I. Complete Streets & Traffic Calming Guidelines

https://www.dover.nh.gov/Assets/government/city-operations/2document/planning/outreach/Transportation/Complete%20Streets%20Traffic%20Calming%20Guidelines.pdf

- Design Guidance and Flexibility. The City shall follow accepted or industry standards and use
 the best and latest design standards available. A list of standards is included in section III of the
 guidelines. Note that each of these standards were not reviewed but one or more contain
 information on street trees.
- Green Streets
 - Care shall be given to incorporate best management practices for addressing storm water runoff.
- Performance measures include: Number of street trees planted

II. CBD Architectural & Urban Design Guidelines

https://www.dover.nh.gov/Assets/government/cityoperations/2document/planning/outreach/ARCH_GUIDE_FINAL.pdf

- Site Strategy: Define and enhance the street edge
 - Use plantings to continue the building line close to the road edge and to maintain a sense of enclosure along the roadway.
 - Screen parking from view from the traveled way.
- Site Strategy: Setbacks
 - o Increased setbacks may accommodate a small landscaped gathering area.
- Subdistrict: Downtown Gateway and Mixed-Use Districts
 - Setback from the street with a fair amount of landscaping
- Subdistrict: Residential District
 - Not setback from street with limited landscaping
- Architectural Design Strategies: Green Infrastructure
 - o Includes: trees and tree boxes, natural landscapes
 - Due to the many benefits of integrated green infrastructure elements, it is encouraged in all development projects.
- Streetscape Design Strategies
 - o Physical features include street trees, a planting zone
 - Sidewalks must be at least 5 feet wide
 - Street Trees: Street trees shall be planted at an average spacing of 25 to 30 feet on center. The planting method shall allow for maximum root zone space where possible. Existing healthy street tree shall be protected, if possible. These trees improve the pedestrian environment, compliment building facades, reduce heat island effect, assist with stormwater management, and provide many other benefits to the Downtown. Tree specifications can be found in the Downtown Design Standards.

III. Streetscape and Urban Design/Downtown Streetscape Standards

- Landscape
 - Documentation of benefits of trees
 - o Provide new trees where there is an opportunity because of construction

- Preserve existing trees wherever possible
- Selection of trees should complement the downtown's traditional appearance and be composed of trees that thrive in a New England urban environment
- Chestnut Street is a prime candidate for establishment of single large canopy tree species to help define the corridor. Recommended that Zelkova serrata is planted on both sides of the roadway no more than 50 feet apart. The location of the trees should not interfere with utility poles and/or lighting. Adequate distance should be left at the intersections to ensure sight lines for drivers.
- O Upper and Lower Squares- Selection of trees planted along the street and within the larger landscape areas should provide adequate shade for pedestrians, require little maintenance, and highlight the significance of the area. Gledistia triacanthos var. inermis is recommended as a shade tree along the street. Pyrus calleryana 'Chanticleer' is recommended as a shade tree within the larger landscaped beds. Plant no more than 40 feet apart along the street and plant in landscaped areas adjacent to seating. Amelanchier canadensis is recommended for planting in the larger landscaped beds.
- Recommended street tree types include:
 - Ulmus americana 'American Liberty'
 - Pyrus calleryana 'Chanticleer'
 - Amelanchier canadensis
 - Zelkova serrata
 - Gledistia triacanthos var. inermis
 - Acer rubrum
- Healthy, mature trees along Central Street, Main Street, Washington Street, and First through Sixth Streets should be preserved and infilled with appropriate tree species.
 - Quercus rubra, Ulmus americana 'American Liberty', and Acer rubrum are recommended.
- Placement of street trees should complement the architecture and should not block important views of businesses.
- o In some locations, seasonal planting might be provided with containers that could be removed during winter months. Locations could include broad street corners in Upper and Lower Squares, along the approaches to in the center island of the mini round about at Portland Avenue, and along the sidewalks or approaches to the bridges within the downtown.

v. Site Review Regulations

• §153-13 Site Development Plan

- (12) A landscape plan that delineates the arrangement, species and dimensions of all existing and proposed landscaping materials. The landscape plan, in sufficient detail to indicate compliance with these regulations, shall be prepared by a professional landscape architect who is licensed by the State of New Hampshire. The licensed landscape architect shall sign the plan. The landscape plan shall be certified by the licensed landscape architect and include his/her State of New Hampshire license number.
- (17) A colored rendering of the streetscape that will be created along the existing public right-of-way. This sheet shall include a perspective of both sides of any existing roadway, any street or

sidewalk improvements, proposed plantings and structures, as prepared by a registered engineer or architect, who shall sign the plan and place his/her seal upon it, as required.

(20) A detailed landscape operations and maintenance plan, developed in accordance with the requirements of §153-14G. Site plans shall provide for the proper management of landscaping, ensuring that landscaping is not unintentionally damaged as a result of snow removal or general traffic flow, pedestrian or otherwise.

• §153-14 Site Development Design Criteria

- (G) Landscaping- Description of purpose
- (I) General Requirements: (summary follows)
 - a. Existing vegetation shall be preserved wherever possible. Existing natural features of special interest, such as those having historic relevance, shall be delineated and located on the landscaping plan.
 - b. Invasive plant species identified in Ch Agr 3800 pursuant to RSA 430:55, and all non-native plant species identified in the NH Restricted Invasive Plant Species/Watch List are prohibited.
 - f. Landscaping shall be used to establish and/or maintain an attractive streetscape adjacent to roadways. A minimum of one tree per 35 linear feet, not more than six feet apart for individual shrubs, and not more than three feet between individual perennials and ground covers or portion thereof shall be provided.
 - g. The type and location of vegetation shall not interfere with utilities or the safe and efficient flow of street traffic. All trees located under utility wires shall be low-growing species.
- (2) Interior landscaping
 - a. Landscaping requirements in addition to the standard of §153-17C: minimum % interior landscaping based on number of parking spaces in lot
 - b. Parking lots which have more than two aisles which are approximately parallel shall be required to have continuous landscaped planting strips separating every four rows of parking. The landscaped planting strips shall be a minimum of 10 feet in width and shall be separated from the parking area by adequate curbing. Within the landscaped planting strips, deciduous and/or evergreen shade trees shall be planted at 40 feet on center. Trees shall be species tolerant to the climatic conditions of Dover and shall be a minimum caliper of 3.5 inches (measured at four feet above grade level). Within the landscaped planting strips, shrubs shall be planted between the deciduous trees at five feet on center. The shrubs shall be a mix of deciduous and evergreen species, tolerant to the climatic conditions of Dover and shall be a minimum height of two feet at the time of planting. All trees, shrubs and landscaping materials shall be maintained in good condition so as to present a healthy, neat, and orderly appearance.
- (3) Perimeter Landscaping
 - a. Along the perimeter of parking lots with 10 or more spaces, deciduous and/or evergreen shade trees shall be planted at 35 feet on center within the buffer area required by §153-17C. Trees shall be species tolerant to the climatic conditions of Dover and shall be a minimum caliper of 3.5 inches (measure at four feet above grade level). Within the perimeter buffer, shrubs shall be planted between the trees

- at 5 feet on center. The shrubs shall be a mix of deciduous and evergreen species, tolerant to the climatic conditions of Dover and shall be a minimum height of two feet at the time of planting. All trees, shrubs, and landscaping materials shall be maintained in good condition so as to present a healthy, neat, and orderly appearance.
- b. Trees shall be salt- and drought-tolerant, native or noninvasive species, and have a structure and growth form which prevents them from obstructing sidewalks and walkways. Flood-tolerant plants shall be used in drainage swales.
- c. To foster biological diversity, trees planted along a given street shall use the 10-20-30 rule (no more than 10% of the trees shall be of the same species, no more than 20% in the same genus, and no more than 30% in the same family).
- d. To ensure that landscape materials do not constitute a driving hazard, a clear sight triangle shall be observed at all street and access drive intersections. Ground cover and trees with at least eight feet of limbless trunk shall be permitted within the sight distance triangle. In the case of a city street intersection, the sight triangle shall consist of the area between points 20 feet along both intersecting streets from their respective edges of pavement.
- e. To ensure that landscape materials do not constitute a driving hazard, a clear sight triangle shall be observed at all street and access drive intersections. Ground cover and trees with at least eight feet of limbless trunk shall be permitted within the sight distance triangle. In the case of a city street intersection, the sight triangle shall consist of the area between points 20 feet along both intersecting streets from their respective edges of pavement.

(4) Stormwater management

- a. Where possible, interior landscaping and perimeter landscaping areas shall provide for stormwater treatment and bioretention as well as act as a visual buffer.
- d. All newly planted trees, shrubs and other vegetation shall have a watering plan during the establishment period (for trees, one year per inch in caliper at planting; shrubs and other vegetation generally establish within one growing season). Mulching trees, shrubs, and plants helps retain soil moisture, moderates temperature fluctuations, provides protection from mechanical damage by mowers and trimmers, and serves as temporary covering of exposed soil until understory plants and ground covers fill in. However, thick applications of mulch (such as "volcano mulching") will kill trees and other vegetation. Mulch shall be no greater than three inches in depth and shall not be in contact with the bark or stems of plants.

§153-16 Design standards for Residential-Commercial Mixed Use (RCM) Overlay District

Note: this section contains some provisions related to trees and landscaping