

DESIGN STANDARDS FOR THE TOWN OF LUDLOW

CHAPTER 40R SMART GROWTH OVERLAY DISTRICT

I. INTRODUCTION

These design standards are adopted pursuant to the authority of M.G.L. Chapter 40R “Smart Growth Zoning” and Regulations (760 CMR 59.00) and Section 5.5 of the Town of Ludlow Zoning Bylaw (the “District Bylaw”). They complement the District Bylaw, and provide the Town of Ludlow with a regulatory framework that will define the site and building design requirements for development within the Town’s Smart Growth Overlay District (“SGOD”).

This document is organized into subject headings based on the areas of regulation. It includes both non-binding Guiding Principles and binding Standards for Compliance. The Guiding Principles identify the Town’s goals and vision for the District and are intended to provide focus to the project’s planning and design. The Standards for Compliance include specific design requirements which shall be applied to development within the District that are subject to Plan Review under the District Bylaw. Where it provides greater clarity regarding the desired design outcomes, illustrative images have been used to complement these Design Standards. *Images are for illustrative purpose only and are to be used to clarify and reinforce the Design Standards in the text.*

a. PURPOSE AND APPLICABILITY

These Design Standards supplement Section 5.5 Smart Growth Overlay District (SGOD) of the Town of Ludlow Zoning Bylaw. They are set forth to ensure that renovation and new development will preserve and augment the SGOD’s architectural qualities, historic character and pedestrian scale while promoting infill development.

This document shall be used by the Plan Approval Authority (“PAA”), the Ludlow Planning Board, in their review and consideration of proposed developments pursuant to the District Bylaw. A development shall be approved by the PAA upon finding consistency with the District Bylaw and with the Standards for Compliance contained herein, unless otherwise waived pursuant to the District Bylaw.

These Design Standards shall be in effect upon adoption by a majority of the Ludlow Planning Board and approval by the Massachusetts Department of Housing and Community Development (“Department”). As authorized by M.G.L. Chapter 40R, these Design Standards may be amended from time to time with the approval of the Department pursuant to Section 5.5.13.2 of the District Bylaw.

In the case of inconsistency between the District Bylaw and these Design Standards, the District Bylaw shall govern. In the case of inconsistency between applicable state or federal laws, including, without limitation, state building codes or life safety codes, and these Design Standards, the applicable state and federal laws, rules, and regulations shall govern.

b. DEFINITION OF TERMS

Definitions of technical or other capitalized terms used in these Design Standards can be found in Section 5.5.2 of the District Bylaw. It is important to note that the Design Standards include a mixture of definitive requirements – indicated generally by the use of the word “shall” with regard to a specific standard – and guidelines which may be strongly encouraged but nevertheless more aspirational and/or advisory in nature – indicated generally by the use of the word “should.”

II. GUIDING PRINCIPLES

A. GENERAL

The Chapter 40R Smart Growth Overlay District in Ludlow will become a vibrant, mixed-use district if certain general development principles shape its redevelopment. The following guiding principles serve as the basis for the Design Standards for Compliance contained in Section IV of this document. Development projects are evaluated with respect to the General Principles, in addition to the pertinent Standards.

1. Promote compact, mixed use development in a pedestrian-oriented form throughout the district: Encourage development that is compact, conserves land, protects historic resources, and integrates uses. Encourage infill development and the reuse of existing sites, structures, and infrastructure. Create pedestrian friendly districts and neighborhoods that mix commercial, civic, cultural, educational, and recreational activities with open spaces and homes.
2. Maximize connectivity and access: Create a multimodal circulation network in which residents, workers, and visitors may conveniently walk, drive, bike, or ride public transportation to destinations within and outside of the district. Ensure accessibility for all residents and visitors, including those with disabilities. Increase access to recreational areas and public open space.
3. Promote the preservation and creation of distinctive neighborhoods that provide diverse housing options: Create mixed-use, mixed-income neighborhoods that include single family homes, townhouses, apartments, condominiums, and supporting neighborhood-scale businesses. Providing a number of units and options for various household types and income levels is critical to the District's success.
4. Require excellence in the design of the public realm and of buildings that front public spaces: Development should be conscious on how the design of private

buildings influences public spaces. Streets, plazas, parks, and other public spaces should be comfortable and inviting, and buildings fronting those spaces should be active and visually interesting at the pedestrian level.

5. Encourage creativity, architectural diversity, and exceptional design: Strive to allow for creativity and variety, provided the end result is of high quality and an asset to the Town.

B. SUB-DISTRICTS

The Ludlow 40R District is divided into three smaller sub-districts, each with its own unique vision for development. The three sub-districts located in the Downtown area of the community – East Street Corridor, Riverside, and Ludlow Mills – look to further enhance one of the main gateways into Ludlow and encourage infill development that is in context with the historical character of these districts.

East Street Corridor

The sub-district is currently home to a variety of small locally-owned businesses and a mix of residential homes that range from single family houses on small lots to duplexes and apartments. This district also contains a variety of community and civic uses, such as schools, churches, social clubs, and a soccer stadium. New developments under the Chapter 40R program within the East Street Corridor sub-district should encourage new residential and mixed use infill development while respecting the existing fabric of the neighborhood.

Vision Statement: A neighborhood with charming shops and distinctive restaurants along tree-lined streets in a neighborhood where the emphasis is on community, with locally owned and operated establishments each with its own unique flavor. New residential and mixed use development on vacant property enhances this district.

Riverside District

Historically developed by Ludlow Manufacturing Associates to compliment the nearby mills along the Chicopee River, this area is host to a variety of civic, commercial and residential uses, and is the main gateway into Ludlow from Springfield. Thousands of commuters pass through this district daily, and residents come to this area to use the public library, the senior center, or stop at the retail shops along Center Street or East Street. Two municipal parks are accessible to residents who live in many of the apartment complexes or homes in the district.

Auto-centric in its development, there is an opportunity to develop this area into a pedestrian friendly, active waterfront district, with a variety of housing types and a mix of uses. Developments under Chapter 40R could encourage retail and restaurants on the ground floor, and professional offices / residential on the upper floors.

Vision Statement: An attractive gateway into Ludlow with eye-catching mixed use buildings, townhomes, and garden style apartments and a community anchor with its concentration of civic, community, and retail uses. A meandering river walk reconnects Ludlow residents to the Chicopee River and is further enhanced by an active waterfront of housing, retail, and restaurants offering outdoor dining.

Ludlow Mills

Constructed between the 1870s and the 1920s, most of the mill buildings located along State Street were built by the Ludlow Manufacturing Associates when operations were at its peak. The complex includes a total of 66 buildings on 170 acres of land adjacent to the Chicopee River. The four brick manufacturing buildings on State Street contain over 930,000 square feet of finished space, with most of the upper-story spaces currently vacant. For this reason, this property is considered underutilized and prime for redevelopment. The addition of pedestrian friendly amenities and the creation of a riverwalk could also connect residents to the proposed Riverside district and bring more activity into the downtown area.

Vision Statement: A revitalized icon of Ludlow's past with residential units, offices, and commercial spaces. A meandering river walk connects new residents and workers to the Riverside and Downtown districts.

III. DESIGN STANDARDS FOR COMPLIANCE

A. SCALE, PROPORTION, AND EXTERIOR APPEARANCE OF BUILDINGS

1. Relationship to Buildings to Site: The relationship of the buildings to the site, including the siting of new buildings, structures, and open spaces shall be designed to permit, to the extent practical, passive solar energy and natural light into them and onto adjacent sidewalks during cooler seasons. Site design and building locations should afford to the extent practical, protection of pedestrian areas from adverse impact of winds, vapors, and other emissions, shadows, and / or noise.
2. Setbacks
 - a. In general, setback for new buildings in the District should be consistent with setbacks of neighboring buildings. Front setbacks may be used for a well-landscaped public place. Where differing front setbacks are approved, design elements such as a wall, fencing, or landscaping of a minimum height of three feet (3') above grade may be used to reinforce the street line.
 - b. Buildings on corner lots shall be oriented to the corner and visible from both public street fronts and in order to reinforce the traditional setbacks in proximity to the project. Corner lots may incorporate residential entries and special landscaping by setting the structure back from the property lines.
 - c. Development in predominantly commercial and mixed-use areas should visually reinforce the existing street storefronts by placing horizontal or vertical elements in a line corresponding with the setbacks and façade elements of adjacent building fronts. These could include trees, columns, windows, planters, benches, overhead weather protection, cornices, or other building features.
 - d. Alternative paving materials such as brick or brick pavers should be used to differentiate the setback area from the sidewalk and to visually reinforce the existing street wall.
3. Proportion. In general, the roof line or top of the structure should be clearly distinguished from its façade walls by way of horizontal divisions, varying materials, and / or traditional roof lines.
4. Roof forms should be varied within a block, and may be varied within a building, incorporating parapets, decorative cornice treatments, belt courses, and window bays. Pitched roofs are encouraged.

5. Mechanical equipment, including metal chimneys, attached to, or on the roof of a building, shall be screened from view of streets; or they should be integrated into the overall design of the building by use of materials, placement, roof shape or form, or other means.
6. New Buildings. Building design for multi-story buildings should create or maintain a visual distinction between upper and lower floors.
 - a. Ground Floor. The Town encourages transparent, open façades for commercial uses at street level (e.g. windows that cover between 50 to 80 percent of the ground floor façade area and begin approximately 24 to 30 inches above the sidewalk rather than continuing down to street level).
 - b. Middle Floors. Architectural features may include: belt courses or horizontal bands to distinguish individual floors; change in materials and color and/or texture that enhance specific forms elements or vertical elements of the building; a pattern of windows; and /or bay windows to give scale to the structure.
 - c. Vertical divisions of ground and upper floors should be consistent across a building frontage. Major horizontal elements of adjacent buildings and storefronts should align. In order to modulate their scale, multi-story buildings should articulate the base, middle, and top, separated by cornices, string cornices, step-backs or other articulating features.
 - d. Buildings more than forty feet (40') wide shall be broken down into a series of smaller elements or "bays". No uninterrupted length of any façade shall be permitted to exceed 40% of the façades total length, or forty (40) horizontal feet, whichever is less, without incorporating at least one of the following design elements: color change, material change, or texture change; and at least one of the following design elements: architectural projections or recesses, trellises, balconies, or windows.
7. Renovation
 - a. Applicants for renovation of existing buildings are encouraged to meet with the Ludlow Historical Commission prior to submitting an application to seek their opinion regarding the historical significance of the buildings, if any, and to seek their advice regarding building elements that may benefit from restoration.

- b. All renovations shall, to the maximum extent practicable, maintain the scale and proportion of the original building elements including roof shape and height, structural framework, cornice, sign band, window size and symmetry, and decorative elements.
 - c. On a building proposed for renovation pursuant to the District Bylaw, the covering or removal of original façade elements (columns, pilasters, fenestration, arches, lintels, decorative elements) is discouraged, and may be prohibited by the PAA. Proposals for a façade renovation that uses a particular historical style should utilize accurate elements and materials of that style.
 - d. On a building proposed for renovation pursuant to the District Bylaw, distinctive architectural features should be restored, and elements that cover up original details should be removed. Architectural features that are important to preserve include, but are not limited to: bay windows, transom windows, columns on the façade, the cornice, sign band, and other details including medallions and decorative panels. Architectural features that should be removed include: siding that covers original brick, metal or wood siding and detail; and shed roofs or false fronts over first floor shop fronts, which may be replaced with awnings or traditional building sign bands.
 - e. Original copper flashing on roofs and cornices should be restored where feasible.
8. New buildings should strive for a contextual approach to design that is sensitive to and/or corresponds with surrounding noteworthy buildings and style elements. This may include:
- a. Distinctive entrances, windows and façade detailing.
 - b. Decorative façade elements to break down the scale and provide pedestrian interest;
 - c. Large storefront windows, where applicable;
 - d. Canopies, variable parapets, and cornices;
 - e. Building entry treatments that are arched or framed in a manner that protects people from the elements;
 - f. Components that improve pedestrian-orientation such as: non-reflective storefront windows and transoms; awnings; architectural detailing on the first floor; and detailing at the roof line.

9. Buildings should include protected pedestrian entry for both business and upper story residential uses. Recessed doorways are preferred, in order to break up the building façade, provide a welcoming space, and provide protection from sun and rain. Where a recessed doorway is not used, an awning can have a similar effect. Adequate lighting for the doorway shall be provided at night.
10. Any side of the building that has frontage on a sidewalk or street shall include windows, doors, or other signs of human occupancy, such as porches or balconies.
11. The portion of side and rear façades that are visible from streets or other public areas should be articulated in a manner consistent with the design of the front façade, although such façades may include less architectural detail than the primary façades.

12. Materials

- a. Materials such as wood shingles, clapboard, brick and stone are encouraged. Other materials may be used in ways that are compatible with these more traditional materials. Generally, materials that have texture or pattern are encouraged.
- b. Finish materials that are susceptible to staining, fading or other discoloration are strongly discouraged. The use of applied foam ornamentation and EIFS (Exterior Insulation & Finish System) is prohibited on ground level locations. The Town discourages vinyl aluminum siding, siding with narrow trim, and pressure treated porches and balconies.
- c. Where more than one material is used, traditionally heavier materials (stone, brick, etc.) should be located below lighter materials (wood, fiber cement board, siding, etc). The change in material should occur along a horizontal line, preferably at the floor level.

13. Windows

- a. Ground floor windows should be located and designed to maximize transparency of commercial façade and attract pedestrian interest.
- b. Large windows that open to facilitate indoor-outdoor interaction with the street or sidewalk are encouraged.
- c. Windows walls perpendicular to the street are encouraged.

- d. Transom or clerestory windows above entrances, display windows and projected bay windows are encouraged.
- e. Multiple paned windows should be considered that divide large areas of glass into smaller parts.

B. PLACEMENT, ALIGNMENT, WIDTH AND GRADE OF STREETS AND SIDEWALKS

1. Ease of access, travel and on site movement for fire and police equipment and other emergency services shall be assured for public safety. Applicants are encouraged to meet with Ludlow Department of Public Works within the application process to seek their opinion regarding the adequacy of the proposed internal transportation network and any proposed or modified curb cuts on public streets.
2. The proposed development shall assure safe interior circulation within the site by separating pedestrian, bike ways and vehicular traffic.
3. All new sidewalks shall be designed and constructed to be accessible to the handicapped in accordance with applicable laws including the Americans with Disabilities Act (ADA) and the Rules and Regulations of the Massachusetts Architectural Access Board (AAB).
4. Provide a clear distinction between pedestrian traffic areas and commercial traffic areas through the use of different paving materials or colors, landscaping, etc.
5. Sidewalks shall be surfaced with concrete, brick, or stone; minimum unobstructed width shall be five feet (5'). Where the proposed development abuts streets that lack sidewalks, or where sidewalks abutting the proposed development do not meet applicable standards, applications should propose a plan for pedestrian walks which may include a combination of sidewalks, paths and pass-through walkways.
6. Where existing sidewalks within rights-of-way abutting the proposed development are cracked, broken or uneven, applicants are strongly encouraged to propose improvements to said sidewalks. Where development is proposed adjacent to sidewalks that are not accessible to the handicapped in accordance with applicable laws including the ADA and the Rules and Regulations of the Massachusetts AAB, improvements to sidewalks may be required as a condition of Plan Approval provided said condition is not unduly restrictive.
7. Benches for seating should be provided near retail entrances and at bus stops. At bus stops, such benches should offer protection from the weather.

8. Pedestrian access shall connect to all building entrances with further connections to local pedestrian arteries. Sidewalks, crosswalks or walkways, shall be provided to allow access to adjacent properties and among buildings within a development. All development and redevelopment should allow for possible future pedestrian and bicyclist connections with adjoining properties, where appropriate.
9. Development in mixed-use areas should preserve and enhance the pedestrian environment by providing for continuous sidewalks that are unencumbered by parked vehicles and are minimally broken by vehicular access within a block.
10. Curbing shall be either concrete or granite. Curbing is strongly encouraged to limit off pavement vehicle access, unless other suitable materials are used.
11. Alteration of the topography shall be limited as nearly as possible to that which is necessary for the provision of access.
12. Traffic Management Plan. The proposed development may be required to prepare a Traffic Management Plan. Applicants are encouraged to meet with the Town Planner prior to filing an application to discuss whether a Traffic Management Plan is needed based on the anticipated traffic generation of the proposed development, its anticipated impact on one or more nearby intersections, and the vehicular Level of Service of nearby streets and intersections. Where required, a Traffic Management Plan shall include the following information.
 - a. A plan showing the proposed parking, loading and traffic circulation within the site; access and egress points; and other features related to traffic generated by the proposed use.
 - b. A traffic study, prepared by a qualified traffic engineer, detailing the expected traffic impacts. Said traffic study must substantially conform to the Institute of Transportation Engineers' "Traffic Access and Impact Studies for Site Development: A Recommended Practice," latest edition. The PAA must approve the geographic scope and content of the study. In addition, the applicant may be required to submit a Transportation Demand Management (TDM) plan tailored to the specific uses and the geographic location of the site.
 - c. Proposed mitigation measures, if any, such as left-turn lanes, roadway widening, signage and signalization of intersections.

C. TYPE AND LOCATION OF INFRASTRUCTURE

1. All new utilities shall be placed underground, to the maximum extent feasible.
2. Parking areas shall be graded, surfaced with asphalt, concrete or other suitable non-erosive material, and drained in a manner deemed adequate by the Town's Department of Public Works to prevent nuisance of standing water, erosion or excessive water flow across abutting streets or ways, within the proposed parking area, to abutting properties and to wetland resource areas. Natural drainage courses shall be utilized insofar as possible and LID techniques are strongly encouraged.
3. All detention and filtration systems shall be designed to conform with the Stormwater Management Policy of the Massachusetts Department of Environmental Protection (DEP).
4. Detention and filtration systems shall be located on site and should have curvilinear sides, so as to appear to be a natural part of the landscape. Manmade embankments shall have maximum side slopes of three (3) feet horizontal and one (1) foot vertical.
5. Surface run-off shall be minimized. LID techniques such as bioretention cells, drainage swales and porous paving materials are encouraged where soil and topography allow and the protection of the site and adjacent properties from erosion as a result thereof is assured.

D. LOCATION OF BUILDING AND GARAGE ENTRANCES

1. Access points should be consolidated wherever possible; multiple curb cuts are strongly discouraged.
2. Acceptable sight distance shall be provided and maintained at all access and egress locations.
3. Parking and automobile access shall be located away from the corners, where practical.
4. Building entrances shall be designed to provide direct access to sidewalks to emphasize pedestrian ingress and egress as opposed to accommodating vehicles. Entries for residential uses on the street rather than from the rear are encouraged.
5. Doorways to upper floors shall be visually separated from street-level shop entries.

6. Pedestrian Entrances. Paths and entry areas shall be sufficiently lighted and entry areas should be protected from the weather.

E. OFF-STREET PARKING

1. Continuous sidewalks that are unencumbered by parked vehicles and are minimally broken by vehicular access within a block should be provided to preserve and enhance the pedestrian environment in mixed use areas.
2. Surface parking areas should not be designed to front on a public street. Surface parking shall be screened from the sidewalk. Screening may include transparent and well-maintained cast-iron and brick fencing or plantings. Screening shall be at least three feet (3') high at time of planting.
3. Parking Area Landscaping. Surface parking lots shall have landscaped islands to divide large parking areas. Landscaping is required in the interior of parking lots and should incorporate existing trees, berms and other landforms where possible. The following minimum landscape coverage standards shall apply:
 - a. Parking lots with less than 100 spaces shall have at least five (5) percent of the interior lot area landscaped.
 - b. Parking lots with more than 100 spaces shall have at least seven (7) percent of the interior lot area landscaped.
4. Separation of Parking Blocks. Parking lots with more than one hundred (100) spaces shall be divided into blocks of no more than fifty (50) spaces. Each block shall be separated from other parking blocks by a landscaped area that is a minimum of eight (8) feet wide.
5. Entrances to structured parking shall be located on side streets or alleys wherever feasible. Blank walls on parking garages are not permitted. Screening may include buildings with uses such as retail, office, or residential; and/or landscaping.
6. Parking areas shall be setback from structures, property lines and public ways by a minimum of 10 feet.

F. LOCATION AND DESIGN OF ON-SITE OPEN SPACES

1. Quasi-public open space should be incorporated within site design for new development, with special focus on corner landscape treatments and courtyard entries.

2. Open space areas within the project should be visible to public view wherever possible.
3. Mature street trees shall be retained.
4. Streetside gardens should be created between buildings and streets.
5. Operation and Maintenance Plan. Provision shall be made for maintenance of open space and common areas. An operation and maintenance plan may be required prior to Plan Approval. The Operation and Maintenance Plan shall remain on file with the Approving Authority and may be an ongoing requirement.

G. LANDSCAPING

1. A landscaping plan shall be submitted with any plan for approval.
2. Plantings shall be of native species and provide seasonal foliage, bloom and fragrance. Landscape materials that are sustainable, requiring minimum irrigation or fertilizer should be used. The selection of plant materials shall be based on the Town's climate and site conditions. Emphasis shall be placed on drought- and disease-resistant landscape selections that are native to the area and sustainable over the long term. All plants shall be A-Grade or No. 1 Grade and free of defects. All plants shall be normal health, height, leaf density, and spread as defined by the American Standard for Nursery Stock, ANSI Z60.1 (latest available edition), or the American Association of Nurserymen. Plants shall have full, even, well-developed branching and a dense, fibrous, and vigorous root system. Plant species should be chosen considering the following:
 - a. In areas of high pedestrian use (where salt is likely to be used during winter months) trees shall be chosen that have been observed to have some salt tolerance.
 - b. Consider the ultimate maturity of the plant species when determining the size of the plant bed or planter.
 - c. On streets with buildings located adjacent to the property line, regardless of the type of land use, when selecting the tree species to plant, consider the mature shape of the tree crown, to prevent the tree canopy from growing into the building wall and potentially requiring severe pruning over time.
 - d. When selecting trees for planting along the streets, consider both the shape and density of the canopy. Smaller, more ornamental

trees or trees with higher or lighter canopies are often chosen for commercial streets.

3. Every effort shall be made to minimize the amount of disturbed areas on the site, especially in order to preserve substantial existing vegetation on site.
4. Preserve existing significant trees where feasible. The location and design of buildings shall not cause avoidable removal or damage to any tree exceeding twelve (12) inches trunk diameter application.
5. Site Plans submitted to the Approving Authority shall identify existing trees on the site to be preserved. Trees shall be tagged in the field within the project review process and appropriately designated on project plans.
6. Provide street trees with tree grates or in planter strips, using species that provide summer shade and winter light.
7. Incorporate street trees in commercial and residential environments to create overhanging canopies of trees.
8. Provide hedges or continuous shrubs to screen pavements, especially parking areas from streets, where practical.
9. All islands and landscape areas should be of a minimum of one hundred (100) square feet to support healthy plant growth.

H. LIGHTING

1. All lighting shall be oriented downward and conform to “Dark Skies” guidelines, as stated by the International Dark Sky Association (IDA).
2. Pedestrian-scale lighting, such as a 12- to 15-foot-high pole or bollard fixtures, should be used, to the extent feasible. For parking areas, light fixtures may be up to a maximum of twenty five feet (25’) in height.
3. Installation of pedestrian light fixtures as part of a development's sidewalk improvements is required as necessary to ensure safety after dark.
4. Fixtures that produce glare or that spill light to adjoining sites are prohibited.
5. Energy efficient lighting with timers or motion sensors are strongly encouraged.
6. A Lighting Plan is required with a development's application materials.

I. BUFFERING IN RELATION TO ADJACENT PROPERTIES

1. At no time shall noise levels emanating from normal operations, except motor vehicles, exceed 10 d.b.a. above ambient at the Project lot line.
2. Service elements, like trash dumpsters, utility/service areas, loading docks and mechanical equipment, shall be consolidated, screened from view, and be located away from the street front where possible.
3. Appropriate provision shall be made for waste disposal, water supply, refuse removal, drainage, dust and erosion control and other utilities and their appurtenances, in accordance with applicable Town regulations.