



Town of Henrietta

Rural Development Design Guidelines

***Applicable to the Rural Residential (RR)
District in the Town of Henrietta***



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Introduction

The purpose of requiring site analysis for the Rural Residential (RR) zoning district is to maintain the rural character of this area and to minimize the impacts of new development on the site *and* the larger land area. The goal of this process is to achieve functional, attractive development that is an asset to the community. Maintaining flexibility for landowners is a critical element of this process.



The scope and content of the site analysis or preliminary design shall be discussed during a pre-application meeting with the town staff and shall be presented by the subdivider during the first review meeting with the Planning Board.

The site analysis process involves the identification and evaluation of the site's major natural, cultural and built features. Unfortunately, all of our resources can not always be protected. This site analysis process will help the landowner gain a deeper understanding of how proposed changes to the site effect the landscape locally (at the site) and regionally. This understanding forms the basis for decisions, which in the end will involve a cautious balancing act to obtain the minimal impact to the landscape and community character while allowing the landowner flexibility and success.

Working with town staff and Planning Board is a critical part of the process. The applicant should meet with town staff and Planning Board early in the process to discuss their goals and needs for the project. Continued communication throughout the process will help to ensure a successful project.

Components of Site Analysis

The site analysis shall consist of written or graphic analysis of: site orientation, site context, soils, agricultural lands, wetlands, topography, existing vegetation, existing structures, existing road networks and utilities, unique rural resources (pastures, forest land, etc.), visual features, historic features, environmentally sensitive areas or unique natural areas as defined by town, state and federal agencies (if any), and past and present uses of the site.

The site analysis plan characteristics are in addition to the requirements of sections 245-5 (Subdivision of Residential Land) and 245-6 (Preliminary Plats) in the Town of Henrietta Chapter 245, *Subdivision of Land*. Some of the materials useful to the site analysis may be available through the Town of Henrietta to assist subdividers with these requirements.

General Site Design Guidelines

Below are several general guidelines for site design that are considered to be integral to the design process. These guidelines will help town staff and the Planning Board to evaluate applications and make decisions during the review process. Applicants should make every effort to incorporate the following guidelines into the site planning process, recognizing that it is not possible to protect all resources, and compromise is a necessity.

- ⇒ **Protect farmlands, farmsteads and other agricultural features as an integral component of the rural character of the town.** *Avoid locating new development near existing farms and farmlands. Buffer new development from existing farms and farmlands. Avoid fragmentation of core agricultural areas.*
- ⇒ **Protect large tracts of contiguous open space such as, woodlands, meadows, open fields, and stream corridors.** *Locate new homes at the edges of fields, wooded areas, or other types of buffers and do not locate them in the middle of a field or open area.*
- ⇒ **Design with nature during site layout to minimize disturbance of natural features of the landscape, such as streams, wetlands and woodlands.** *Integrate these natural features such as streams and hillsides into site design. Design with natural drainage ways, contours and landforms. Maintain existing mature trees and vegetation. Avoid siting homes on hilltops.*
- ⇒ **Design new roadways to take into account the scale, proportions and context of the surrounding area.** *Minimize the total number of curb cuts on existing roads. Use shared driveways and parking.*
- ⇒ **Protect the visual quality of landscapes and viewsheds by considering the visual impacts of new development.** *Use tools to mitigate the visual impact (such as landscape, buffering, placement of the home on the site, etc.).*
- ⇒ **Protect scenic viewsheds along the roadside.** *Use site design to appropriately set back and “tuck development into” the landscape (woodlands or hedgerows, for example) or use landscape plantings to shield the roadway from development. Minimize on-site clearing of vegetation.*

Site Analysis Process

To begin, create a base map using an existing map, USGS quadrangle, aerial photo or any combination of these. If an aerial photo is used, the scale shall be no less than 1” - 400’. This base map will be used to identify areas for conservation and development as outlined in the following four-step process.

Site Analysis Process: An Overview

Step 1: Identify Natural and Cultural Resources

Step 2: Identify Potential Conservation and Development Areas

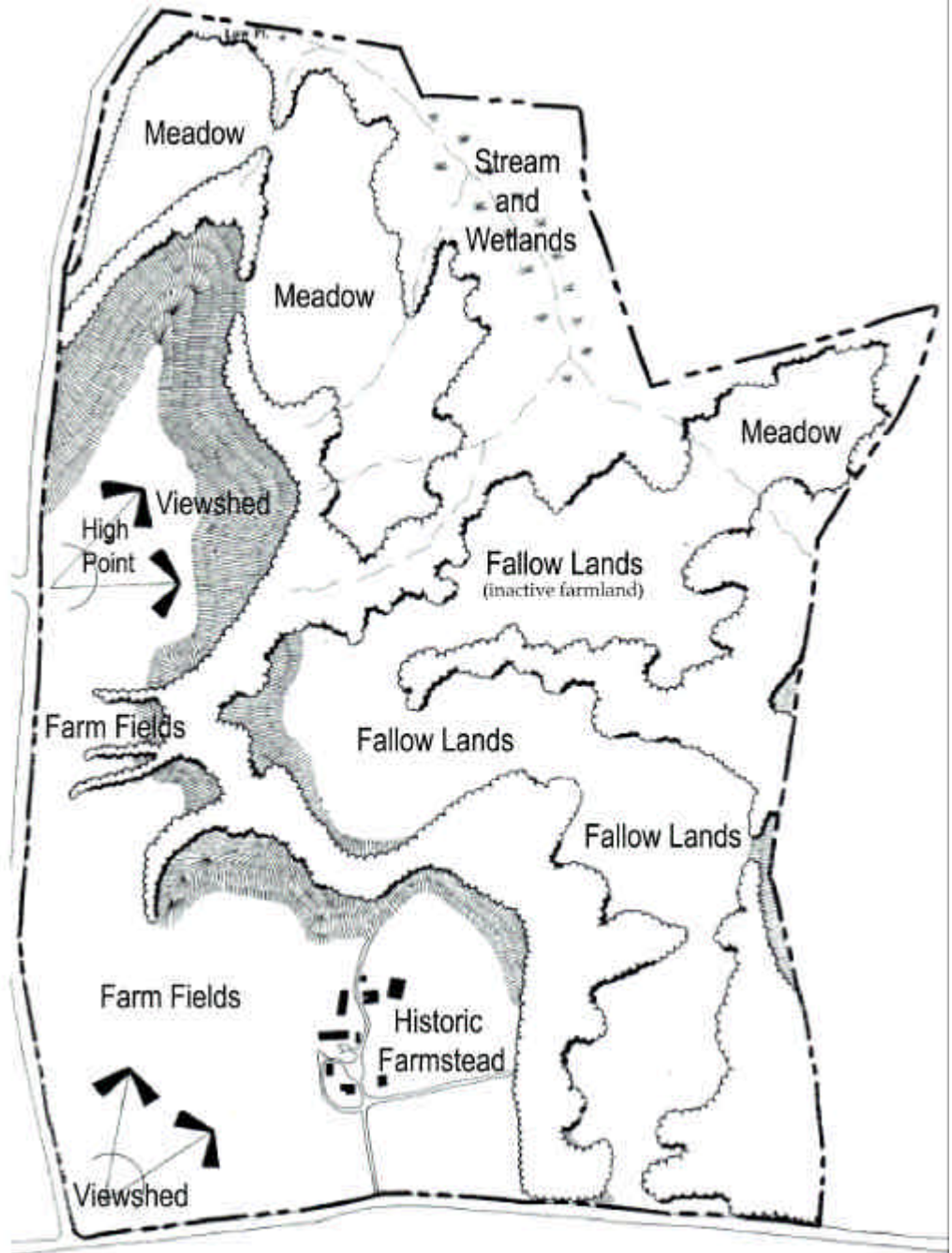
Step 3: Delimit Houses, Streets, Access and Trails

Step 4: Identify Lot Lines and Conservation Sites

Step 1: Identify Natural and Cultural Resources.

The following natural and cultural resources should be identified on your base map or on an overlay:

1. **SOILS:** Capability Class I and II agricultural soils and lands and soils unsuitable for construction or on-site sewage disposal.
2. **LANDSCAPE FEATURES:** Large isolated trees (greater than 15" diameter at breast height), rock outcrops, unusual glacial formations, surface water, flood courses, historic sites and other such irreplaceable natural assets.
3. **VEGETATIVE COVER:** Vegetative cover types, such as but not limited to wooded areas, fields, hedgerows, or wetland areas, shall be identified by the applicant and shall be considered as potential conservation areas by the Planning Board. Streams and wetlands shall also be provided a vegetative buffer as determined by the Planning Board.
4. **VIEWSHEDS:** The location and extent of views into the property from adjacent public roads and public areas, including parks, forests or state property.
5. **SLOPES:** A topographic map with 10 foot intervals (minimum)

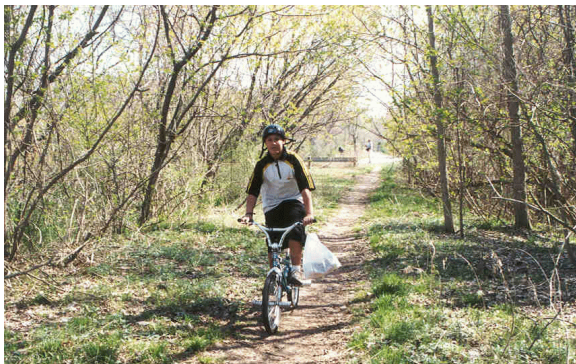


Above: Major resources on this site as visible in this drawing include: a stream and wetlands across the northern portion, steep sloping hillsides (with significant viewsheds) in the western portion, large clusters of woodlands throughout the site, and an historic farmstead with associated roads and farm fields.

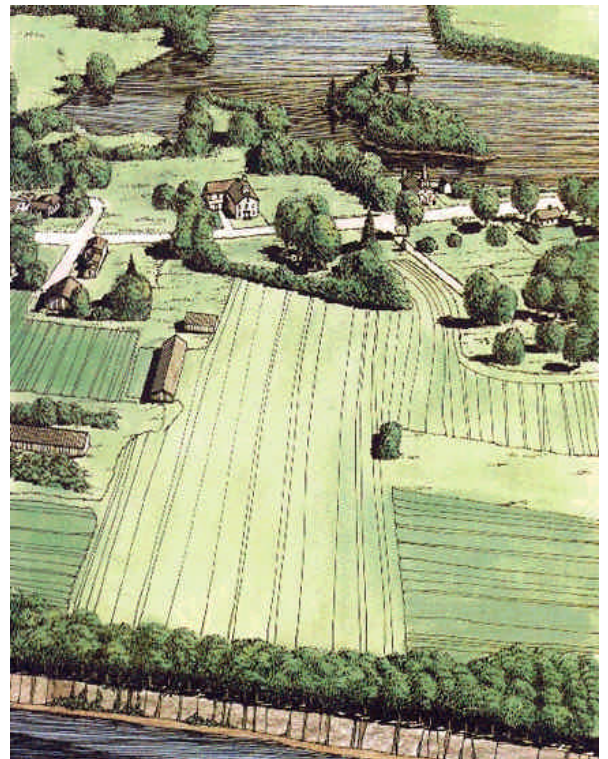
shall be provided. Generally, slopes up to 7% are optimal for development. Slopes between 8 and 14% are less optimal, but may be developed if needed and approved by the Planning Board. Slopes greater than 15% are to be avoided since the potential for erosion problems is great.

6. **CULTURAL/AGRICULTURAL HERITAGE:** Significant farm buildings and structures, active and fallow farm fields.
7. **TRAILS:** Any existing or proposed trails (bicycle, pedestrian, equestrian, etc.) and potential connections to regional trail systems.
8. **EXISTING CONSTRUCTED FEATURES:** All existing infrastructure (including, but not limited to roads, farm roads, driveways, storm and sanitary sewers, drainage areas, etc.) and buildings.
9. **EASEMENTS:** Any easements or encumbrances of property should be marked on the map.

As mentioned previously, preservation of all of the important natural and cultural resources on the site is not always feasible. Evaluation of the open space resources identified above for priorities is an important step in this process. Key landscape features that are integral to the site and the larger region, such as water features (streams, lakes, marshes), farm fields, and rural buildings should be prioritized. Consideration of visual quality (preservation of larger landscapes, viewsheds, etc.) and maintenance of rural character should be at the forefront of these decisions.



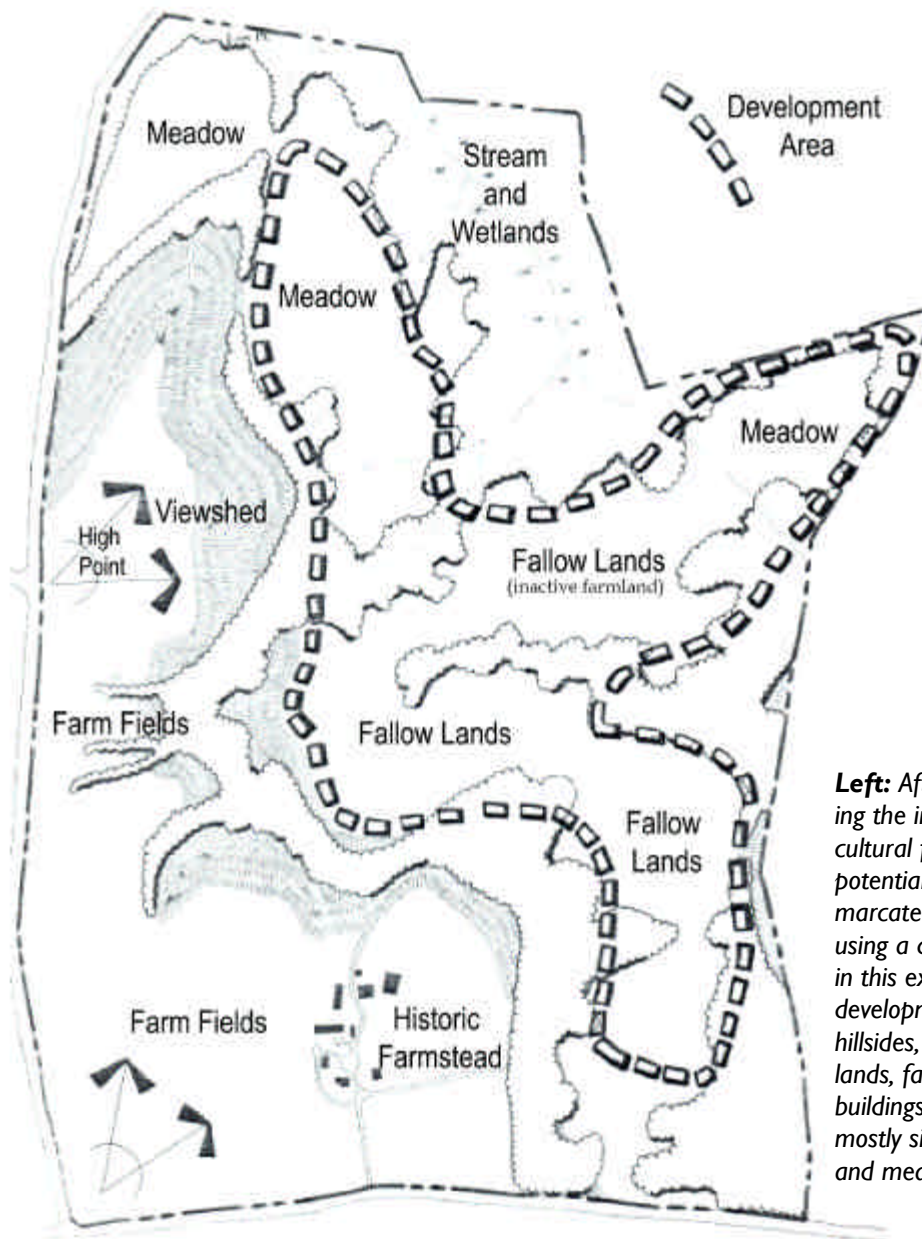
Above: Incorporating trail connections within the site, as well as connections to regional trail systems, provides an important amenity for residents.



Right: From this drawing, visible resource for protection include a tree-lined river corridor, active farm-lands, farm buildings and hedgerows, as well as existing residential homes along the roadway. Views of open farm lands and the river corridor from the roadway contribute greatly to the character of this place.

Step 2: Identify Potential Conservation and Development Areas

After identifying the natural and cultural features that are most unique and significant to the site including unbuildable areas (wetlands and surface waters) (“potential conservation areas”), The remaining part of the proposed development site shall be the “potential development area (s)” (excluding any regulated wetland buffers). These areas shall be identified for review and pre-application approval by town staff at the initial pre-application meeting. The Planning Board shall have final approval of proposed potential development areas. Clearly mark on your base map or on an overlay the **potential conservation and development area(s)**.



Left: After identifying and prioritizing the important natural and cultural features of the site, the potential development area is demarcated. (here it is demarcated using a dashed hollow line). Notice in this example that the potential development area avoids the steep hillsides, the river corridor, wetlands, farmlands and farmland buildings. The development area is mostly situated along fallow lands and meadows.

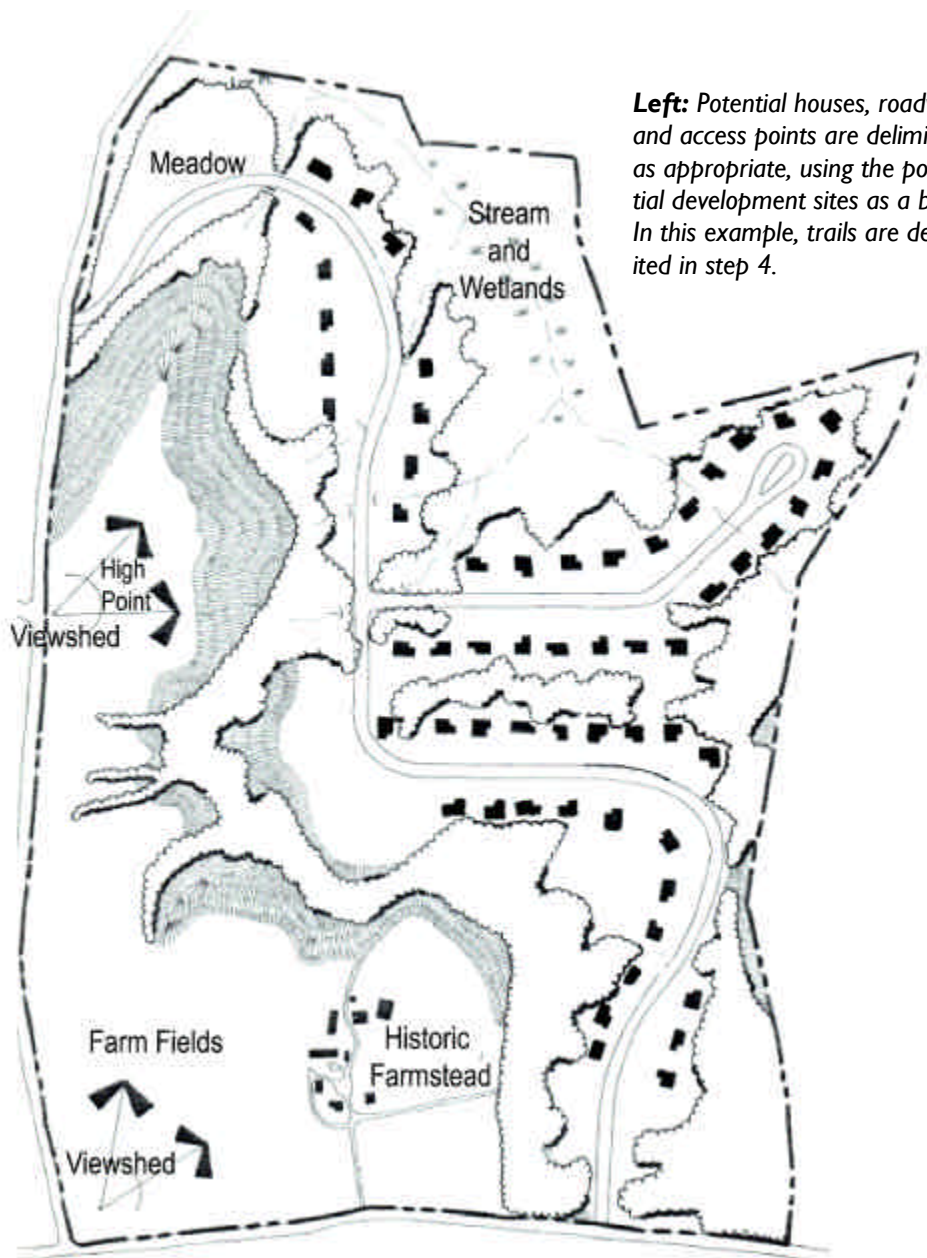
Step 3: Delimit Houses, Streets, Access and Trails

Once the development sites are identified, infrastructure such as streets, access points and trails should be identified.

STREETS: All streets shall be designed to minimize impacts upon conservation areas and open space. The use of cul-de-sacs is discouraged and shall only be incorporated into the design where there are no other options for connection to another street at the time of the design, or in the future. The use of shared roadways and driveways, as well as the scale of the street relative to the surrounding context should be considered.

ACCESS: Any road providing ingress or egress to the **subdivision** shall be located in a manner so as to create fully functioning four-way intersections with other subdivision entrances/exits where feasible. Roadside vegetation shall only be cleared to the minimum amount necessary to provide adequate sight distance.

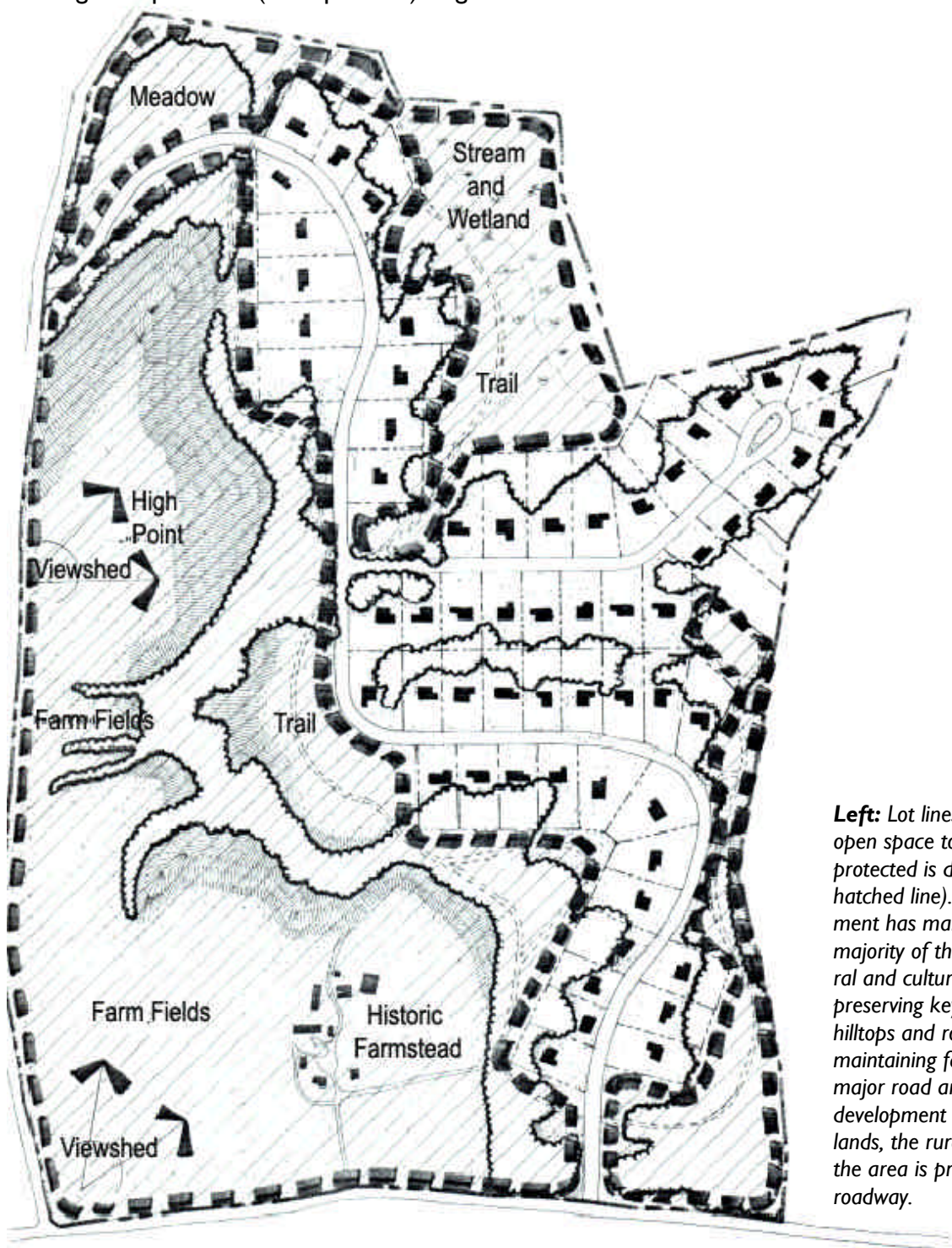
**TRAILS/
PATHWAYS:** If a trail system is included in the plan, it shall link internal neighborhood trails to external trail systems and to public open space areas. The proposed site shall not cause any existing trail or pathway to be disconnected.



Left: Potential houses, roadways and access points are delimited as appropriate, using the potential development sites as a base. In this example, trails are delimited in step 4.

Step 4: Identify Lot Lines and Open Space Areas

After identifying locations for houses, streets, access areas and trails, the lot lines (or building envelopes), showing approximate dimensions, shall be drawn to show the boundaries of each house lot. The lots shall show the required setbacks. The conservation area(s) should also be clearly identified on the map. On the following pages, some examples of creative solutions for residential design are provided (examples 1-5) as guidance.



Left: Lot lines are drawn and open space to be permanently protected is demarcated (black hatched line). This development has managed to avoid a majority of the significant natural and cultural features while preserving key viewsheds from hilltops and roadways. By maintaining farmland along the major road and tucking the development into the woodlands, the rural character of the area is preserved from the roadway.

Additional Considerations/Requirements

- I. The applicant shall ensure that scenic views are preserved during the physical structure design phase of the project by incorporating year-round vegetative buffers, consisting of natural topographical features where applicable, and/or by the use of color and material on the external portions of the buildings. It is encouraged that a combination of these tools be used to preserve views and buffer new development. The Planning Board may require any of these tools in any combination to protect and preserve the views that contribute to the rural character of the area.

- II. A description of a generalized landscaping plan that includes street trees, vegetative buffers and other plantings as deemed necessary by the Planning Board.

Planning Board

The Planning Board may vary street location, lot shapes and dimensions, yards, and setbacks for the purpose of encouraging and promoting flexibility, economy, and environmental soundness in layout and design, provided that the lots' areas and dimensions, yards, and setbacks within the subdivision conform to the minimum requirements of the zoning ordinance for the Rural Residential District and provided that such standards shall be appropriate to the type of development permitted.

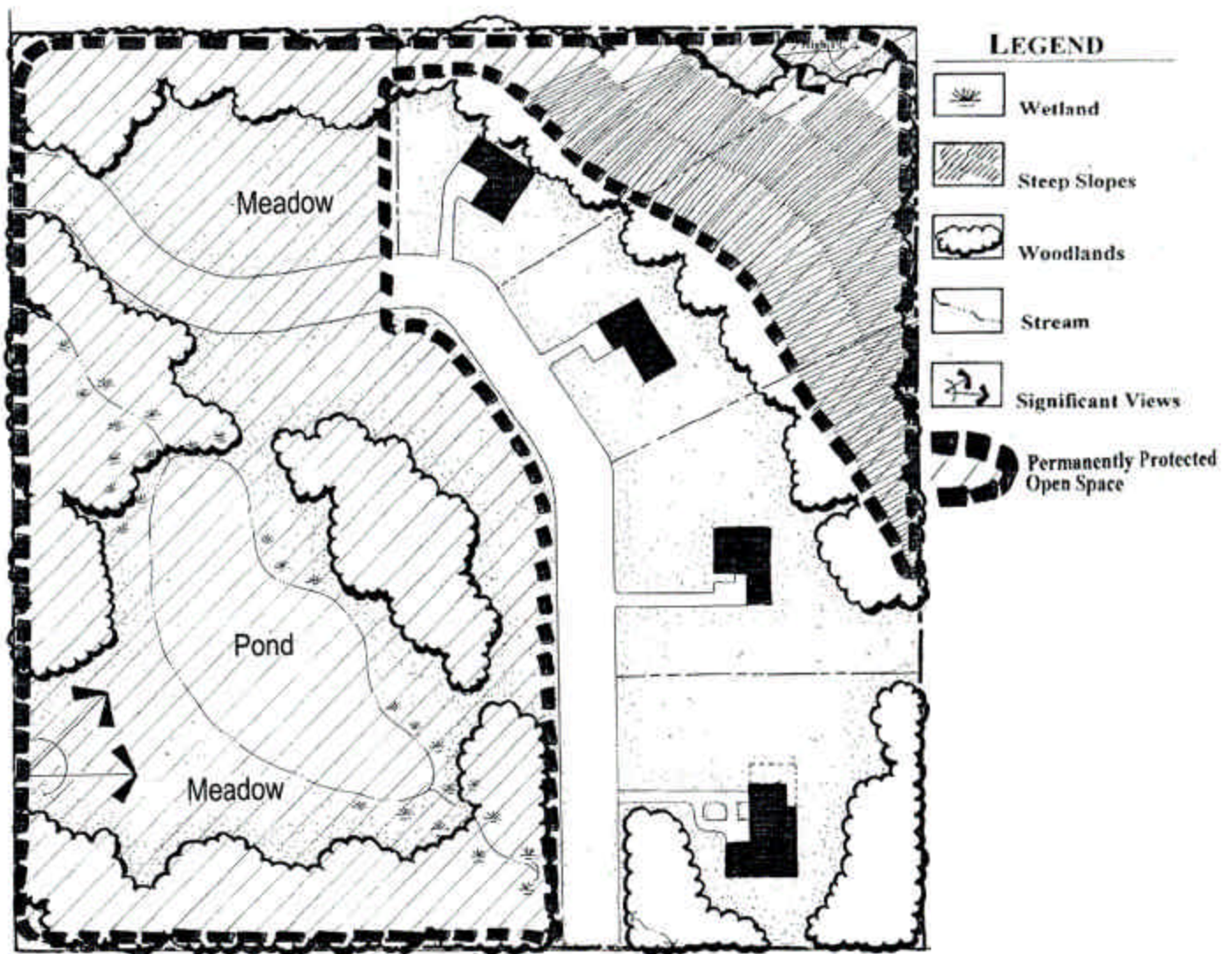
The Planning Board shall have the right to prohibit or require modification to lots which are shaped or configured in such a manner as to conflict with the use of the land for the intended purpose.

The Planning Board may, in reviewing a proposed land development or subdivision, require modification to the proposed lot layout as it deems necessary to achieve the purposes of the Rural Residential zoning regulations and the Town's Comprehensive Plan.

The Planning Board may approve designated conservation/open space lands as meeting the percentage requirements for developers to utilize the open space incentive option.

Site Design Examples

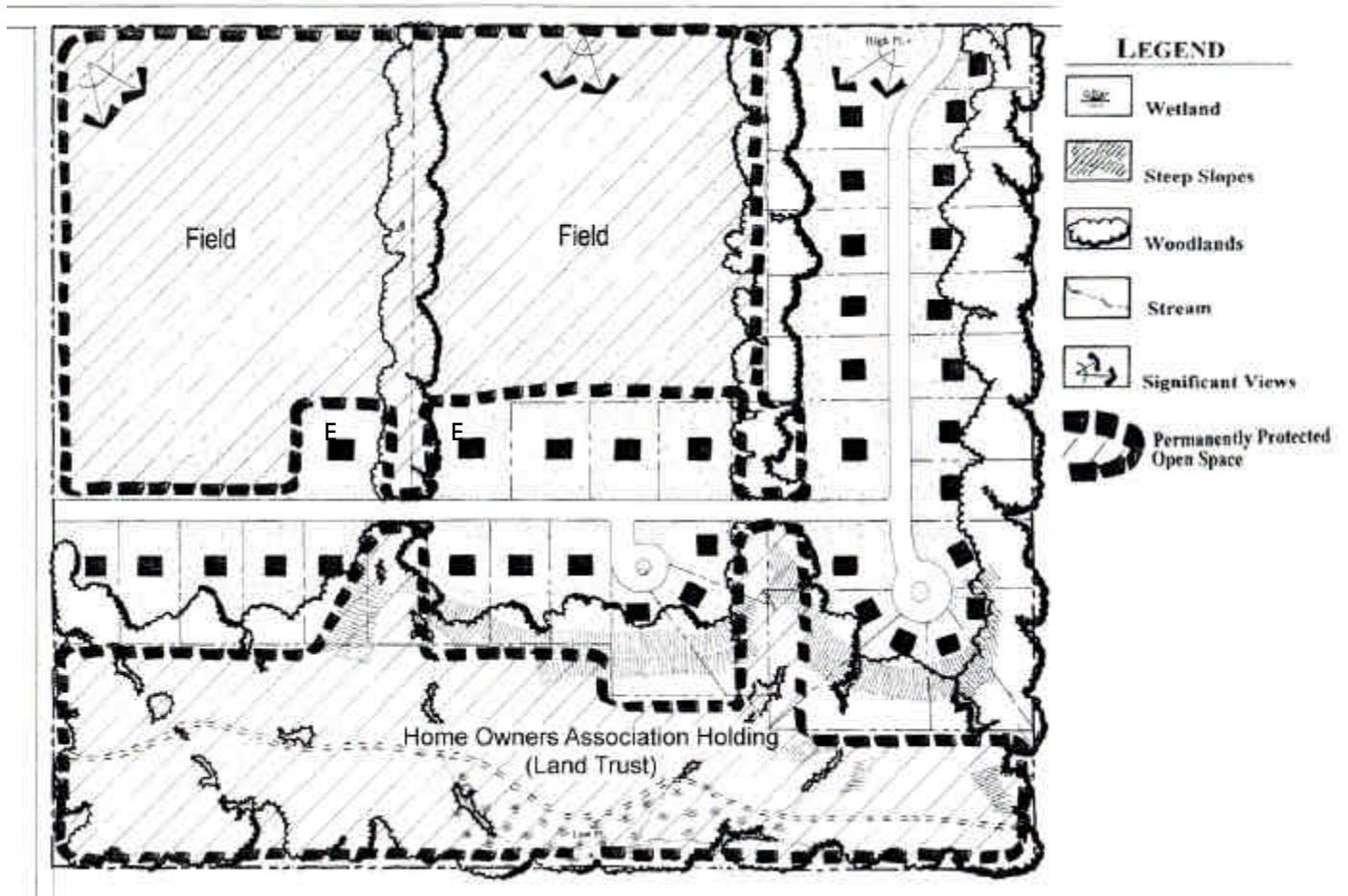
The following are examples of site design that illustrate how resources are evaluated to identify areas for resource protection on the site. In these examples, the predominant character of the site is identified and preserved through creative design solutions. For example, the character of a rural roadway is preserved by protecting agricultural lands and buildings, tucking homes into existing woodlands and the use of vegetative buffers between roadways and residential development. These are illustrative examples only for use as a reference to help inform projects and are not necessarily based upon the actual dimensional requirements of the Rural Residential District.



Example I: Conservation Subdivision Design

This design protects the most significant visual and natural resources on the site -- the meadow, woodlots, pond, and wetlands in the southwest corner of the site. The houses are tucked into the rear of the parcel and are hardly visible from the existing roads. Curb cuts onto the existing roads are minimized and the road is constructed to the new road standard for low volume local roads.

The southernmost lot (bottom) retains ownership of almost all of the open land created by this subdivision. A conservation easement is utilized to ensure that these lands (including the meadows, pond, and wetlands) will remain permanently undeveloped. The rear portions of the other three lots, which contain steep slopes, are also placed under conservation easement to ensure that the slopes remain undisturbed.



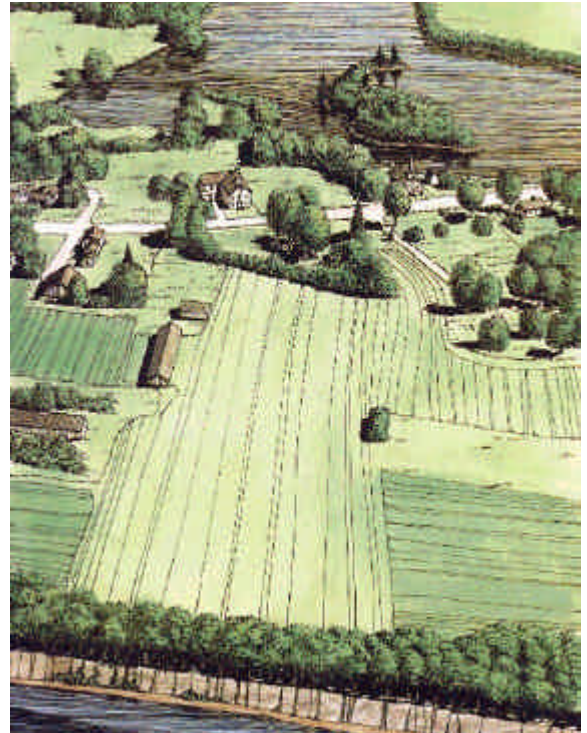
Example 2: Conservation Subdivision Design

This design conserves the most significant resources on the site. The two largest fields, and the hedgerows which separate them, remain undeveloped. The protection of these foreground features ensure that much of the rural character of the area remains while development occurs. The wooded wetland at the rear of the parcel is also conserved.

In this example, the owners of the two estate lots (E) each retain ownership of the field adjacent to their property and use the fields for their horses. Conservation easements ensure that these fields will remain undeveloped in the future. Ownership of the rear section of the original parcel could be transferred to a home owners associations or local land trust which uses this area to create a connection to a larger trail network in this portion of the town.

Example 3: Conventional vs. Conservation Subdivision Design

This sequence of images shows an existing site (top), and two different approaches for a subdivision on the bottom. The bottom left shows a conventional development approach, with a road and large lots traversing the farm fields. The bottom right image shows a conservation subdivision approach where the homes are clustered together and tucked into the woodlands along the existing road.



Right: The existing landscape. Major resources on this site as visible in this drawing include: a large stream, farm fields, farm buildings, hedgerows and tree lines along the river.



Above left: Same area after conventional development. Above right: Same area with appropriately scaled and sited development. Note how the farm field views were conserved and the tree lines and stream corridor were protected. This contributes to the overall protection and enhancement of the parcel's rural character and natural resources.

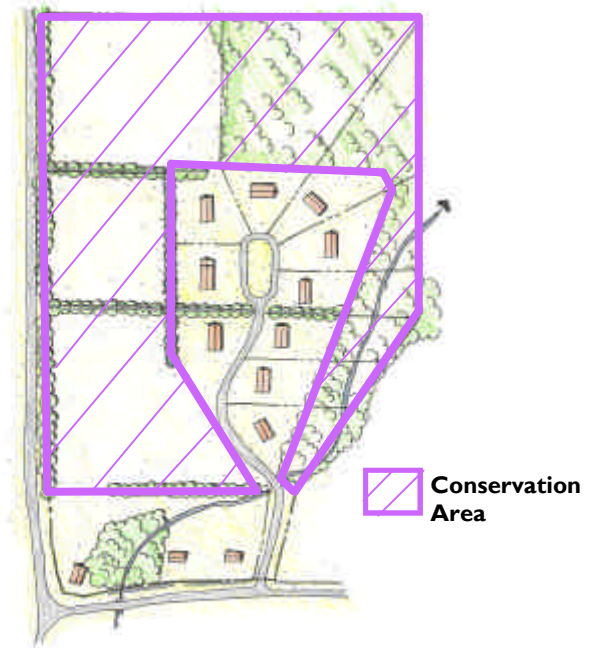
Illustrations in Example 3: © Copyright 1995-1996 Center for Rural Massachusetts, used with permission Department of Landscape Architecture and Regional Planning, University of Massachusetts, Amherst

Example 4: Conservation Design With Dedicated Open Space Retained in Private Ownership

This sequence of images shows existing resources on a site (top) and a conservation design approach (bottom left and right) in which homes are clustered together and surrounded by permanently protected open space. In this example, each individual parcel maintains ownership and access to the conservation area associated with the parcel. The land in the conservation area is permanently protected through a conservation easement.



Above: The existing site. Natural features on the site include wet woods (top right), a vegetated stream corridor, and gentle slopes as visible by the contour lines. Existing hedgerows and farm fields about a busy roadway.



Above left: The existing site showing the development area. Views from both roadways are preserved and the hedgerows are maintained within the farm fields and also to buffer the noise from the busy roadway on the left. The hedgerow was expanded to provide a buffer between the homes and the farm fields. *Above right:* The existing site showing the development and the conservation areas. The conservation area (hatched lines) is protected through private conservation easements and the individual parcels retain ownership and access to the associated conservation area.

Example 5: Example of a small rural residential “hamlet” with open space defining the site.

In this example, the significant rural features of the site include ponds, woodlands, wetlands, farmsteads and farm fields. Residential developments is tucked into the existing woodlands with a buffer between the homes and the main roadway. Many of the lots share a common open space in the center of the development and are surrounded by agricultural lands. Hedgerows and woodlands buffer the residential lots from the farmland parcels. Trail connections are provided between the residences and the recreational areas such as ponds and parks.

This development scheme allows for protection of the rural character of this area. Farmsteads and farm fields along the existing country road are preserved and adequate buffers between the roadway and the residential areas help to maintain the existing viewshed of the roadway. Trail and open space amenities are a major feature of this site and help to create an interesting and diverse residential experience.



Conclusion

These *Rural Development Design Guidelines* are provided to assist landowners and developers with the process of site planning and design. With good communication between the landowner/applicant and the town staff and Planning Board, this process will help to facilitate new development that respects significant natural and cultural features of the site and larger landscape while meeting landowner needs. It will help to ensure that new development builds upon the existing rural character of the community.

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