antenna support structure's capacity, including the number and type of antennas that it can accommodate;
   iv. documents what steps the applicant will take to avoid interference with established public safety telecommunications;
   v. includes an engineer's stamp and registration number.

2. For all antenna support structures (towers), a letter of intent committing the owner and his or her successors in interest to allow the shared use of the tower if an additional user agrees in writing to meet reasonable terms and conditions for shared use.

3. The following items shall be submitted as part of any application (at the Planning Board's option they may be submitted as part of precedent conditions on any approval, prior to issuance of a building permit):
   i. a copy of the FAA's response to the submitted "Notice of Proposed Construction or Alteration" (FAA Form 7460-1);
   ii. proof of compliance with applicable Federal Communications Commission regulations; and,
   iii. a report from a qualified professional engineer which demonstrates the facility's compliance with Merrimack’s structural and electrical standards (to be submitted to the
4. The following supplemental information:
   
i. Location, uses, and approximate size and height of all buildings and structures within 500 feet of the proposed wireless communication facility.
   
   ii. Elevations of all facades, indicating exterior materials and color of the facility.
   
   iii. Plans shall be drawn at the scale of 1 inch equals 50 feet, maximum.
   
5. As required by RSA § 12-K:7, all municipalities (board of selectmen or city/town council) within a 20-mile radius of any proposed tower shall be notified of the public hearing and shall be identified in the abutters list on the plans.

6. As provided for in RSA § 12-K:4, the following information shall be submitted with an application for a new antenna support structure:

   i. Detailed maps showing all of the carrier's current externally visible antenna support structure locations within a 20 mile radius of the proposed antenna support structure.

   ii. A written description of why less visually intrusive alternatives for the proposed facility were not proposed.

   c. Design. The following design standards apply:

   1. The lowest six (6) feet of the facility shall be visually screened by trees, large shrubs, solid walls, fences and/or other structures.

   2. The height and mass of the facility shall not exceed that which is essential for its intended use.

   3. The color of the proposed facility will be of a light tone or color (except where otherwise required by the FAA) so as to minimize the visual impact.

   4. There shall be a security fence around the base of the support structure base or the lot where the support structure is located.

   5. The proposed facility will not unreasonably impair the view of or from any public park, natural scenic vista, historic building or district, or significant view corridor.

   6. All reasonable efforts shall be made to camouflage or disguise the tower to look like trees or other appropriate alternative designs that blend in to the particular environment. Those towers that are not of an alternative design shall be of a monopole design.

   d. Process for co-location of antennas or modifications of existing structures. The colocation of antennas and modifications (as defined by RSA 12-K:2) on existing support structures shall be approved administratively - by the Community Development Department and Building Division - provided the proposal meets all applicable requirements from RSA 12-K: 10.

5.02 CONTRACTOR STORAGE YARDS - The following requirements apply to all contractor storage yards:

   a. Contractor storage yard activity shall be screened from abutting properties and public roads meeting a 75% vertical opacity to a height of 6 feet, year-round, within one year of installation.

   b. Security. To ensure public safety the applicant shall present a plan for securing any construction
related vehicles, equipment, or materials from unauthorized access, to be approved by the Planning Board. A simple plan specifying such items as lighting, fencing, and locking of equipment may be sufficient.

c. Maintenance and Repair Work. On-site maintenance and repair of heavy vehicles is restricted to those owned by the contractor storage yard owner and operator. Commercial maintenance and repair of heavy equipment and vehicles owned by others is permitted only if such work is permitted within the applicable zoning district and such work is approved as part of the contractor storage yard site plan review.

d. Salt Storage. Salts, and any bulk materials containing salts, commonly used in snow and ice removal, shall be stored as recommended by the Conservation Commission and Fire Department.

5.03 RULES AND REGULATIONS FOR OUTLET VILLAGE SHOPS PERMITTED BY CONDITIONAL USE PERMIT

a. General Provisions

1. Purpose and Authority - These Rules and Regulations are adopted by the Merrimack Planning Board, hereinafter called the Board, for the purpose of establishing uniform rules and procedures for the granting of conditional use permits pursuant to the Town of Merrimack Zoning Ordinance, Sec. 2.02.4.D.9, Outlet Village Shops permitted by Conditional Use Permit.

2. Applicability - All applications for Outlet Village Shops projects within the I-2 Industrial District under Sec. 2.02.4.D.9 of the Zoning Ordinance are subject to all applicable provisions of the Zoning Ordinance and to these Rules and Regulations.

3. Relationship to Other Zoning Laws and Regulations - These Rules and Regulations are promulgated under RSA 674:21(II), and accordingly, in the event of any conflict between these Rules and Regulations and the Zoning Ordinance, the applicable provisions of the Zoning Ordinance shall control.

4. Relationship to Other Application and Submission Requirements - Unless specifically stated otherwise herein, an application for an Outlet Village Shops conditional use permit is subject to (a) the plan requirements and road and infrastructure standards of Section 4 of the Subdivision Regulations and (b) the Site Plan Review standards and submission requirements set forth in these Site Plan Regulations. Unless specifically stated otherwise herein, these Rules and Regulations are intended to supplement the above standards and requirements and are not intended to relieve the applicant or proposed project from subsequent compliance with said standards and requirements.

b. Definitions - The following terms shall be defined as indicated below. Some of these terms have been previously defined in the Town of Merrimack Zoning Ordinance and are set forth here for convenience. Any term defined in the Zoning Ordinance and used herein shall have the same meaning as set forth in the Zoning Ordinance.

1. Applicant shall mean an applicant for an Outlet Village Shops conditional use permit.

2. Application shall mean an application for an Outlet Village Shops conditional use permit.

3. Outlet Village Shops conditional use permit shall mean a conditional use permit granted by the Planning Board authorizing development pursuant to Sec. 2.02.4.D.9 of the Zoning Ordinance and these Rules and Regulations.

4. Outlet Village Shops project shall mean a planned development of Outlet Village Shops pursuant to Sec. 2.02.4.D.9 of the Zoning Ordinance, whether or not the entire development is
proposed to be authorized under a single conditional use permit, together with all adjacent land that is required or proposed to be used for access to the Outlet Village Shops, utilities, parking, accessory uses, or other ancillary or supporting purposes.

c. Phasing

1. An Outlet Village Shops project in the I-2 Industrial Zone may be reviewed, approved and constructed in phases. If more than one phase is proposed, the initial Application shall include a conceptual master plan for the entirety of the proposed development, not just for the initial phase. The conceptual master plan shall include information on subsequent phases that is sufficient in the Board’s opinion to enable the Board to evaluate the desirability of types, scale, intensity and design of development under the master plan, and shall include analyses of the impacts of full build-out and proposed mitigation measures.

2. Each phase of an Outlet Village Shops project must include all infrastructure components required to support that phase and all measures needed to fully mitigate the projected impacts of that phase.

3. An application for an Outlet Village Shops conditional use permit shall include the information required in Sections 5.04.e and 5.04.f of these Rules and Regulations for the entire site, and the more detailed information and assessment of impacts pursuant to Section 5.03.g of these Rules and Regulations for the phase being proposed.

4. Under an Outlet Village Shops conditional use permit, project timing and phasing of development and mitigations into two or more phases may not exceed five (5) years from the grant of the Outlet Village Shops conditional use permit, unless extended as provided in Section 5.04.j.2.

5. An Outlet Village Shops conditional use permit shall include sufficient monitoring requirements to allow the Planning Board to evaluate impacts during project build-out and up to five years following issuance of the last certificate of occupancy for improvements authorized by any Outlet Village Shops conditional use permit for the entire development.

d. Preliminary Review

1. Preliminary Conceptual Consultation

   i. In accordance with RSA 676:4(II)(a), the Applicant may meet with the Planning Board for preliminary conceptual consultation. Preliminary conceptual consultation discussions may take place without the necessity of giving formal notice to abutters but may occur only at formal meetings of the Board. Any information exchanged as part of this meeting shall be considered as advisory and shall not be binding on the part of the Applicant or the Board.

   ii. Request for a preliminary conceptual consultation shall be submitted not less than 15 days prior to the regular meeting of the Board and shall be properly posted as part of the Board’s agenda as required by applicable State statutes. Preliminary conceptual consultation meetings shall be separate and apart from consideration of a formal application for an Outlet Village Shops conditional use permit and shall not establish the time limits for acting on such formal application.

   iii. Preliminary conceptual consultation meetings shall be directed at review of the basic concept of the proposal and suggestions which might be of assistance in resolving problems with meeting requirements during final consideration. Preliminary plans or sketches may be submitted for discussion purposes and to assist in the identification of the nature of information necessary to meet the requirements of these Rules and
Regulations and the Zoning Ordinance and to address issues of concern to the Town and abutters. The Board and the Applicant may discuss the Project in conceptual form only and in general terms such as desirability of types of development and proposals under the master plan.

iv. Preliminary conceptual consultation shall not bind either the Applicant or the Board, and statements made by Planning Board members shall not be the basis for disqualifying said members or invalidating any action taken.

2. Design Review

i. Prior to submitting an Application for a Conditional Use Permit, the Applicant may meet with the Planning Board for design review. Design review shall include nonbinding discussions beyond conceptual and general discussion, involving more specific design and engineering details than in the preliminary conceptual consultation.

ii. Design review meetings may proceed only after identification of and notice to abutters, holders of conservation, preservation, or agricultural preservation restrictions, and the general public as required by RSA 676:4(I)(d) and Section 2 of these Site Plan Regulations. Design review meetings shall be separate and apart from consideration of a formal application for an Outlet Village Shops conditional use permit and shall not establish the time limits for acting on such formal application.

iii. Statements made by Planning Board members in design review meetings shall not be the basis for disqualifying said members or invalidating any action taken.

e. Application Requirements - General

1. Pre-Application Review by Community Development Department - Prior to making formal application to the Planning Board for an Outlet Village Shops Conditional Use Permit, the Applicant shall submit the proposed Application to the Community Development Department for review. The purpose of this pre-application review is to identify required information that may be missing or incomplete. Any information exchanged as part of this meeting shall be considered as advisory and shall not be binding on the part of the Applicant, the Board or the Town of Merrimack.

2. Form of Application - An Application shall be made on an official Application Form on file at the Community Development Department office and shall be accompanied by a check or checks made payable to the Town for the Application Fee as specified in these Rules and Regulations. Any communication not on this official form shall be considered a notice of intention to apply and not an actual Application. It is the responsibility of the Applicant to ensure the accuracy and completeness of all information submitted to the Board. The Applicant is also responsible for factually supporting the Application, including references for methodologies used. Failure to meet these requirements may constitute grounds for disapproval of the application.

3. Signatures - A property owner of record and/or an agent or prospective purchaser may file an Application. Without exception, the property owner(s) of record and, if applicable, the agent(s) or prospective purchaser(s), shall be signatories on the official Application Form. An Application submitted without all the required signatures shall be considered incomplete and shall be returned for completion and re-filing. The date of such re-filing shall be the official date of Application.

4. Request for Waivers - Strict compliance with these Rules and Regulations may be waived if the Board finds by majority vote that the waiver is in the public interest or is consistent with the intent and purpose of these Rules and Regulations and Section 2.02.4.D.9 of the Zoning Ordinance, provided that no waiver shall be from specific provisions of the Zoning Ordinance.
Any request from an Applicant for a waiver of these Rules and Regulations or any separate provisions hereof must be submitted in writing to the Board. Such requests must clearly identify the provision of these Rules and Regulations that is to be waived and the reasons why, in the Applicant’s opinion, granting such a waiver would be in the public interest or consistent with the intent and purpose of these Rules and Regulations and Section 2.02.4.D.9 of the Zoning Ordinance. Failure to provide the information may constitute grounds for disapproval of the waiver request.

5. Number of Copies
   
i. At the time of Application, the Applicant shall file a minimum of ten (10) copies of the official Application Form and all plans, exhibits, analyses and any other information and/or attachments with the Board. Unless otherwise approved by the Community Development Director, the plan sheets shall be provided at both 22” x 34” and 11” x 17” (10 copies each).
   
   ii. The Applicant shall also be responsible for submitting to the Community Development Department complete copies of the Application and all subsequent filings for distribution to the Board’s outside consultants.

6. Abutters List - The Applicant shall provide a list of abutters as defined in Section 2.01.b.

7. Other Variances, Permits and Conditional Use Permits - The Applicant shall provide a list and copies of variances, permits, other conditional use permits and approvals previously issued by Town boards or commissions or by state and federal agencies and a list of any additional variances, permits or conditional use permits that will be required to complete the proposed development. This list should include all permits and approvals required under applicable local, state and federal regulations. The list should include the name of the person or entity as it appears on the permit or approval, the date of issuance, and, where applicable, the Book and Page or Document Number as evidence of recording or filing with the Registry of Deeds.

8. Preliminary Layout - If subdivision of the site is contemplated by the development plan, the Application shall include a preliminary subdivision layout.

f. Application Requirements – Plans & Drawings - An application for a CUP shall comply with all plan requirements of these regulations contained in Sections 3 and 4, and shall include the following information:

1. Locus Map - An Application shall include a Locus Map showing the boundaries of the project site, adjoining properties, zoning districts, public and private streets and ways, buildings, water bodies and other landmarks within a minimum distance of one (1) mile.

2. General Layout Map - An Application shall include a General Layout Map on one (1) sheet, showing the project site including the existing and proposed layouts of the streets and ways, lot and zoning district boundary lines, lot numbers, and proposed structure locations. The general layout map shall be shown on the title sheet or the next sheet.

3. Existing Conditions Plan - An application shall include an Existing Conditions Plan showing the information listed in Section 4.12 as applicable for the project site and, to the extent that such information is available from public records or aerial surveys, for an area extending two hundred and fifty (250) feet around the perimeter of the site, and shall include the following information:

   i. Existing site features such as, but not limited to, floodplains, waterways, drainage courses, ponds, water supply wells, leach fields, ledge outcroppings, soil types per Natural Resources Conservation Service (NRCS), stratified-drift aquifers per the United States Geological Survey (USGS), significant trees and vegetation, and the generalized
location and habitat for any endangered or threatened species, species of special concern, or exemplary natural community as listed by the New Hampshire Natural Heritage Bureau, New Hampshire Nongame and Endangered Wildlife Program, or US Fish and Wildlife Service.

ii. All existing monuments and improvements such as, but not limited to, buildings, structures, roads and ways, stone walls, underground and above ground storage tanks, wastewater disposal systems and wells.

iii. Designation of all existing monuments and improvements to be removed.

iv. Existing topographic contours shown at two (2) foot intervals.

v. All zoning classifications and zoning district boundaries, including the boundaries of the I-2 Industrial Districts and, if applicable, the Special Flood Hazard Areas, Aquifer Conservation District, Wetlands Conservation District, and Wellhead Protection Area.

4. Master Site Development Plan - An application shall include a Master Site Development Plan showing the information listed below. The Master Site Development Plan is not intended to be a fully engineered site plan, but is a graphic depiction of the proposed project that will be referenced in a Development Agreement and will serve as the basis for the development and review of the final site plan(s) for the Outlet Village Shops project.

The Master Site Development Plan shall consist of the following elements:

i. Structure and Circulation Plan.

   A. Proposed alterations to special site features including, but not limited to, waterways, wetlands, bridges, dams, drainage courses and public water supply wells.

   B. All proposed streets, ways, access and interior driveways, shared driveways, walkways, sidewalks, parking lots, parking structures, and other impervious covers.

   C. All proposed buildings or structures, including footprint, floor area, general setbacks, height (feet and number of stories), proposed uses, number of retail establishments, and surface and structured parking spaces, as applicable for each building or structure.

ii. Grading Plan - Proposed grading (cut and fill).

iii. Drainage Plan - General location, type and anticipated size of storm water drainage facilities. Information relating to placement of the drainage system components shall be sufficient to evaluate the operation of the system. Locations of retention/detention ponds and other proposed stormwater Best Management Plan facilities shall be shown. Information shall be sufficient to demonstrate that the existing system will support the new addition to the system must be provided. Actions to achieve substantial recharge and appropriate treatment of storm water must also be provided.

iv. Utilities Plan

   A. Access, utility and any other easements.

   B. Location, type and size of existing and proposed water services facilities. Locations of any on-site wells, including setbacks from any building, structure
or wastewater disposal system must be shown. Any public water service mains
serving the site must be identified. Sufficient information demonstrating that the
existing system will support the new addition to the system must be provided.
Actions proposed to manage both peak and average water demands of the
project must also be provided.

C. Location, type and size of existing and proposed sewer services. Information
relating to placement of the sewer system components shall be sufficient to
evaluate the operation of the system. Sufficient information demonstrating both
high flow and low flow capacities of existing and proposed sewer mains must be
provided.

D. Measures to minimize generation of wastewater and other wastes, including
conservation, reclamation or recycling.

E. Location, type and size of any underground utilities, whether or not within
public right-of-ways, including, but not limited to, electric, gas, telephone and/or
cable television services. Any emergency power facilities must also be shown.

F. Preliminary location, type, size and screening of any solid waste disposal
facilities.

G. Measures to minimize generation of solid waste from the site, including
recycling.

v. Landscaping Plan - Location of areas of retained vegetation and areas proposed for
landscaping.

vi. Buffering Plan - Proposed measures to screen and buffer the development from
surrounding properties and public and private ways, including retained vegetation, new
plantings, fencing and constructed berms where appropriate.

g. Application Requirements – Reports. An application for an Outlet Village Shops conditional use
permit shall include the five reports as outlined in this subsection. Each report must meet the
minimum requirements set forth in this Section. Each report shall also include a detailed explanation
of the methodology used for each area of analysis, and any calculations derived as part of the
analysis, which may be included in a separate appendix.

The five reports may be combined into a single, comprehensive report that contains a separate
section addressing each area of analysis required by these reports (i.e., existing conditions, proposed
development, service improvements, traffic impact, transportation demand management, fiscal and
community impact, and environmental impact). The single, comprehensive report must contain
section headings that clearly identify the subject matter that is analyzed in each section.

Each report should address the construction phase and ongoing operations separately.

1. Existing Conditions Report. An application for an Outlet Village Shops conditional use
permit shall include an Existing Conditions Report that presents a generalized narrative and tabular
description of existing conditions on the site of the proposed development and in the area within
one half mile from the site boundaries. To the extent possible, the Existing Conditions Report
shall present information through tabulation supplemented by narrative description. When
relevant, information should be included in the Existing Conditions Plan. The Existing
Conditions Report shall include, at a minimum, the following information for the area covered
by the Outlet Village Shops project and for adjoining areas:

i. Zoning districts, including all overlay districts.
ii. Gross and net floor area of development by land use.

iii. Natural resources such as wetlands, water resources, vegetation and wildlife habitat.

iv. Status (i.e., public, private), width and condition of existing streets and ways. The Applicant shall provide information regarding rights of third parties in any streets or ways.

v. Drainage conditions and impervious areas, including an estimate of the impervious area within the area covered by the Outlet Village Shops project, both in square footage and as a percent of the total area of covered by the Outlet Village Shops project.

vi. Description of the topographic character of the site.


2. **Proposed Site Development Report.** An application for an Outlet Village Shops conditional use permit shall include a Proposed Development Report that presents a generalized narrative and tabular description of the proposed project. When relevant, information should be included in the Master Site Development Plan.

i. Site and Development Data - The Proposed Development Report shall include, at a minimum, the following data for the Outlet Village Shops project area. For each of the applicable items specified below, information shall be provided in tabular form for existing pre-development conditions, minimum or maximum requirements set forth in the Zoning Ordinance, each proposed phase of the Outlet Village Shops project, and full build-out of the Outlet Village Shops project.

   A. General
      1. land area
      2. non-wetland area
      3. total gross floor area

   B. Outlet Village Shops buildings/uses
      1. size, height, number of stories
      2. gross floor area of retail use
      3. statement of intended uses for each building

   C. Other buildings/uses
      1. size, height, number of stories
      2. gross floor area by use

   D. Parking
      1. number of surface lots
      2. number surface parking spaces
3. number of parking structures
4. number of parking structure spaces
5. total impervious area of parking lots and structures
6. total interior and boundary landscaped area
7. total gross area of parking areas (impervious areas plus landscaped areas)

E. Area and percentage of:
   1. building coverage
   2. open space
   3. landscaped area (outside of parking areas)
   4. impervious surface

ii. Proposed plan for implementation of the project by phase, including both on-site and off-site infrastructure improvements.

iii. Proposed construction timetable by phase, including both on-site and off-site infrastructure improvements.

iv. Proposed plan for addressing stormwater handling and treatment, including drainage design methodology, proposed stormwater facilities, temporary and permanent erosion control measures, and inspection and maintenance schedule for stormwater facilities.

v. Location, type and size of existing and proposed water service facilities and sewer facilities.

vi. Proposed actions relating to the collection and disposal of sanitary wastes, including actions to minimize wastes generated by site occupants.

vii. Improvements to infrastructure that the Applicant proposes to make at its own expense, with an estimate of the cost of each such improvement and the proposed timetable for completion by phase or stage. Included in this report shall be any proposed infrastructure improvement or mitigation which may involve, but not be limited to:
   A. public streets and private streets that are used or practically available for use by the public;
   B. traffic coordination and traffic calming devices;
   C. water mains, sewage systems and other utilities;
   D. public transportation such as buses, shuttles and train systems; and
   E. open space or parkland that is or will be available to the public.

viii. Improvements to infrastructure that the Applicant proposes to be made by public entities. The Applicant shall provide an alternative plan for making these improvements in case
that construction by public entities is not realized.

ix. Description of the proposed methods for monitoring and correcting adverse impacts of each phase of development and means of making changes in later phases if earlier phases have traffic, school enrollment, groundwater quality or quantity, site work or other impacts substantially departing from those in the projections upon which the Board relied on in its approval of the Outlet Village Shops conditional use permit, but only to the extent attributable to development pursuant to such Outlet Village Shops conditional use permit.

x. Schematic renderings, computerized renditions, drawings and/or photographs depicting the project. These shall be at a detail sufficient for the Board to evaluate its overall design, general use of building materials, and general sense of individual units within a building, such as retail uses and their locations.

xi. Drawings to illustrate seasonal view lines to and from abutting properties to the project.

xii. Proposed design standards and guidelines for architecture, signage, lighting, landscaping, and roadways (e.g., typical roadway cross-sections including lane/shoulder widths, cross slope, curbing and sidewalk width/location). These standards and guidelines shall be included in a design handbook for the Outlet Village Shops.

3. **General Standards for Traffic Impact Study** – The traffic impact study shall be performed in accordance with the requirements of Section 3.14.d.

4. **Community and Fiscal Impact Report** - The Applicant shall meet with the Community Development Department and its consultants to develop a proposed scope of the community and fiscal impact assessment, which shall be presented to the Board at a meeting for its review and approval by vote. The scoping meeting will serve to identify available data, will assist in the prevention of duplication of work efforts, and will assure that the product to be submitted will contain all required information and achieves a level of completion to the satisfaction of the Planning Board.

The applicant shall provide the Planning Board with a detailed Community and Fiscal Impact Report for the proposed project. The Community and Fiscal Impact Report shall include the following:

i. A description of the development including the likely tenant profile by size and type of tenant (retail shops, larger retailers, cinema, restaurant, etc.), by phase.

ii. A case study analysis of two similar developments in similar community settings (subject to approval by the Planning Board or its designee) setting forth for each of the case studies:
   
   A. A timeline of the development, showing date completed, expanded, hours of operation, etc.

   B. Assessed valuation and municipal tax revenues

   C. Operating and capital impacts on specific town services including, at a minimum, police, administrative services/general government, fire, ambulance, road maintenance and solid waste.

   D. A statement of emergency service calls including police, fire and ambulance to the development and its immediate neighborhood, including type and purpose of each call, if available.
E. Off-site improvements funded by the developer and the cost of those improvements.

F. The pre- and post-development character of the neighborhood, including a statement of induced development.

G. Pre-development and post-development traffic counts.

H. An analysis of the fiscal impact of the development considering municipal revenues, operating expenses and capital outlays.

I. A statement of the development’s impact on surrounding residential property values.

J. Aerial photographs and other depictions of the development.

iii. A community and economic impact assessment including:

A. An estimate of the number of full-time and part-time jobs created, by phase. Local and regional offsite net employment impact should be estimated by the use of employment and wage multipliers.

B. An estimate of annual wages likely to be paid at prevailing area wage rates for similar positions, by phase.

C. An estimate of the type of service demands and expenditures generated by the project that would be redirected into the local economy (e.g., snow plowing, payroll services, landscaping, etc.).

D. An estimate of the Merrimack population and housing impact resulting from the development’s job creation, by phase.

E. An estimate of the amount of induced development (type, building area, and employment) likely to occur within one mile of the development.

F. An analysis of the impact of the development on existing businesses within the town.

G. An estimate of the impact of the development on residential and on nonresidential property values in consideration of traffic, lighting, noise and such other factors as may influence value.

H. A graphic depiction of how the proposed development will look from various ground-level compass points.

I. An analysis of the direct and indirect impacts on Merrimack’s community character, as may be requested by the Board.

iv. A fiscal impact analysis estimating phase-specific (including build-out) direct and indirect (resulting from induced development) impacts including:

A. The estimated assessed valuation and resulting property tax revenues accruing to the town, after consulting with the town Assessor.

B. The estimated non-property tax revenues accruing to the town from user fees,
licensing, etc.

C. An estimate of the impact (capital and operating) of the development on all existing town services, based on interviews with department heads and the case study analysis. The analysis will specifically address the cost of educating students entering the school system as a result of identified induced residential development.

D. An analysis of the capacity of impacted town services to accommodate the identified impacts, without degrading services to existing town residents and commercial enterprises.

E. A statement of capital outlays for roads, streets, sewer, water, storm drainage, police and fire services, buildings and grounds, sanitation recreation, schools and such other facilities as may be impacted.

F. Identification of capacity enhancement and operating costs of servicing the development, including allowance for any proposed mitigation measures required by the town or offered by the developer.

G. An estimate of the municipal cost (capital and operating) of servicing the development including staffing, wages, overhead, training, recruiting, supplies, general operating expenses, etc.

H. A statement of the annual costs (capital and operating) and revenues accruing to the town, by phase.

I. The fiscal impact analysis will be conducted utilizing a mutually agreed methodology. A simple per capita or proportional share approach is unlikely to provide the level of detail and confidence needed in this analysis. Reliance on the case studies, interviews with town staff, analysis of the town’s budget, master plan and capital improvement program will likely be required.

5. **Environmental Impact Report** - The Environmental Impact Report shall include the following:

   i. Water budget analysis for the affected sub-basins that includes the net flows resulting from inflows (stormwater recharge and discharge) and outflows (surface water diversions, groundwater withdrawals, sewer flows, and other consumptive uses) for existing conditions and post-development conditions. At a minimum, the water budget analysis must undertake the following:

      A. Assess existing stream flow, precipitation, evapotranspiration, and infiltration in and around the project site to establish baseline conditions;

      B. Provide an estimate of the amount of impervious surfaces to be created as a result of the project build-out;

      C. Calculate the water that leaves the site as a result of surface water diversions, stormwater discharges, impervious surfaces, groundwater withdrawals, sewer flows, water consumption, and grading changes, including changes in the direction of flow and resulting impacts on different sub-basins;

      D. Provide an estimate of the amount of water to be recharged back into the sub-basin through stormwater retention and water recycling;

      E. Demonstrate that the post-development flow rates will not exceed that of the
pre-development for the 2, 10, and 50-year storm events;

F. Evaluate the 100-year storm event and design stormwater management systems to avoid increase of peak rates of discharge from the property after development;

G. Consider all practicable methods for preserving groundwater recharge capacity, including collection, treatment and recharge of runoff from roofs, roadways, and surface lots.

ii. Analysis of existing water quality for potentially affected surface water and ground water resources (including the Merrimack Village District wells) and the potential impacts to these resources resulting from full implementation of the proposed Outlet Village Shops project, including a determination of potential mitigation measures and the likely impact of these mitigation measures. At a minimum, the water quality analysis shall include the following information:

A. Documentation of pre-development surface water and ground water quality to establish a benchmark or reference to compare with results from post-development monitoring;

B. Identification of potential sources of contamination, including point sources and non-point sources such as road and parking lot runoff; hazardous materials and solid wastes; erosion and sedimentation; fertilizers, herbicides and pesticides; and sewage disposal;

C. Pollution load analysis that identifies anticipated levels of contamination from the sources identified above;

D. Description and consideration of potential mitigation measures listed below to ensure that there is no degradation of water quality as a result of the proposed project;

1. Collection and recharge of runoff from roofs, roadways, and surface lots;

2. Treatment of runoff for dissolved contaminants and suspended solids;

3. A snow removal plan that includes a prohibition of the storage of road salt and considers alternative de-icing materials; and

4. Consideration of alternatives to traditional fertilizers, herbicides and pesticides.

E. An operation and maintenance plan for the stormwater collection, recharge, and water treatment systems.

F. A post-development water quality monitoring plan for potentially affected surface water and ground water resources.

iii. Identification and location of any known, existing hazardous waste sites and a description of how these sites will be or are being remediated.

iv. Identification, delineation and assessment of the functions, values and condition of all existing wetland resources, including identification of wetlands that function as vernal pools, and identification/quantification of all proposed alteration, restoration and replacement of these wetland resources.
v. Identification of any state-protected or federally-protected endangered or threatened species or species of special concern known to exist within the area of the Outlet Village Shops project or previously sighted in this area and reported to NHNHB, and preliminary assessment of any impacts on these species or their habitats associated with implementation of the Outlet Village Shops project, including a determination of potential mitigation measures and the likely impact of these mitigation measures.

vi. Identification of any state-listed or federally-listed landmarks or historic or archeological resources within or in the immediate vicinity of the area of the Outlet Village Shops project and preliminary assessment of any impacts on these resources associated with implementation of the Outlet Village Shops project, including a determination of potential mitigation measures and the likely impact of these mitigation measures.

vii. Identification and preliminary assessment of air quality impacts associated with implementation of the Outlet Village Shops project, both at the construction stage and at the post-development stage, including a determination of potential mitigation measures and the likely impact of these mitigation measures. The assessment shall include “hot-spot analysis” of key locations which shall estimate likely future localized pollutant concentrations resulting from the proposed development, and shall compare those concentrations to the relevant National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter (PM) and lead.

viii. Identification and preliminary assessment of any noise impacts associated with implementation of the Outlet Village Shops project, both at the construction stage and at the post-development stage, including a determination of potential mitigation measures and the likely impact of these mitigation measures. Include analysis of noise impacts from trucks, tour buses and other vehicles, and measures to mitigate such impacts.

ix. Identification of any potential cumulative environmental impacts including known development projects and proposals that may impact the same areas or resources as the Outlet Village Shops project.

x. Description of a construction management plan describing proposed actions to mitigate environmental impacts for each issue and feature addressed in (i) through (vii) above.

6. **Relationship of Report Requirements to Other Jurisdictions** - The information and reports required for an Outlet Village Shops conditional use permit application are independent of any information or reports required for any other federal, state or local permit or approval. The requirements for an Application for an Outlet Village Shops conditional use permit are intended to provide the Planning Board with comprehensive overview of (i) proposed development, (ii) anticipated impacts that will result from proposed development, and (iii) measures by which the impacts requiring mitigation may be mitigated. To that end, an Applicant is encouraged to plan and prepare required federal or state filings consistent with the requirements of this Section as far as practicable. The Board, in its sole discretion, may accept all or part of such federal or state filings as satisfying the requirements of this Section in all or in part. The purpose of this subsection 6 is not to eliminate any other requirement of these rules and regulations, but rather to allow the Applicant, where practicable, to prepare reports that satisfy both the requirements of these rules and regulations and the requirements of federal or state agencies.

7. **Additional Information** - The Applicant may submit additional information that the Applicant feels is relevant to properly inform the Board about the proposed development, which may include legal opinions, deeds, historical data, studies and reports. The Board is empowered to require information in addition to that specifically required by the Zoning Ordinance or these Rules and Regulations if it finds that this information is necessary to properly act upon the
Application.

h. Site Visit - From time to time the Board may request a site visit to the proposed development site. The date and time for such visits shall be satisfactory to both the Board and Applicant. The Board may request that any work subject to these Rules and Regulations be clearly flagged or otherwise delineated prior to the scheduled site visit. The Board may also request a “balloon” test or other test in the field sufficient to illustrate the proposed height and location of a proposed building or structure in relation to the surrounding area.

i. Disposition of Application

1. Action by Planning Board - The Board shall, within 45 days following delivery of an Application for a Conditional Use Permit, determine if the Application is complete according to these regulations. Upon determination that the Application is complete, the Board shall accept the Application for review and begin formal consideration of the Application and shall approve, approve with conditions, or disapprove the permit Application within 90 days, subject to any extension of time agreeable to the Applicant and the Board.

2. Approval Criteria - The Board may approve or approve with conditions an Application only upon its written determination that the proposed Outlet Village Shops development fully complies with the Zoning Ordinance, including the specific provisions and standards of Section 2.02.4.D.9 of the Ordinance regarding Outlet Village Shops. In case of disapproval of an Application, the ground for such disapproval shall be stated in the Board’s minutes.

3. Conditions of Approval - An Outlet Village Shops conditional use permit is granted at the discretion of the Planning Board in accordance with applicable law. The use, density and construction standards that may be permitted by the Planning Board under its authority as conditional use permit granting authority may be more stringent than as allowed by these Rules and Regulations and shall be based on the merits of the application and the approval criteria set forth in the Zoning Ordinance and herein.

4. Development Agreement - The Planning Board shall require, as a condition of its approval of an Outlet Village Shops Conditional Use Permit, the execution of a Development Agreement or other similar instrument specifying the phasing, timing and sequence of the improvements contained within the Outlet Village Shops project; the performance guarantees relating thereto; actions to mitigate development impacts; and any other information and commitments the Board deems necessary to insure the successful completion of the project as proposed and approved, including all mitigation commitments. A copy of the signed agreement shall be recorded at the Hillsborough County Registry of Deeds.

5. Modification or Amendment of Conditional Use Permit

   i. The Board shall have the authority to allow for the correction of an inadvertent or clerical error or omission provided such correction does not constitute a reversal of the decision on an Outlet Village Shops conditional use permit or conditions contained therein.

   ii. In the event that field conditions, building plan modifications or requirements of the Town of Merrimack or any other governmental authority necessitate changes to the Outlet Village Shops project, a detailed written description of such changes shall be submitted to the Board. The Board shall determine whether such changes warrant further review by the Board. If the Board determines that such changes are not minor as contemplated by Section 2.02.4.D.9 of the Zoning Ordinance, then the petition to amend the Outlet Village Shops project conditional use permit shall be subject to the notice and public hearing requirements as set forth in Section 2.04 and in applicable law.

6. Relationship to Subdivision and Site Plan Approval - The approval by the Planning Board of an
Outlet Village Shops conditional use permit shall neither oblige the Planning Board to approve the related Final Subdivision Plat or Site Plan nor substitute the approval of the Application for the approval of the related Final Plat or Site Plan.

j. **Lapse And Renewal Of Conditional Use Permit**

1. **Duration and Lapse of Conditional Use Permit**
   
i. If an approved Outlet Village Shops conditional use permit is not acted upon within a period of two (2) years from the date of approval, then such approval shall be null and void.

   
ii. Actions sufficient to vest an approval for a conditional use permit include site plan approval, subdivision approval, issuance of a building permit authorized under the conditional use permit. However, should any site plan or subdivision approval or building permit granted under an approved Outlet Village Shops conditional use permit expire unused after the conclusion of the two-year validity period provided for herein, said conditional use permit shall become void as well.

2. **Extension of Conditional Use Permit - Prior to the expiration of an Outlet Village Shops conditional use permit, the Applicant may apply for an extension of the conditional use permit from time to time for a period not to exceed two (2) years. Requests for extension may be made in such form as the Planning Board shall require. The Applicant may apply for an extension if the construction or substantial use thereof has not commenced for good cause. Any application to extend the two-year validity period shall demonstrate to the satisfaction of the Planning Board that it was impossible or impractical to receive the necessary approvals to move forward in reliance on the conditional use permit granted within two years. Any application for renewal or extension of the conditional use permit shall be filed with the Planning Board no sooner than 90 days, nor later than 30 days, prior to the conditional use permit expiration. The Planning Board may, in its sole discretion, grant such extension of the above validity period as it deems warranted. If granted, such extension shall be retroactive to the date of expiration.

k. **Application, Review And Inspection Fees**

1. **Application Fees**
   
i. The application fee for an Outlet Village Shops Application shall be Fifty Dollars ($50.00) per acre of land area in the parcel proposed for development, plus Five Cents ($0.05) per square foot of proposed gross floor area.

   
ii. No additional filing fees shall be required for Applications for conditional use permits required by Sections other than Section 2.02.4.D.9 of the Zoning Ordinance where such Applications are consolidated into the Outlet Village Shops Application.

   
iii. Application fees shall be non-refundable.

2. **Project Review Fees - The Board shall impose Project Review Fee(s) on an Outlet Village Shops Application which requires, in the judgment of the Board, review by outside consultants due to the size or complexity of the proposed project, the project’s potential impacts, or because the Town lacks the necessary expertise to perform the necessary review. In hiring outside consultants, the Board may engage engineers, planners, attorneys, designers, or other qualified professionals to assist the Board and to ensure compliance with all relevant laws, statutes, the Zoning Ordinance and these Rules and Regulations. Such assistance may include, but need not be limited to, analyzing an Application, monitoring or inspecting a project or site for compliance with the Board’s decisions or regulations, or inspecting a project during construction or implementation. The Board may receive the assignment of contracts with outside consultants**
from other Town boards.

3. Inspection Fees: The Applicant shall be required to pay inspection service fees and costs to the Town, as required by Section 6.02 of these Regulations.

4. Transcription Costs - The Applicant shall be responsible for all costs associated with the transcription of the public hearing for the Application.
SECTION 6 ASSURANCES FOR COMPLETION AND MAINTENANCE OF IMPROVEMENTS

6.01 GENERAL:

a. Under no circumstances shall any site work commence or any building permits be issued until all the conditions of approval have been met, the plan is signed by the Planning Board, a preconstruction meeting has taken place, and until any applicable performance sureties have been posted.

b. OFF-SITE IMPROVEMENTS: Prior to the Planning Board signing the site plan and prior to commencement of any site work, the applicant shall post a performance surety to guarantee the completion of off-site improvements.

c. ON-SITE IMPROVEMENTS: In accordance with NH RSA § 676:13, no certificate of occupancy shall be issued by the Building Division until all on-site improvements specified on the approved site-plan are completed, and inspected (as evidenced by all applicable departments signing off on the Building Division’s sign-off sheet).

d. In circumstances that prevent landscaping to be completed (due to weather conditions or other unique circumstance), the Building Division may issue a certificate of occupancy prior to the completion of landscaping improvements, if agreed upon by the Community Development Department, when a performance surety and agreement to complete improvements are placed with the Town. The landscaping shall be completed within 6 months from the issuance of the certificate of occupancy, or the Town shall utilize the bond to contract out the work to complete the improvements as stipulated in the agreement to complete landscaping improvements. No other improvements shall be permitted to bond for their completion for purposes of receiving a certificate of occupancy.

e. All performance sureties shall be in a form acceptable to the Town of Merrimack Finance Department.

6.02 INSPECTION

a. INSPECTION SERVICE FEE AND COSTS:

1. All applicants shall be required to deposit an inspection fee escrow with the Town. This fee shall cover all costs incurred by the Town and the cost of the Town’s designated agent who shall monitor and inspect improvements for compliance with the approved plans and required engineering standards.

2. Escrow shall be determined by the Public Works and Community Development Departments but shall not be more than 5% of the estimated cost of all project related improvements. This estimate shall be provided to the Community Development Department prior to pre-construction meetings or any construction commencing on a site.

3. 10% of final inspection costs shall be retained by the Town to cover administrative costs.

4. The Town may contract with consultants for services. The applicant shall be responsible for all costs of all inspections and associated work, and execute a signed agreement and guarantee as required by the Town.

5. If it is determined that any of the required improvements have not been constructed in accordance with the Town’s construction standards and specifications, the applicant shall be responsible for reconstruction and re-inspection of the improvements.

6. Escrow accounts shall be periodically reviewed to assure that sufficient funds are available to cover all inspection costs and additional escrow provided as needed.

7. Upon satisfactory submission of the required as-built site plan and issuance of a Certificate of Occupancy, any unused escrow amount shall be returned to the applicant.

b. ARRANGEMENT FOR INSPECTIONS: At least 15 working days prior to commencing construction of any site plan improvements, the applicant shall notify the Town in writing of the time he/she proposes to commence construction of such improvements and shall pay to the Town the
escrow for the inspection fee required by these regulations. The Town will arrange for inspection by the Town’s agent to assure that all standards, specifications and requirements are met during the construction of the required improvements and utilities. The applicant shall request to schedule a preconstruction meeting with the Community Development Department which is mandatory prior to the start of construction.

c. PROPER INSTALLATION OF IMPROVEMENTS: The Town, through various departments and agents, will inspect the improvements performed as part of an approved site plan, to ensure that all of the required improvements have been constructed in accordance with approved plans and specifications of any conditions of approval of the Planning Board. If the Town or the Town’s agent finds, upon inspection of the improvements performed before the expiration of any security, that any of the required improvements have not been constructed in accordance with approved plans and specifications of any conditions of approval of the Planning Board, the status shall be reported to the Community Development Department. The Department shall then notify the Applicant, and if necessary, the bonding company or escrow agent and take all necessary steps to preserve the Town’s rights under the bond or agreement. No Certificate of Occupancy shall be issued by the Building Division, until such time as all required improvements from the approved site plan have been completed, or bonded in accordance with Section 6.01.d.

d. FAILURE TO COMPLETE IMPROVEMENTS OR ABANDON PROJECT:

1. When a performance bond has been posted and required off-site improvements have not been installed or completed in accordance with the terms of said performance bond, the Planning Board may declare the project in default and direct the Department of Public Works to use the bond to complete all outstanding required improvements.

2. When an applicant fails to complete all required on-site improvements as shown on approved site plans, the Planning Board shall proceed with the Site Plan Revocation process as outlined in Section 7.09.d.

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

a. Compliance with all applicable codes and ordinances of the Town of Merrimack.

b. Two copies of any required As-Built plan in accordance with Section 6.04;

c. The seven-part REQUEST FOR CERTIFICATE OF OCCUPANCY form, as most recently adopted by the Building Division, shall be completed and signed by each department prior to the issuance of any Certificate of Occupancy.

6.04 AS-BUILTS

a. The applicant shall submit to the Community Development and Public Works Departments detailed "as-built" plans in a form as described in Section 2.04.n, mylar reproducible and one paper print) of the site plan. The applicant's engineer shall certify to the Town Engineer that the layout of the line and grade of all improvements is in accordance with improvement plans of the site plan.

b. When a revision to the approved plan is proposed, the applicant shall submit a print of the approved plan indicating the proposed revision to the Community Development Department. The revision shall be reviewed by the Community Development Department and if necessary, the Planning Board. All approved revisions shall be shown on the "as-built" plan required at the completion of the project.
SECTION 7  ADMINISTRATION AND ENFORCEMENT

7.01 AMENDMENTS: For the purpose of providing for the public health, safety and general welfare, the Board may amend, change, alter, add or rescind the provisions imposed by these regulations. Notification, public hearings, publications and certification of all proposed amendments shall be accomplished by the Board in accordance with NH RSA § 675:6 and 675:7.

7.02 SAVING PROVISION: These regulations replace and supersede the former sections of the Subdivision Regulations of the Board applicable to Site Plan Review. Adoption of these regulations is not intended to invalidate any approval or requirement of approval under the former regulations and shall not be considered applicable to any application which has been formally accepted by the planning board pursuant to RSA 676:4, I(b) prior to the first legal notice of a proposed adoption of regulations.

7.03 INTERPRETATION, CONFLICT and SEPARABILITY: The provisions herein shall be considered the minimum requirements for the protection of public health, safety and welfare. These regulations are not intended to interfere with the application of other laws or regulations or privately imposed restrictions. Where these regulations may differ from other applicable laws or regulations, whichever provisions are more restrictive or impose higher standards shall govern. If any part of these regulations is determined to be invalid, that determination will be construed applicable to that part only and the remainder of these regulations will be construed to continue in full force.

7.04 WAIVERS: In accordance with RSA § 674:44, the Board may waive specific plan requirements when:

   a. Strict conformity would pose an unnecessary hardship to the applicant and the waiver would not be contrary to the spirit and intent of the regulations; or
   
   b. 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;

The applicant shall submit in writing a “request for waiver” to the Board citing the specific regulation and the reason the regulation cannot be met. Any waiver granted shall be noted on the Site Plan.

7.05 PUBLIC HEARING: All formal applications shall have a hearing in accordance with Section 2.05 of these regulations. Such public hearing shall be held at the appropriate stage as indicated in Exhibit 1 and shall in accordance with RSA § 676:4d.

7.06 ACTION of the BOARD:

   a. Within the appropriate time frames as established by NH RSA § 676:4, the Board shall approve, conditionally approve, or deny the application. The reasons for denial of a plan shall be stated in the record of the Board. Approval of a plan shall be endorsed on the plan by the chair and the Vice Chair of the Board. The time to act may be extended in accordance with NH RSA § 676:4f.
   
   b. All conditional approvals are valid for a period of not more than 6 months, unless the Board, at their discretion, chooses to extend the number of days required to meet precedent conditions. All precedent conditions of approval must be met within this 6-month period (unless a different time period is established by the Planning Board at time of conditional approval) or the approval shall be considered null and void. In cases where extenuating circumstances prevent the meeting of precedent conditions within 6 months, the applicant may request an extension, to be filed (in writing and with justification) with the Board no later than 14 days prior to the expiration date of the conditions. The Planning Board shall then vote on whether or not to grant such extensions.
   
   c. Approved site plans shall be protected from future changes in regulations and ordinances in accordance with NH RSA § 674:39 as summarized by the following:

      1. Every site plan approved by the planning board shall be exempt from all subsequent changes in
site plan regulations and zoning ordinances adopted by the Town of Merrimack, except those regulations and ordinances which expressly protect public health standards, such as water quality and sewage treatment requirements, for the time period specified by RSA § 674:39 (as most recently adopted by the State) after the date of certification of the site plan by the Planning Board; provided, however, that once substantial completion of the improvements as shown on the plans have occurred in compliance with the approved plans, or the terms of said approval or unless otherwise stipulated by the planning board, the rights of the owner or the owner’s successor in interest shall vest and no subsequent changes in site plan regulations or zoning ordinances shall operate to affect such improvements; and further provided that:

i. Active and substantial development or building has begun on the site by the owner or the owner's successor in interest in accordance with the approved plans within 24 months after the date of approval (certification by the Planning Board), or in accordance with the terms of the approval, and, if a bond or other security to cover the costs of roads, drains, or sewers is required in connection with such approval, such bond or other security is posted with the Town, at the time of commencement of such development;

ii. The development remains in full compliance with the public health regulations and ordinances of the Town of Merrimack; and

iii. At the time of approval (certification of the plans by the Planning Board), the site plan conforms to the site plan regulations, and zoning ordinances then in effect at the site of such plan.

2. For purposes of these regulations, “active & substantial development” shall be defined as:

i. Construction and/or installation of basic infrastructure to support the development (including all of the following: foundation walls and footings of proposed buildings; roadways, access ways, parking lots, etc. to a minimum of gravel base; and utilities placed in underground conduit ready for connection to proposed buildings/structures) in accordance with the approved plans; and

ii. Construction and completion of drainage improvements to service the development (including all of the following: detention/retention basins, treatment swales, pipes, underdrain, catch basins, etc.) in accordance with the approved plans; and

iii. All erosion control measures (as specified on the approved plans) must be in place and maintained on the site; and

iv. Items i, ii, and iii shall be reviewed and approved by the Town Department of Public Works or designated agent.

Movement of earth, excavation, or logging of a site without completion of items i, ii, iii, & iv, above, shall not be considered “active and substantial development.” Plans approved in phases shall be subject to this definition for the phase currently being developed. The Planning Board may, for good cause, extend the 12-month period set forth in 7.06.d.1.i.

7.07 FAILURE to ACT: If the Board has not obtained an extension in accordance with NH RSA § 676:4f and has not approved or denied the plan within 65 days from the date the plan was accepted as complete the applicant may seek relief in accordance with NH RSA § 676:4e(2).

7.08 APPEALS: Any person aggrieved by any decision of the Board may appeal to the Superior Court as provided for in NH RSA § 677:15
7.09 ENFORCEMENT and PENALTIES:

a. **General** - These regulations shall be enforced under the authority of NH RSA § 676 and such other authorities as may be available.

b. **Penalties** - Any person who fails to comply with or violates any section of these regulations may be fined in accordance with N.H. RSA § 676:17.

c. **Civil Enforcement**: Appropriate actions may be taken by law or in equity to prevent any violation of these regulations in order to prevent unlawful construction, to recover damages, to restrain, correct, or abate a violation, or to prevent illegal occupation of a structure or premises. These remedies shall be in addition to the penalties described above.

d. **Revocation of Site Plan Approval**:

   1. The Planning Board may, in accordance with RSA § 676:4-a, revoke, in whole or in part, site plan approval only under the following circumstances:

      i. When the applicant or successor in interest to the applicant has performed work, erected a structure or structures, or established a use of land, which fails to conform to the statements, plans or specifications upon which the approval was based, or has materially violated any requirement or condition of such approval.

      ii. When the applicant or successor in interest to the applicant has failed to perform any condition of the approval within a reasonable time specified in the approval, or, if no such time is specified, within the time periods specified in RSA § 674:39.

      iii. When the time periods specified in RSA § 674:39 have elapsed without any vesting of rights as set forth therein, and the plat, plan or other approval no longer conforms to applicable ordinances or regulations.

      iv. When the applicant or successor in interest to the applicant has failed to provide for the continuation of adequate security as provided by RSA § 674:36, III(b) and § 674:44, III(d) until such time as the work secured thereby has been completed.

   2. Prior to recording any revocation under this section, the planning board shall give notice, as provided by RSA § 676:4, I(d), to the public, the applicant or the applicant's successor in interest, and all abutters and holders of conservation, preservation, or agricultural preservation restrictions. The notice shall include the board's reasons for the revocation. A hearing with notice as provided in RSA § 676:4, I(d) shall be held at the request of any party receiving such notice, submitted within 30 days of receiving such notice, or if the planning board determines to hold a hearing.

   3. A declaration of revocation, dated and endorsed in writing by the planning board, and containing reference to the recording information for the plat, plan or other approval being revoked, shall be filed for recording with the register of deeds, no sooner than 30 days after written notification of the revocation is served on the applicant or the applicant's successor in interest, in person or by certified mail, or 30 days after any public hearing, whichever is later. If only part of an approval is revoked, that portion of land subject to revocation shall be clearly identified in the declaration. The declaration shall be recorded under the same name or names as was the original approval, as well as the names of subsequent owners, if any, of the land or part thereof subject to revocation, as identified by the municipality.

   4. A revocation under this section may be appealed pursuant to RSA § 677:15. Nothing in this section shall affect the municipality's ability, either before or after such a revocation, to pursue other remedies or penalties as set forth in § RSA 676:15-17.
EXHIBIT 1 - SITE PLAN FEE SCHEDULE

(These fees do not include required escrow for Engineering Peer Reviews)

- **Base Fee:**
  - **Commercial, Semi-public, Civic, and Recreational Facilities***:
    - $70.00 x 1,000 square feet of building area (Up to 100,000 sf)
    - $50.00 x 1,000 square feet of building area (100,000 sf and over)
  - **Industrial***:
    - $40.00 x 1,000 square feet of building area (Up to 100,000 sf)
    - $30.00 x 1,000 square feet of building area (100,000 sf and over)
  - **Multi-Family Residential***:
    - $50.00 per unit
  - **Home Occupation**:  
    - $50.00

- **Abutters Fee**: $12.00 per abutter

*A minimum $250.00 fee applies to Pre-Submission applications and Waivers of Full Site Plan Review*
### APPENDIX 1

#### NOTES ON NATIVE TREES AND SHRUBS AND THEIR USE IN LANDSCAPING - RECOMMENDED NATIVE TREES

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Latin Name</th>
<th>Low Maint</th>
<th>Salt Tolerance</th>
<th>Screen</th>
<th>Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arborvitae</td>
<td>Thuja occidentalis</td>
<td>Intermediate</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Ash, Black</td>
<td>Fraxinus nigra</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ash, White</td>
<td>Fraxinus americana</td>
<td>Intermed./Tolerant</td>
<td></td>
<td>Fall Color</td>
<td></td>
</tr>
<tr>
<td>Basswood, Am. Or Linden</td>
<td>Tilia americana</td>
<td>Sensitive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beech, American</td>
<td>Fagus grandifolia</td>
<td>Sensitive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birch, Paper</td>
<td>Betula papyrifera</td>
<td>Intermed./Tolerant</td>
<td></td>
<td>Fall Color/White Bark</td>
<td></td>
</tr>
<tr>
<td>Black Gum</td>
<td>Nyssa sylvatica</td>
<td>Yes</td>
<td></td>
<td></td>
<td>Fall Color/Winter Shape</td>
</tr>
<tr>
<td>Cedar, Eastern Red</td>
<td>Juniperis virginianus</td>
<td>Intermediate</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cottonwood, Eastern</td>
<td>Populus deltoides</td>
<td>Tolerant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dogwood, Pagoda</td>
<td>Cornus alterniflora</td>
<td></td>
<td></td>
<td>Flowers/nice shape/Fruits</td>
<td></td>
</tr>
<tr>
<td>Fir, Balsam</td>
<td>Abies balsmifera</td>
<td>Sensitive</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawthorne, Fleshy</td>
<td>Crataegus succulenta</td>
<td>Intermediate</td>
<td></td>
<td>Fruits/Fall Color</td>
<td></td>
</tr>
<tr>
<td>Hopthornbeam, American</td>
<td>Ostrya virginiana</td>
<td>Sensitive</td>
<td></td>
<td>Winter Interest</td>
<td></td>
</tr>
<tr>
<td>Hornbeam, American</td>
<td>Carpinus caroliniana</td>
<td>Yes</td>
<td>Sensitive</td>
<td>Fall Color</td>
<td></td>
</tr>
<tr>
<td>Juniper, common</td>
<td>Juniperis communis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Larch, American</td>
<td>Larix laricina</td>
<td>Tolerant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maple, Red</td>
<td>Acer rubrum</td>
<td>Yes</td>
<td>Sensitive</td>
<td>Fall Color</td>
<td></td>
</tr>
<tr>
<td>Maple, Sugar</td>
<td>Acer saccharum</td>
<td>Sensitive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oak, Scarlet</td>
<td>Quercus coxannea</td>
<td></td>
<td></td>
<td>Fall Color</td>
<td></td>
</tr>
<tr>
<td>Oak, Red</td>
<td>Quercus rubra</td>
<td>Tolerant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oak, Swamp White</td>
<td>Quercus bicolor</td>
<td>Sensitive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pine, Jack</td>
<td>Pinus banksiana</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pine, Pitch</td>
<td>Pinus resinosa</td>
<td>Sensitive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pine, White</td>
<td>Pinus strobus</td>
<td>Sensitive</td>
<td>Yes</td>
<td></td>
<td>Flowers/Fruit</td>
</tr>
<tr>
<td>Plum, Canadian</td>
<td>Prunus nigra</td>
<td></td>
<td></td>
<td></td>
<td>Flowers/Fruit</td>
</tr>
<tr>
<td>Shadbush</td>
<td>Amelanchier arborea</td>
<td>Sensitive</td>
<td></td>
<td>Flowers/Fruit</td>
<td></td>
</tr>
<tr>
<td>Shadbush</td>
<td>Amelanchier candensis</td>
<td>Sensitive</td>
<td></td>
<td>Flowers/Fruit</td>
<td></td>
</tr>
<tr>
<td>Spruce, White</td>
<td>Picea glauca</td>
<td>Intermed./Tolerant</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Native Shrubs

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Latin Name</th>
<th>Low Maint</th>
<th>Salt Tolerance</th>
<th>Screen</th>
<th>Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrowwood</td>
<td><em>Viburnum dentatum</em></td>
<td>Tolerant</td>
<td>Tolerant</td>
<td></td>
<td>Flowers/Fruit/Fall Color</td>
</tr>
<tr>
<td>Bayberry</td>
<td><em>Myrica pensylvanica</em></td>
<td>Yes</td>
<td>Tolerant</td>
<td></td>
<td>Semi-Evergreen</td>
</tr>
<tr>
<td>Blueberry,</td>
<td><em>Vaccinium corymbosum</em></td>
<td>Tolerant</td>
<td></td>
<td></td>
<td>Flowers/Fruit/Fall Color, colorful winter twigs</td>
</tr>
<tr>
<td>Highbush</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cranberry,</td>
<td><em>Viburnum trilobum</em></td>
<td>Yes</td>
<td>Unknown</td>
<td></td>
<td>Showy white flowers, glossy red berries</td>
</tr>
<tr>
<td>Highbush or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cranberrybush</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dogwood,</td>
<td><em>Cornus racemosa</em></td>
<td>Sensitive</td>
<td></td>
<td></td>
<td>Flowers/Fruit/Colored Stalks/fall color</td>
</tr>
<tr>
<td>Panicled</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dogwood, Red</td>
<td><em>Cornus sericea</em></td>
<td>Sensitive</td>
<td></td>
<td></td>
<td>Red stems, white berries</td>
</tr>
<tr>
<td>Osier</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elderberry</td>
<td><em>Sambucus canadensis</em></td>
<td>Unknown</td>
<td></td>
<td></td>
<td>White flowers, purple berries</td>
</tr>
<tr>
<td>Spicebush</td>
<td><em>Lindera benzoin</em></td>
<td>Yes</td>
<td></td>
<td></td>
<td>Yellow flowers/red fruits</td>
</tr>
<tr>
<td>Mountain Laurel</td>
<td><em>Kalmia latifolia</em></td>
<td>No</td>
<td>Yes</td>
<td></td>
<td>Evergreen/Flowers</td>
</tr>
<tr>
<td>Rhododendron, Rosebay</td>
<td><em>Rhododendron maximum</em></td>
<td>Yes</td>
<td></td>
<td></td>
<td>Flowers/Evergreen</td>
</tr>
<tr>
<td>Viburnum, Sweet</td>
<td><em>Viburnum lentago</em></td>
<td>Sensitive</td>
<td></td>
<td></td>
<td>Flowers/Fruit/Fall Color</td>
</tr>
<tr>
<td>Viburnum, Mapleleaf</td>
<td><em>Viburnum acerifolium</em></td>
<td>Sensitive</td>
<td></td>
<td></td>
<td>Fall Color</td>
</tr>
<tr>
<td>Winterberry, Black Alder</td>
<td><em>Ilex verticillata</em></td>
<td>Yes</td>
<td>Intermediate</td>
<td></td>
<td>Gorgeous red berries in fall</td>
</tr>
<tr>
<td>Witch Hazel</td>
<td><em>Hamamelis virginiana</em></td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 2

NOTES ON NATIVE TREES AND SHRUBS AND THEIR USE IN LANDSCAPING – PROHIBITED PLANTS

INVASIVE NON-NATIVE TREES AND SHRUBS*

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Latin Name</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autumn Olive</td>
<td>Eleagnus umbellata</td>
<td>Crowds out native vegetation.</td>
</tr>
<tr>
<td>Bayberry, Common</td>
<td>Berberis vulgaris</td>
<td>Forms thorny thickets preventing native herbaceous and shrub growth.</td>
</tr>
<tr>
<td>Bayberry, Japanese</td>
<td>Berberis thunbergii</td>
<td>Forms thorny thickets preventing native herbaceous and shrub growth.</td>
</tr>
<tr>
<td>Buckthorn, Common</td>
<td>Rhamnus cathartica</td>
<td>Buckthorn invading drier areas.</td>
</tr>
<tr>
<td>Buckthorn, Glossy</td>
<td>Rhamnus frangula</td>
<td>Tolerant of dense shade and invades wet areas.</td>
</tr>
<tr>
<td>Euonymus, Winged</td>
<td>Euonymous alatus</td>
<td>Dense shade and dense root system crowd out everything but own seedlings.</td>
</tr>
<tr>
<td>Honeysuckle</td>
<td>Lonicera morrowii and tatarica</td>
<td>Form impenetrable thickets and displace vegetation in young forests and floodplains.</td>
</tr>
<tr>
<td>Honeysuckle, Japanese</td>
<td>Lonicera japonica</td>
<td>Vine that chokes supporting trees and shrubs.</td>
</tr>
<tr>
<td>Locust, Black</td>
<td>Robinia pseudoacacia</td>
<td>Crowds out native vegetation.</td>
</tr>
<tr>
<td>Maple, Norway</td>
<td>Acer platanoides</td>
<td>Crowds out native vegetation.</td>
</tr>
<tr>
<td>Rose, Multiflora</td>
<td>Rosa multiflora</td>
<td>Crowds out native vegetation.</td>
</tr>
</tbody>
</table>

NATIVE TREES NOT RECOMMENDED BY DRED OR COOPERATIVE EXTENSION LITERATURE

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Latin Name</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box Elder</td>
<td>Acer negundo</td>
<td>Brittle wood, subject to snow and wind breakage.</td>
</tr>
<tr>
<td>Dogwood, Flowering</td>
<td>Cornus florida</td>
<td>Disease problem.</td>
</tr>
<tr>
<td>Elm, American</td>
<td>Ulmus americana</td>
<td>Disease problem.</td>
</tr>
<tr>
<td>Hemlock, Eastern</td>
<td>Tsuga canadensis</td>
<td>Wooly adelgid heading north; recommend not to plant as there is no solution to the adelgid problem at this time.</td>
</tr>
<tr>
<td>Maple, Silver</td>
<td>Acer saccharinum</td>
<td>Disease problem, structurally weak wood.</td>
</tr>
<tr>
<td>Mulberry</td>
<td>Morus sp.</td>
<td>Abundant fruit is a litter problem.</td>
</tr>
<tr>
<td>Sycamore</td>
<td>Plantanus occidentalis</td>
<td>Disease problems make it very unattractive.</td>
</tr>
<tr>
<td>Willow, Weeping</td>
<td>Salix sp.</td>
<td>Root problems, tree litter, attracts beetles.</td>
</tr>
<tr>
<td>Aicantus</td>
<td>Salix sp. altissima</td>
<td>Crowds out native vegetation, toxin in bark, leaves and bark in soil endanger other plants.</td>
</tr>
</tbody>
</table>

NON-NATIVE TREES NOT RECOMMENDED BY DRED OR COOPERATIVE EXTENSION LITERATURE

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Latin Name</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birch, European White</td>
<td>Betula pendula</td>
<td>Disease problems make it very unattractive, spring, summer and fall.</td>
</tr>
<tr>
<td>Elm, Siberian</td>
<td>Ulmus pumila</td>
<td>Weak wooded, susceptible to wind breakage. Invasive in some locations.</td>
</tr>
<tr>
<td>Pear, Bradford Callery</td>
<td>Pyrus calleryana ‘Bradford’</td>
<td>Serious structural splitting at branch junctions.</td>
</tr>
<tr>
<td>Plane Tree, London</td>
<td>Plantanus X acerfolia</td>
<td>Disease problems.</td>
</tr>
<tr>
<td>Poplar, Lombardy</td>
<td>Populus nigra</td>
<td>Insect and disease problems make it short lived.</td>
</tr>
</tbody>
</table>

* These may not be invasive in all locations; however it is not recommended that they be used as part of any landscaping plans.
## APPENDIX 3

IES
Parking lot
Levels of activity (Examples)  IES Maintained Horizontal Illuminance

<table>
<thead>
<tr>
<th></th>
<th>General Parking &amp; Pedestrian</th>
<th>Vehicles Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>3.6</td>
<td>.9</td>
</tr>
<tr>
<td>Civic Recreational Facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Cultural or Civic Ctr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional Shopping Centers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fast Food Facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas/Convenience Store</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>2.4</td>
<td>.6</td>
</tr>
<tr>
<td>Community Shopping Ctr.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Parks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital Parking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation Parking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Airport, Commuter Lots, Etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Complex Parking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>.8</td>
<td>.2</td>
</tr>
<tr>
<td>Neighborhood Shopping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Employee Parking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Facility Parking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Church Parking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IES States: “This recommendation is based on the requirement to maintain security at any time where there is low level of nighttime activity.”
APPENDIX 4

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. Signs allowed under the appropriate section of the Merrimack Zoning Ordinance shall be used for that purpose.

1. 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;
2. Areas around the pump islands and under canopies shall be illuminated in accordance with Appendix A of these regulations;
3. 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 the sketch below.