

## **APPENDIX 8: MODEL CONSERVATION DEVELOPMENT ZONING BYLAW**

*Prepared by the Pioneer Valley Planning Commission, with funding provided by the  
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### **1.0 Conservation Development**

#### **1.01 Purposes**

The purposes of this bylaw are to:

- (1) Promote compact development using flexible development standards;
- (2) Protect open space for use as farmland, forestry, recreation, or wildlife habitat;
- (3) Protect the town's rural character, natural resources, environmentally sensitive areas, or scenic views;
- (4) Increase use of sustainable or green energy sources in residential development; and
- (5) Preserve or enhance rural town character, including scenic roads and town centers.

#### **1.02 Definitions**

Conservation Development: A form of residential development allowed in all districts by right with Site Plan Review, whereby the options of common driveways and flexible area and frontage requirements are utilized to create permanent open space and avoid standard Approval Not Required and subdivision development.

Common Driveway: A vehicular access from a road to more than one (1) {but no more than six (6)} residential units, built in accordance with the common driveway standards stated in Section 1.08 of this bylaw.

Existing Resources / Site Analysis Map: A map which identifies, locates, and describes noteworthy features to be designed around through sensitive subdivision layouts, such as vegetation, wetlands, steep slopes, farmland soils, historic or cultural features, threatened or endangered species, unusual geological formations, and scenic views or viewsheds.

Low Impact Development (LID): A land-planning and engineering design approach to managing stormwater runoff which emphasizes use of on-site natural features to protect water quality. Low Impact Developments are designed to reflect natural hydrology, minimize impervious surfaces, treat stormwater in small decentralized structures, preserve portions of the site in natural conditions, and use natural topography for drainageways and storage.

Site Context Map: A map that illustrates the proposed development in connection to its surrounding neighborhood and shows major natural resource areas or features that cross parcel lines.

**1.03 Conservation Development Allowed By Right with Site Plan Review**

Conservation Development in accordance with this bylaw shall be allowed by right with Site Plan Review in all zoning districts. Any person creating {two} or more lots available for residential use, whether or not by subdivision, may apply for Conservation Development under this section. Conservation Development shall be encouraged within the town and shall be the preferred method of development wherever the purposes in Section 1.01 would be served.

**1.04 Criteria for Site Plan Review**

In reviewing applications for Conservation Development, the Planning Board may consider whether the application complies substantially with the following Site Plan Review criteria. The Planning Board may impose reasonable conditions at the expense of the applicant, including performance guarantees, to promote these criteria.

1.041 All dwellings shall, to the greatest extent possible, be located out of view from any road, unless valuable natural resources or farmland located to the rear of the property render building in view of the road more desirable.

1.042 Conservation Development shall create permanently protected conservation land. All land within a Conservation Development not in use for building lots shall be placed in permanent conservation.

1.043 The portion of a parcel placed in conservation shall, to the greatest extent possible, be that which is most valuable or productive as a natural resource, wildlife habitat, farmland, or forestry land.

1.044 Conservation Development shall result in the creation of fewer curb cuts and vehicular access points to a public way than would occur under standard Approval Not Required or Subdivision Development.

1.045 Conservation Development may result in a net increase in density of dwellings on the parcel, up to {ten percent (10%) or one (1) lot} over the density which could reasonably be expected to occur under standard Approval Not Required or Subdivision Development.

1.046 Stormwater runoff generated from land development and land use conversion activities shall not be discharged directly to a wetland, local water body, municipal drainage system, or abutting property, without adequate treatment.

1.047 Conservation Development shall employ Low Impact Development techniques and Renewable Energy techniques to the maximum extent practicable, as described in Sections 1.072 and 1.113 herein.

1.048 In Conservation Development, each structure shall be integrated into the existing landscape on the property, to the extent feasible, so as to minimize its visual impact through use of vegetative and structural screening, landscaping, grading, and placement on or into the surface of the lot.

## **1.05 Application Procedure**

1.051 Any application for Conservation Development shall include all contents and follow all procedures in the Site Plan Review section, Section \_\_\_\_ of the {TOWN NAME} zoning bylaw.

1.052 Any application for Conservation Development shall clearly state the terms by which the development shall meet the criteria listed in Section 1.04 of this zoning bylaw.

1.053 In addition to the Site Plan Review requirements listed in Section \_\_\_\_ of the {TOWN} zoning bylaw, a Site Context Map and Existing Resources / Site Analysis Map shall be submitted to the Planning Board. These maps shall be used by the applicant in the preparation of a preliminary design plan.

1.054 The applicant is very strongly encouraged to request a concept meeting at a regular business meeting of the Planning Board. If one is requested, the Planning Board may invite the Conservation Commission, Board of Health, Historical Commission, and {INSERT THE NAMES OF ANY OTHER APPROPRIATE BOARDS}. The purpose of a concept meeting is to minimize the applicant's costs of engineering and other technical experts, and to commence discussions with the Planning Board at the earliest possible stage in the development. At the meeting, the applicant may outline the proposed development, seek preliminary feedback from the Planning Board and/or its technical experts, and set a timetable for submittal of a formal application.

## **1.06 Flexible Dimensional Standards**

Conservation Developments shall utilize the flexible area and frontage provisions of this bylaw for the purpose of minimizing the destruction of natural resources while maximizing availability of open space, farmland, and rural character.

### **1.061 Flexible Frontage in Conservation Developments**

(1) The frontage of the total parcel from which the lots of Conservation Development are created shall equal or exceed one half the total frontage length otherwise required for the sum of all lots created under standard Subdivision Regulations. (For example, to create a six-lot Conservation Development in a zone where there is a 200 foot frontage requirement, the parcel must have a minimum of 600 foot contiguous frontage along one road.)

(2) Provided that all other requirements of this bylaw are met, there shall be no frontage required for individual lots within Conservation Development, with the exception described in Section 1.061(3) below.

(3) Any building lot which fronts on an existing public road shall have {200} foot frontage. This provision shall not apply to permanent conservation land.

#### 1.062 Flexible Area in Conservation Developments

(1) There is no minimum lot size for individual lots, provided the lot meets Title V standards. The average lot size for all lots created shall be at least {two (2) acres}.

(2) The total number of building lots which can be created from any parcel shall be determined by subtracting the area of all wetlands (as defined by the {TOWN NAME} Conservation Commission) and slopes of greater than fifteen percent (15%) from the total parcel area, and dividing the resulting area by the required average lot size of {two acres}.

(3) All land not used for building lots shall be placed in permanent conservation in accordance with Section 1.10 of this bylaw, but not less than {40%} of the total land area.

(4) To the extent feasible and practical, building lots shall be located out of view of town roads, while all protected open space shall be located along, or in view of, town roads.

#### 1.063 Flexible Setback Requirements

(1) Maximum front setback requirements are {25} feet from a common driveway and {150} feet from a public way.

(2) There are no minimum setback requirements for rear or side yard setbacks.

### 1.07 **Additional Development Standards**

#### 1.071 Stormwater Management

The design and development of Conservation Development shall minimize off-site stormwater runoff, promote on-site infiltration, and minimize the discharge of pollutants to ground and surface water. Natural topography and existing land cover should be maintained and protected to the maximum extent practicable. Conservation Development shall meet the following requirements:

(1) Untreated, direct stormwater discharges to wetlands and surface waters are not allowed;

- (2) Post-development peak discharge rates should not exceed pre-development peak rates;
- (3) Erosion and sediment controls must be implemented to remove eighty percent (80%) of the average annual load of total suspended solids;
- (4) All stormwater treatment systems or Best Management Practices must have operation and maintenance plans to ensure that systems function as designed.

1.072 Low Impact Development

All Conservation Developments shall employ the following Low Impact Development techniques to the maximum extent practicable:

- (1) Vegetated Swales - shallow drainage channels with thick grasses or vegetation that slow runoff, filter it, trap pollutants and promote infiltration into the ground;
- (2) Cisterns and Rain Barrels – water tanks that store rainwater for landscaping and gardens;
- (3) Bioretention Areas or Rain Gardens – bioretention “cells” are shallow depressions filled with sandy soil, topped with mulch and planted with dense vegetation, that collect, treat and infiltrate rainwater;
- (4) Low Impact Roadways – narrow roadways to reduce impervious cover, which employ open-section layouts without curbs and gutters, flanked by grass filter strips and swales for stormwater infiltration;
- (5) Permeable Paving – paving surfaces used for driveways, parking, walkways and patios that allow rainwater to percolate into the ground, including porous asphalt or concrete, paving stones and manufactured “grass pavers” made of concrete or plastic ;
- (6) Green Roofs – vegetated roof systems that capture and store rainfall in a lightweight engineered soil medium, where water is taken up by plants and returned to the atmosphere.

## 1.08 Common Driveways

1.081 Common Driveways shall be allowed with Site Plan Review in accordance with the provisions of this section. Where applicable, under the Subdivision Regulations, Common Driveways may be allowed in place of a subdivision road.

1.082 No more than {six (6) lots} shall be served by a Common Driveway. The driveway shall lie entirely within the lots being served.

1.083 Frontage along the length of any Common Driveway shall in no way be used to satisfy frontage requirements as specified in the Zoning Bylaw; furthermore, no Common Driveway shall be accepted as a public road; nor shall the town under any circumstances be held liable for construction, reconstruction, maintenance, or snow removal on any Common Driveway, unless by contract duly entered into by the town and all landowners served by the Common Driveway.

1.084 The landowners of all residences served by a Common Driveway shall be granted a Right-of-Way for the use of the Common Driveway. Such Right-of-Way shall be recorded in the {COUNTY NAME} County Registry of Deeds prior to the recording and the deeding out of any of the lots within the Conservation Development, together with a statement of covenants as follows:

- (1) The Common Driveway shall at no time be used to satisfy frontage requirements under the zoning bylaw;
- (2) The Common Driveway shall at no time become the responsibility or liability of the town;
- (3) Each landowner served by the Common Driveway shall be liable and responsible for the repair and maintenance of any portion of the Common Driveway to which they have the exclusive Right-of-Way (such as a spur serving solely one parcel); and
- (4) Each landowner served by the Common Driveway shall be responsible and liable for the repair and maintenance of all portions of the Common Driveway to which more than one landowner holds a Right-of-Way.

1.085 The applicant shall prepare a Maintenance and Repair Agreement that will provide provisions for services, maintenance, and enforcement for the common driveway and shall be entered into by the affected property owners. Such Agreement shall be recorded in the {COUNTY NAME} County Registry of Deeds prior to the recording and the deeding out of any of the lots within the Conservation

Development

## 1.086 Common Driveway Standards

- (1) A common driveway shall have a minimum roadway width of {sixteen (16) feet and a maximum of twenty (20) feet}, in addition to an easement of sufficient width to assure proper drainage and maintenance.
- (2) A common driveway shall not be longer than {six hundred (600) feet} in length.
- (3) The slope or grade of a Common Driveway shall in no place exceed {eight percent (8%)} if unpaved or {twelve percent (12%)} if paved.
- (4) The common drive shall intersect a public way at an angle of not less than eighty (80) degrees.
- (5) The minimum curvature of a common driveway shall be sufficient for a fire engine to negotiate, generally no less than a radius of fifty (50) feet.
- (6) There shall be a turnaround area at the end of the Common Driveway; such turnaround shall accommodate safe and convenient turning by fire trucks and other emergency vehicles. Design of the turnaround area shall also be approved by the town's Fire Department.
- (7) Other standards may be set based on site configurations, including requirements for drainage.
- (8) The common driveway shall be constructed of a minimum 15" gravel base, with a surface layer consisting of three successive layers of ¾"-size crushed traprock stone, ½"-size crushed traprock stone, and ¼"-size crushed traprock stone, with a crown sufficient for drainage.
- (9) Drainage shall be adequate to dispose of surface runoff. Low Impact Development standards for stormwater management are preferred, but culverts shall be installed if deemed necessary by the Planning Board.
- (8) These standards may be waived when, in the opinion of the Planning Board, such action is in the public interest and not inconsistent with the purpose and intent of the {TOWN} Zoning Bylaw.

## 1.09 Utility Requirements

### 1.091 On-site Sewage Disposal

The following standards shall apply to developments requiring on-site sewage disposal:

(1) The applicant shall submit a septic system design prepared by a certified engineer and approved by the Board of Health and a plan illustrating the location of water supply wells with the application.

(2) All Conservation Developments must meet the minimum state Environmental Code (Title V) requirements for minimum setbacks between private water supply wells and septic tanks or soil absorption systems (310 CMR 15.211).

(3) All Conservation Developments must meet the minimum state Environmental Code (Title V) requirements for nitrogen loading limitations (310 CMR 15.214-15.217). For Conservation Developments with individual lot sizes less than 40,000 square feet, applicants must meet the following standards:

(a) Applicants must designate, on a plan, specific areas of common open space as "nitrogen credit land", based on the following equation:

$(40,000 \text{ square feet} \times \text{number of Conservation Development lots}) - (\text{total square feet in proposed Conservation Development lots}) = \text{square feet of required nitrogen credit land in common conservation lands}$

(b) Nitrogen credit land must meet DEP qualifications contained in "Guidelines for Title 5 Aggregation of Flows and Nitrogen Loading 310CMR15.216"

(c) All designated nitrogen credit land must be permanently restricted from further development under a "Grant of Title 5 Nitrogen Loading Restriction and Easement on Nitrogen Credit Land".

After approval of the Conservation Development Plan, applicants must apply to the Board of Health and the Mass. Department of Environmental Protection (DEP) for an aggregate determination of nitrogen loading under 310 CMR 15.216.

(d) Septic tanks must be installed on individually-owned lots. Nitrogen Credit Land must be at least 100 feet from all private wells.

#### 1.092 Water Supply

In order to meet state Title V requirements for separation distances between drinking water wells and septic systems, private drinking water supply wells may be located in the common open space for a Conservation Development, provided that the provisions of Section 1.12 for a homeowners' association are met.



## 1.10 Conservation Land

### 1.101 Conservation Land Requirements

- 1) A minimum of {forty percent (40%) } of the total development parcel must be permanently protected as conservation land. At least seventy percent (70%) of the conservation land shall be retained in contiguous areas, unless approved by the Planning Board.
- 2) Watercourses, lakes, ponds, wetlands, floodplains, and steep slopes over twenty-five percent (25%) may be included in conservation land calculations not to exceed twenty-five percent (25%) of the total protected conservation lands.
- 3) The Planning Board may permit up to three percent (3%) of the conservation land to be paved or built upon for structures accessory to the dedicated use of open space (i.e. pedestrian walks, bicycle paths, playgrounds, farm-related structures).
- 4) All recreational facilities, common areas, and conservation land shall be reasonably accessible to all residents of the development.

### 1.102 Land Protection Methods for Conservation Land

- 1) All land not devoted to buildings, lots, roads and other development shall be permanently protected as conservation land for recreation, open space, forestry or agricultural uses which preserve the land in its natural condition.
- 2) The final owner of the conservation land and the conservation restriction are strongly recommended to develop a conservation management plan that will address proper management and future maintenance of this natural resource.
- 3) Further subdivision of conservation land, except for easements for underground utilities or drinking water supply wells, shall be prohibited.
- 4) If the land is not donated to the Town or conservation organization duly recognized as such pursuant to M.G.L. c. 180 and IRC Section 170(h) for conservation purposes, then a permanent conservation restriction is required in accordance with the provisions of M.G.L. c.184 §§ 31-33, as amended. The conservation restriction must be held by the Town or a non-profit organization dedicated to conserving open space.

### 1.103 Maintenance of Conservation Land

- 1) Prior to final approval of the Conservation Development, all required covenants, grants of easements, or conveyance for the conservation land must be submitted to the Planning Board and Town Counsel for review and approval prior to the recording and the deeding out of any of the lots within the Conservation Development.
  
- 2) Where applicable, if any portion of the conservation land is conveyed to a non-profit homeowners association or trust of the homeowners of the dwelling units in the Conservation Development, then the following shall be required. In order to ensure that the grantee will properly maintain the land deeded to it under this section, the applicant shall cause to be recorded in the appropriate Registry of Deeds, a Declaration of Covenants and Restrictions which shall, at a minimum, provide for:
  - a) Mandatory membership in an established homeowners association or trust, as a requirement of ownership of any residential unit or lot in the Conservation Development;
  
  - b) Provisions for maintenance assessments of all owners of residential units or lots in order to ensure that the conservation land is maintained in a condition suitable for the approved uses; failure to pay such assessment shall create an automatic lien upon written notice to any property owner failing to pay the assessment on the property assessed, enforceable by the association or trust;
  
  - c) Provision which, so far as possible under the existing law, will ensure that the restrictions placed on the use of the conservation land will not terminate by operation of law. The developer of the Conservation Development shall be responsible for the maintenance of the common land and any other facilities to be held in common until such time as the grantee is capable of assuming said responsibility.
  
- 3) Prior to the issuance of a building permit for an approved Conservation Development, proposed conservation land shall be clearly marked, and all efforts shall be taken by the developer to prohibit any disturbance of the delineated conservation lands during the construction process.

### 1.11 **Additional Considerations**

1.111 Trails. Where there is an existing local or regional trail network on land adjacent to a proposed Conservation Development, the applicant may be required to preserve or enhance the existing trail network with trail corridors through the site.

1.112 Enhancing Conservation Land Connectivity

Where there is existing conservation land adjacent to a proposed Conservation Development, the applicant may be required to locate the development's conservation land so that it expands or enhances the connectivity of such lands, where feasible.

1.113 Renewable Energy

Conservation Developments may employ the following Renewable Energy techniques to the maximum extent practicable:

- (1) Streets, roads and common driveways shall be laid out primarily on an east-west axis to maximize solar gain;
- (2) Homes and buildings shall be oriented to maximize passive solar gain, by having the longest side of the structure facing south, while maximizing windows facing south;
- (3) Solar access should be maintained for all buildings. New structures shall not cast shadows that reduce solar access for other structures;
- (4) Homes and buildings should use renewable energy sources as feasible.

**1.12 Homeowners' Association**

1.121 A qualified homeowners' association shall be created prior to the conveyance of any lot in Conservation Development for which such an association is required.

1.122 The association shall be responsible for the permanent maintenance of all commonly-owned amenities, (e.g. common conservation lands, stormwater facilities, recreational facilities, utility easements), except where such responsibility is assumed by another owner of the amenities.

1.123 A homeowners association agreement or covenant shall be submitted with the Conservation Development application guaranteeing continuing maintenance of and the development of a capital expense fund for such commonly-owned amenities, and assessing each lot a share of maintenance expenses. The articles of formation of the qualified homeowners' association shall be prepared by a licensed attorney. Such agreement shall be subject to the review and approval of Town Counsel and the Planning Board, and shall be recorded in the {COUNTY NAME} County Registry of Deeds. The Planning Board may commission further legal review of any documents submitted, the cost of which shall be borne by the applicant.

1.124 Such agreements or covenants shall provide that in the event that the homeowners association fails to maintain the commonly-owned amenities

reasonable order and condition, in accordance with the agreements or covenants, the Town of {TOWN NAME} may, after notice to the homeowners association enter upon such land and maintain it in order to preserve the taxable values of the properties within the development and to prevent the commonly-owned amenities from becoming a public nuisance. The costs of such maintenance by the Town of {TOWN NAME} shall be assessing each lot a share of maintenance expenses within the Conservation Development.

1.124 Additional details regarding the creation and formation of the homeowners association can be found in the {TOWN NAME} Planning Board Rules and Regulations.

### **1.13 Conflict with Other Laws**

The provisions of this bylaw shall be considered supplemental of existing zoning bylaws. To the extent that a conflict exists between this bylaw and others, the more restrictive bylaw or provision thereof shall apply.

### **1.14 Severability**

If any provision of this bylaw is held invalid by a court of competent jurisdiction, the remainder of the bylaw shall not be affected thereby. The invalidity in whole or in part of any section or sections of this bylaw shall not affect the validity of the remainder of the town's bylaws.