

ZONING BYLAW/ORDINANCE
 STREET DESIGN AND PARKING LOT GUIDELINES AND FEASIBILITY OF
 ALLOWING GREEN INFRASTRUCTURE

ASSESSMENT OF

Pioneer Valley Planning Commission, February 2022

NPDES MS4 Community: Granby

Within Zoning, the following elements are critical considerations: parking ratios; parking lots and driveways (stall sizes, travel lanes, landscaping, etc.); dimensions and density; and landscaping.

Parking Ratios

Y/N	Checklist Item	Location in code and any standards	Example Language/Notes (shown in italics)	Change(s) recommended	Proposed schedule to incorporate changes
N	Are parking maximums used in any instances (to prevent too much parking)?		<p>Consider the following:</p> <p>1. Establishing both minimum and maximum parking ratios to provide adequate parking while reducing excess impervious coverage. Parking reductions could be allowed for factors such as: mixed land uses, access to alternative transportation, demographics, and utilization of Transportation Demand Management (TDM) Programs including subsidized mass transit and parking cash out programs. Flexibility is a key component to providing adequate but not excessive parking.</p>	sent to PB for review	
			<p>2. Requiring a Special Permit for an increase in maximum parking allowance. Some onsite parking requirements could be met off-site particularly in redevelopment sites and compact mixed use centers.</p>		
			<p>For useful language on parking, see the MA Smart Parking Model Bylaw at: https://www.mass.gov/files/documents/2017/11/03/Smart%20Parking.pdf</p>		
n	Does zoning require <u>more than 3</u> off street parking spaces per 1,000 sq. ft. of gross floor area for office uses?		<p>For recommended parking requirements per 1,000 sq ft of Gross Floor Space, see table provided in this workbook at Tab 5 - Reference Tables and Figures.</p>		
n	Does zoning require <u>more than 4.5</u> off street parking spaces per 1,000 sq. ft. of gross floor area for shopping centers?				
n	Does zoning vary parking requirement by zone to reflect places where more trips are on foot or by transit?				
n	Does zoning have reduced off-street parking requirements for its downtown zoning district?				
n	Does zoning have lower parking requirements for properties near transit stops?				
n	Does zoning allow reduced parking requirements for properties within walking distance to multiple services?				
n	Does zoning have lower parking requirements for properties in the more densely developed residential districts?				
n	Does zoning allow alternative measures such as custom parking demand calculations, transportation demand management or in-lieu payments to reduce required parking?				
n	Does zoning have provisions allowing for shared parking to reduce parking requirements?		<p>Refer to the Smart Parking Model Bylaw for bylaw language around three strategies for shared parking: opportunities to share parking between competing and non-competing uses on the same site, locating parking off-site on other privately owned lots or public parking facilities, and/or for using a "fee-in-lieu" approach. See:</p>		
n	Are shared parking provisions by right?		<p>https://www.mass.gov/files/documents/2017/11/03/Smart%20Parking.pdf</p>		
n	Does the municipality provide model shared parking arrangements for private use?		<p>See model for shared parking here:</p>		
n	Does zoning require <u>more than 2</u> off-street parking spaces per residential unit?		<p>https://www.gardinermaine.com/sites/g/files/vvhlif611/f/news/appendix_d_sampleparkingagreement_0.pdf</p>		
n	Does zoning require 2 off-street parking spaces per residential unit?				
n	Does zoning require <u>less than 2</u> off-street parking spaces per residential unit?				

n	Does zoning require more than 1 off-street parking space for an accessory dwelling unit?				
n	Does zoning have lower parking requirements for smaller residential units?				

Parking Lots and Driveways

Y/N	Checklist Item	Location in code and any standards	Example Language/Notes (shown in italics)	Change(s) recommended	Proposed schedule to incorporate changes
n	Is requirement for standard parking lot stall consistent with LID purposes?		<i>LID Standard = 9 feet or less by 18 feet or less</i>	sent to PB for review	
n	Is requirement for drive lane width consistent with LID purposes?		<i>LID Standard = 9 feet wide for one lane / 18 feet wide for two lanes</i>	sent to PB for review	
n	For larger parking lots, are there provisions requiring compact car spaces?			sent to PB for review	
	If yes, are at least 30% of parking spaces required to have smaller dimensions for compact cars?				
n	Is there a minimum percentage of a parking lot required to be landscaped?			sent to PB for review	
n	Do landscaping requirements for parking areas <u>allow</u> for vegetated areas with bioretention functions?		If landscaped Islands are located in an area with existing soils classified in the NRCS hydrologic soil groups A/B, such that the existing soils are suitable for infiltration stormwater runoff, the internal landscape areas may/shall be installed at a lower grade than the parking lot pavement, and curbing shall allow drainage from the pavement to enter and percolate through the landscaped areas while simultaneously protecting the landscape materials.	sent to PB for review	
n	Do landscaping requirements for parking areas <u>encourage</u> vegetated areas with bioretention functions?			sent to PB for review	
n	Is the use of pervious surfacing materials <u>allowed</u> for parking stalls, spillover parking areas, shoulders, etc.?		Pervious materials such as porous asphalt or concrete, porous pavers, and reinforced grass blocks may be allowed in lower volume stalls or overflow parking areas. Note that snow storage should not coincide with these areas as plow piles may include sand, which will clog pervious pavement and prevent infiltration.	sent to PB for review	
n	Is the use of pervious surfacing materials <u>encouraged</u> for parking stalls, spillover parking areas, shoulders, etc.?			sent to PB for review	
n	Are pervious materials for single family driveways (porous pavers, paving stones, pervious asphalt or concrete), and/or use of two-track design for residential driveways allowed?			sent to PB for review	
n	Does zoning allow for common or shared driveways?		<i>Example from Hadley – through special permit: The Planning Board may issue a special permit permitting a common driveway (a single curb cut and driveway providing vehicular egress/access to more than one lot) when, in its judgment, such action is in the public interest and not inconsistent with the intent of this Zoning Bylaw, provided:</i>	sent to PB for review	
	If yes, are they allowed by right?				
			<p><i>5.7.1. Said common driveway shall not service more than three residential lots. In the case of commercial/retail and industrial/manufacturing uses in Business and Industrial zoned Districts a common driveway may serve more than three lots, but the total shall be set by the Planning Board in the issuance of their special permit.</i></p> <p><i>5.7.2. Said common driveway shall provide the only vehicular egress/access to the lots being serviced by it, and this shall be so stated in the deeds to the subject lots.</i></p> <p><i>5.7.3. Said common driveway shall not be eligible for maintenance by the Town or for acceptance by Town Meeting as a street, and this also shall be so stated in the deeds to the subject lots.</i></p> <p><i>5.7.4. The grade, length and location of the common driveway shall be of suitable construction, in the opinion of the Planning Board, for the access and turnaround of the number and types of vehicles, including moving vans, ambulances, fire and police, which will be utilizing such driveway.</i></p> <p><i>5.7.5. For common driveways servicing commercial/retail and industrial/manufacturing uses in Business and Industrial zoned Districts, the design and construction standards of said common driveway shall be set by the Planning Board in the issuance of their special permit.</i></p> <p><i>5.7.6. Common driveways servicing residential properties shall comply with all of the following:</i></p> <p><i>5.7.6.1 Shall have a length of no more than 500 feet; and</i></p> <p><i>5.7.6.2. Shall have a width of at least 15 feet; and</i></p> <p><i>5.7.6.3. Shall have passing turnouts providing a total width of at least 20 feet along a distance of at least 25 feet, spaced with no more than 300 feet between turnouts, and with the first such passing turnout being located at the driveway connection to the street; and</i></p> <p><i>5.7.7. All common driveways must:</i></p> <p><i>5.7.7.1. Meet the prior approval of the Highway Division and the Fire Department; and</i></p> <p><i>5.7.7.2. Conform to all other driveway requirements of the Zoning Bylaw.</i></p> <p><i>5.7.8. Where applicable, easements and easement plans must be submitted with the special permit</i></p>		

Dimensions and Density					
Y/N	Checklist Item	Location in code and any standards	Example Language/Notes (shown in italics)	Change(s) recommended	Proposed schedule to incorporate changes
Y	Are there any special districts or flexible design opportunities that enable clustering of buildings and greater protection of open space areas on a site?		<i>Open Space Residential Development (OSRD), Open Space Design (OSD), Conservation Development and Natural Resource Protection Zoning (NRPZ) are the current zoning models for what was previously called cluster or flexible development. These models reverse the typical subdivision planning process by utilizing LID site design strategies for conserving natural hydrologic functions and reducing impervious surfaces for preventing runoff, and integrating green infrastructure as a fundamental design element. Resulting development plans typically retain native vegetation and natural areas, and structure site layout to greatly reduce street infrastructure. It has been noted that the open space set aside should be based on resource values, not by formula such as X% of the development.</i>		
n	Is this type of development allowed by right?		<i>Permit such development as a "by right" form of development, where no special permit is required.</i>		
y	Are the submittal or review requirements for such developments greater than for conventional development?				
n	Are there any other regulations that allow for reductions in dimensional requirements to increase flexibility in building placement?		<i>Allow flexible site design criteria such as reduced setbacks and smaller lot sizes. Reductions in frontages would allow for reduced road length/paved area, perhaps where appropriate such as in open space residential developments, at the outside sideline of curbed streets, and around cul-de-sacs.</i>	sent to PB for review	
y	Is the use of bioretention and other stormwater practices allowed in setback areas?		<i>Explicitly allow bioretention areas, rain gardens, filter strips, swales, and constructed wetlands within required setback areas for front, rear, and side yards based on site-specific conditions such as soils, depth to groundwater table and slope. In a mixed-use district, setbacks should include enough space for a substantial vegetated buffer adjacent to the residential use as screening that can also serve as stormwater green infrastructure.</i>		
Landscaping					
Y/N	Checklist Item	Location in code and any standards	Example Language/Notes (shown in italics)	Change(s) recommended	Proposed schedule to incorporate changes
y	Is the use of bioretention and other stormwater practices allowed within landscaped areas for parking lots (versus requirement for curb and gutter management of stormwater)?		<i>Edging and curbing in parking lots can be notched or perforated to allow stormwater flows into infiltration and bioretention areas. For larger parking lots, parking rows may be separated with planting strips that function to manage stormwater. Shade tree requirements in planting strips should also take into consideration stormwater treatment. Note that shade in parking lots will also help to reduce the "heat island" effect.</i>		
n	Does language on screening and buffers indicate that these areas could be used for stormwater management?		<i>Depending on site-specific conditions such as soils, depth to groundwater table and slope, buffer and landscaped areas may include bioretention areas and other green infrastructure stormwater management facilities.</i>	sent to PB for review	
n	Is the use of bioretention and other stormwater practices explicitly allowed within landscaped areas?		<i>Consider also including design standards for landscaping and screening that encourage the use of green stormwater management infrastructure facilities. In the same way that architectural design standards serve a town, design standards for landscaping can support placemaking within neighborhoods and across a community.</i>	sent to PB for review	
			<i>Important note: Suggested standards on ensuring soil permeability below serve best under standards required for a stormwater management permit/and, but they may also be appropriate under zoning bylaw/ordinance - site plan review for projects that do not trigger stormwater permit requirements. They are included here to underscore the importance of soils in performance of infiltration facilities, but also in ensuring that curve runoff numbers used in calculations remain as accurate as possible post construction.</i>		
y	Is it clear that topsoil removal from the site should not diminish the infiltration characteristics of the site?		<i>Applicants must describe how their project will minimize and limit topsoil removal from the site.</i>		
y	Is it clear that any new soils brought on site should not diminish the infiltration characteristics of the site?				

n	Is there any mention of avoiding compaction of soils by construction vehicles and restoring permeability of soils for infiltration if compacted?		Ensure that all work is planned and executed so as to avoid compaction of topsoil and subsoils, including such best practices as reducing the number of trips required over area of disturbance, laying down soil protective mats for trafficked areas, and avoiding work after rain or snowmelt that soaks soils. For construction equipment, best practices should include using vehicles with low axle loads, reduced tire pressures, and use of flotation tires, doubles, radial tires, and/or large-diameter tires. For areas where such practices are not possible and soils are to be compacted by heavy equipment, subsurface restoration must occur prior to final landscaping activities.	sent to PB for review	
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Development Policies in Zoning Regulations					
Y/N	Checklist Item	Location in code and any standards	Example Language/Notes (<i>shown in italics</i>)	Change(s) recommended	Proposed schedule to incorporate changes
y	Are standards and requirements within the zoning code consistent with the Stormwater Management Bylaw/Ordinance and Regulations?		<i>A best practice for eliminating conflicting standards is to reference the local stormwater bylaw or regulation within needed sections of the zoning code for appropriate drainage standards, thereby keeping all drainage standards and specifications in one section of the local code. All zoning standards for drainage should be consistent with the purpose and standards identified in any local stormwater management bylaw, regulation or policy to provide a seamless process for promoting LID site planning. Conserving the natural hydrologic function of a site, reducing impervious surfaces and preventing runoff are key principles in ensuring post development peak flows do not exceed predevelopment peak flows. Green infrastructure facilities should be explicitly encouraged for treatment, attenuation, and infiltration of stormwater at decentralized locations around a site to capture stormwater at its source.</i>		
n	Does the site plan approval process promote and enable an LID approach?		<i>Critical to effective implementation of green infrastructure facilities is the site inventory and analysis process which should occur before any design work. Existing site conditions may offer opportunities to minimize impacts as well as the costs of stormwater management and can be identified through careful site analysis. Local zoning and permitting can promote a thoughtful process by defining the planning process and providing standards for green infrastructure, especially for smaller projects that do not trigger review for a stormwater management permit.</i>	sent to PB for review	
	What elements count toward meeting open space requirements? (indicate all that apply)		<i>Consider allowing applicants to count <u>green infrastructure</u> stormwater management facilities as open space, especially if their project goes above and beyond requirements for stormwater management.</i>		
y	Bioretention areas				
y	Constructed wetlands				
n	Green roofs			sent to PB for review	
	Other:				