

A Vision for Exeter: Implementing the Game Plan for Our Future



***Phase II Final Report
December, 2011***

Contents

4	I. Overview, Key Findings and Recommendations
12	II. Alternatives for the Future - What are our choices?
15	III. Why Build a Village? The village as the basic building block of community Villages for the 21st Century Villages still matter
22	IV. Comparing the Costs and Benefits of Conventional and Village Growth Fiscal Impacts Traffic Impacts Costs and Benefits for Natural and Cultural Resources Costs and Benefits for Community Character and Quality of Life
32	V. Assessment of Potential Sites for Village Growth Development Context Water Supply and Wastewater Disposal Conclusions
41	VI. Exploring Village Development for Exeter Design Scenarios for the Route 102 Village Site Design Scenarios for the Exeter Road Village Site
50	VII. Detailed Design for the Exeter Road Village Site Masterplan Key Concepts and Design Guidelines Infrastructure Analysis
56	VIII. Implementing Village Growth The Village Ordinance Transfer of Development Rights (TDR) Design Guidelines
	Appendices <ul style="list-style-type: none">• Appendix A - Traffic Analysis Memoranda, Fuss & O'Neill• Appendix B - Economic Analysis, Pamela Sherrill Planning• Appendix C - Draft Zoning Ordinances

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**More information about the Exeter
Vision project may be found at:
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I. Overview, Key Findings and Recommendations

What is the Exeter Vision Project?



Exeter's beautiful landscapes and rural lifestyle are universally valued by the town's residents. Most respondents are not against growth and development -- unless it destroys these resources.

In 2008, Exeter received a grant from the Orton Family Foundation to involve residents in exploring the heart and soul of the community and developing a shared vision for the future. The project was overseen by a Project Team made up of town staff, residents and business owners appointed by the Exeter Town Council. The intent was to engage the people of the community to determine what they value about Exeter and how those values may be addressed as the town grows. All findings and recommendations are based on extensive public feedback over 3 years - including focus groups/web-based surveys, five public meetings, and electronic key pad polling to allow the public anonymous input.

What Were the Results of Phase One?



The growth challenge, or "Chip Game" uses a map of the town as a game board. Each playing piece, or chip, represents a given type and density of development. By placing the chips on the board, participants learn about the pattern of growth likely to occur under existing zoning, and can experiment with alternatives that can allow growth to continue while preserving the features people care about.

The first phase of the project began with a series of interviews, an opinion survey and a public workshop to get residents' perspectives on the heart and soul of their community and their desires for the future. The Team learned that residents highly value Exeter's rural character and small-town atmosphere, and fear that it could be lost as the town grows. Analysis of potential future growth under current zoning demonstrated that there could be more than 3,000 additional homes built in Exeter - more than doubling the number of existing homes. Spread over the countryside, this new growth would destroy our farms and forests, degrade community character, increase traffic and raise our property taxes to provide new services.

Faced with this undesirable future, 91% of the participants at the first public meeting said they were very concerned about the impacts of future growth. Moreover when asked "if you could change one thing in Exeter, what would it be?," the top three responses were:

- Develop a clear game plan for growth
- Create a village center with shops, recreation and town services
- Create multiple village centers

At the second public meeting, residents were asked to take chips representing the same amount of potential new homes and businesses allowed by current zoning and place them on a map of the town. They could distribute the chips using existing large lot development patterns or cluster homes and businesses together. The public overwhelmingly choose an approach based on creating new villages on up to six potential sites. It was clear from the first two public meetings that the public supported village growth. However, the public supported an increase in density only if it was balanced with protection of our farms, forests, and rural quality of life, and keeps property taxes as low as possible.

Visioning Process and Timeline									
Phase 1				Phase 2					Phase 3
May 2008	June 2008	Summer 2008	October 2008	Sept. 2010	Fall 2010 - Winter 2011	March, 2011	Summer, 2011	Oct., 2011	2012
Focus Group Interviews and Web survey	First Public Workshop	Planning & Analysis	Second Public Workshop	Third Public Workshop	Planning & Analysis	Fourth Public Workshop	Zoning Strategies	Fifth Public Workshop	Implementation

At the conclusion of Phase I, The *Vision for Exeter* Project Team prepared the following Vision Statement for consideration by the Town Council and Planning Board. The statement was approved by both groups and officially adopted as part of the Exeter Comprehensive Plan in 2010.

A Vision for Exeter

The Vision for Exeter Project Team prepared the following Vision Statement for consideration by the Town Council and Planning Board. The statement was approved by both groups and officially adopted as part of the Exeter Comprehensive Plan in 2010.

“The Project Team recommends that the Town Council and Planning Board integrate the findings of Phase I of this project into the process of amending the Comprehensive Plan to enhance the Town of Exeter’s ability to manage future growth to achieve the following vision:

- The rural character and quality of life will be preserved;
- Natural areas will be protected;
- Our working farms and forests will be maintained for future generations;
- Environmentally appropriate and sustainable economic growth will be stimulated,
- The negative impacts of increased traffic will be minimized;
- Property taxes will be as low as possible;
- Balanced housing needs will be achieved;
- Rural design and architectural guidelines will be used for new growth;
- Individual property rights will be respected;
- There will be an efficient delivery of town services; and
- Village style development patterns will be encouraged.

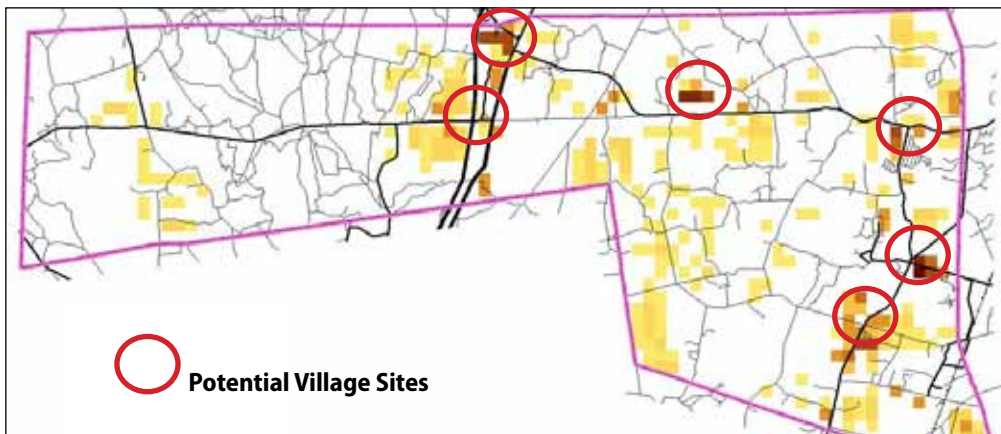


The potential build out under existing zoning could bring more than 3,000 new homes to Exeter.

Participants were asked: “what if lost would fundamentally change Exeter forever?” The top 4 responses in order of priority were: rural character, scenic 102, forests and farms.



Keypad polling allowed participants in the workshops to identify the issues and opportunities they were most interested in. This helped to focus attention on the need for a townwide study of growth trends and potential alternatives to sprawl.



When the results of the Chip Game exercise were compiled on a single plan, six potential village sites emerged as the best candidates. Phase II began with an evaluation of each of these areas to determine which of them might be capable of supporting village-style growth.

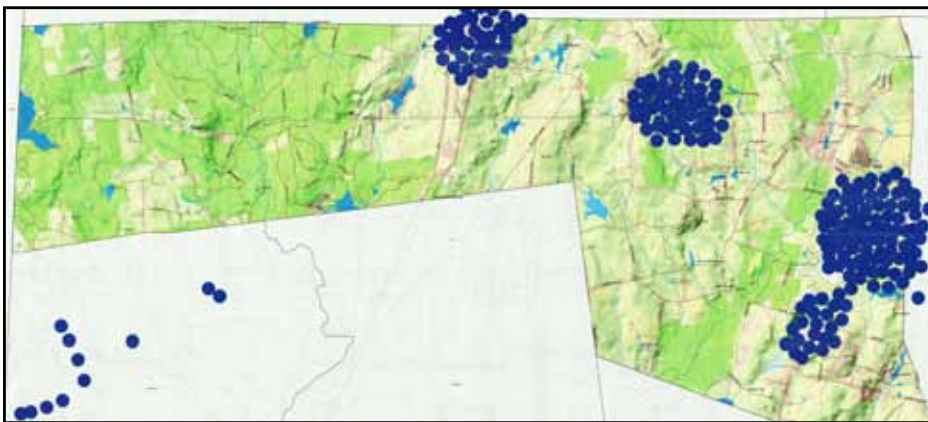


Keypad polling was also used to ask participants to identify the type of development they believe to be a good fit for Exeter.

The Phase II Village Planning and Public Engagement Process

The first phase of A Vision for Exeter created a Game Plan for the town's future. Based on initial feedback from the public, the Team concluded that there was strong support for continuing the process of exploring whether village development is a good fit for Exeter. With the support of a Planning Challenge Grant from the Rhode Island Statewide Planning Program, Exeter was able to take the investigations and public discussion started in Phase I to a greater level of detail. This included continued meetings of the Project Team and three additional public workshops. Many important questions needed to be answered, such as: What are the fiscal impacts of village versus conventional development? How would a village affect traffic, quality of life and drinking water supplies? What type of village would fit best within a rural town, and how can it be adapted to Exeter's unique circumstances?

Phase II was designed to look at the initial village planning concepts from every angle to see if the village approach really makes sense for Exeter. The process started with a detailed evaluation of six



Participants in the third public workshop placed dots on the sites they thought should be studied further as possible locations for village development. While each of the four sites discussed at the meeting received some votes, the largest number of votes were cast for the site at the intersection of Exeter Road and Route 2.

potential village sites identified by the public in Phase I, to see if any have the capacity to support a village. In addition to having space for new homes and businesses, a potential village site has to have ample water and the ability to support wastewater disposal. It also has to have good road access, with the ability to absorb more vehicles without creating traffic tie-ups.

Based on an initial suitability analysis prepared for all the sites using a Geographic Information System (GIS), the Project Team selected four sites

that seem to have the most potential to support village development. They invited the public to provide input on the sites at a public workshop on September 22, 2010 at the Exeter Jobs Corps Academy. This included a mailing that went out to every Exeter resident. Facilitated by students from Roger Williams University, the workshop started with an overview of the *Vision for Exeter* project and a presentation describing the four sites. Professor Edgar Adams and his students presented an historical context for village growth in Exeter and spoke about the relationship of village planning to the Comprehensive Plan. Participants were then invited to break into small groups to discuss strengths, weaknesses and opportunities for development for each of the potential sites. At the end of the evening each group presented their findings, and participants were asked to vote on which site or sites they thought should be studied further as possible locations for village development. All four sites received some votes, with the most votes cast for the Exeter Road/Route 2 site.

The market potential for village development was the focus of a series of meetings in October, 2010 organized by the Urban Land Institute as part of their Technical Assistance Panel (TAP) program. Provided at nominal cost, the TAP brought together a panel of land use and development professionals for a day-long session focused on the market viability of the village concept. The panel concluded that there is currently a limited market for new commercial development, with existing capacity

along the south end of Rt. 2 already going unfilled. They suggested the town focus on completing existing commercial projects such as Oak Harbor Village and the Liberty Hill Office Park before embarking at a major new village at an undeveloped site. It was also determined there was demand for residential development and more people are needed to support existing businesses in town. With this in mind, the Project Team decided to proceed with study of the potential village sites with a focus on providing a variety of new home types that would provide choices for Exeter residents, especially young and old people who don't need a big house. Residential development concentrated at one of the village sites could also enhance economic activity for existing businesses on the town's main roads, as well as providing support for gradual commercial development within the new village.

In the next stage of the project, two potential village sites were selected for more detailed planning studies. Over the course of the winter of 2011, the consultants and the project team met to explore different options for each location. Neither site is designated as the "official" village location; rather these further studies are intended to demonstrate how a village could work anywhere in Exeter, and what principles the town could put in place to make sure that village development enhances both visual character and economic opportunity. The first site is focused on the area around the library, which was chosen because it has long been discussed as center of municipal uses. In addition to the library, there is space set aside for a new Town Hall, and there is available land surrounding the parcel for additional residential development. The study found that there is considerable capacity for village growth at the site, but that there are also many practical constraints in implementing such a plan. These include the presence of streams and wetlands that divide the site, a complicated pattern of lot lines and ownership, and the fact that several parcels, including that owned by the town, are subject to conservation easements that limit future residential development.

The second site is found at the intersection of Exeter Road and Route 2, and includes town land that is part of the former Reynolds property, the Exeter Mall, and several hundred acres of farmland. As described later in this report, the availability of land in relatively few ownerships, good soils for wastewater disposal and the potential for public water supply make this site the best for village



Panelists participating in a Technical Assistance Panel organized by the Urban Land Institute discuss Exeter's place in the regional economy of South County.



Existing Conditions at Exeter Road and Route Two. In addition to the VA Cemetery (lower left), there are about 250 acres of farmland.



Under current zoning, most of the site would be converted to 3 and 4 acre house lots, with additional commercial buildings around the Exeter Mall.

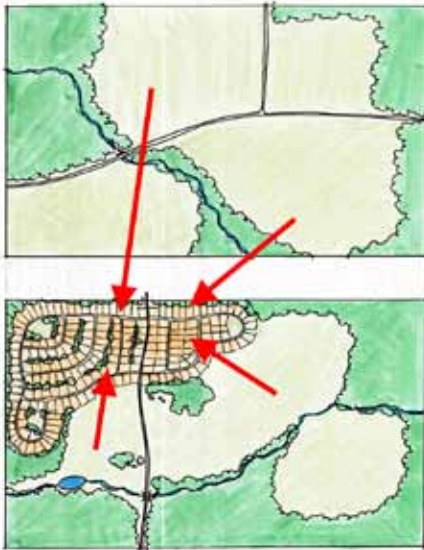


In the Village Scenario, all of the house lots could be rearranged into a village on less than 50 acres, leaving 90% of the site as permanent open space.

growth. Again, this doesn't mean that this area will ever become a village, but for the purposes of this study it offers the most realistic combination of available land, road access and infrastructure potential. Totalling about 500 acres in multiple ownerships, the site has about 250 acres in active agriculture, surrounded by a mix of forest, wetlands and existing homes and businesses. Under current zoning all of that farm and forest land could be subdivided into 89 three- and four-acre house lots. Under the village alternative, however, those 89 lots can easily fit within a small portion of the site, allowing most of the farm and forest land to be preserved. In addition, there is enough capacity to support many additional homes in the village, which could be built there instead of converting open space to house lots elsewhere in Exeter.



A detailed concept plan for the village was prepared to explore how homes, businesses, roads, parks, wildlife habitat and farmland could be combined into a vibrant community.



Using a technique called Transfer of Development Rights, additional homes could be built in the village by purchasing the development rights on land on neighboring properties (bottom). If the village has additional capacity, additional homes could be transferred into the village from farm and forest land elsewhere in Exeter (top). This allows the village to grow beyond the limits of current 3-4 acre zoning while providing for permanent conservation of farmland and other sensitive open space resources.

The Team looked at numerous alternatives for the size and shape of the potential village at Exeter Road. Each of these options was evaluated to see what the impact would be on tax revenue, cost to the town for services, traffic and other factors. What the team found is that **each new home in subdivisions with three and four-acre lots costs the town \$800-\$1,000 more in services per year than it generates in taxes.** Villages, on the other hand, are likely to provide substantially more in revenue to the town than they cost in services: **the average village home would generate surplus revenue of \$1000-\$1600 per year.** The reason is that for a given number of new homes, the village has much less road to maintain, fewer school children on average to be educated

in Exeter schools, and greater efficiency in providing other services. Since most people work out of town, traffic is not greatly diminished compared to large-lot development, but a village makes it easier for people to walk for some of their daily needs and allows for efficient bus service. Not least of all, the village provides a range of homes that meet the needs of many Exeter residents and their families – especially empty-nesters, retirees and young people just starting out -- who don't need a big house on a four-acre lot, and would love to live in a quaint village where you could walk to a park or coffee shop.

Options for both village sites were presented at a public forum on March 23, 2011. Again, a mass mailing went out to every Exeter resident. Participants were able to compare the conventional development approach to the village alternative. Each participant at the meeting was able respond anonymously to a series of questions using keypad polling, and over 84% concluded that the village alternative was the best way for Exeter to achieve its visionary goals of preserving rural character and quality of life, protecting water supplies and preserving unique landscapes, while at the same time allowing for suitable growth that will provide services and support the tax base. In addition, 88% of those present supported further work to refine the village development strategy and create zoning tools that would encourage village development in Exeter.

As a result of the strong public support received by the village concept, the Exeter Planning Board worked with the consulting team over the summer and fall of 2011 to prepare ordinances that would allow village development to move forward in designated areas. These ordinances will take the form of a Planned Village District - configured as a "confined floating zone," which will allow for village style growth in areas



A digital model of the proposed village helped participants get a sense of what the plans look like in three dimensions.

where it can be supported, with strict town control over the density, uses and design of the village. The Planning Board is also exploring zoning tools that will make it possible for some development to be transferred away from sensitive farm, forest, and water supply lands and shifted into the village. This will ensure that a village will be allowed only if large areas of farm and forest are permanently protected from development.

A final public meeting was held on October 26, 2011, publicized through another mass mailing, where the results of the project were presented, including detailed design studies and visualizations of the Exeter Road village. Participants also heard about the potential zoning changes that would be required in order for village development to be implemented. Keypad polling again allowed for an immediate response from the audience to a series of questions. Among the results:

- 86% agreed that Exeter will grow in the future and keeping the town exactly as it is today is not possible.
- 89% affirmed that they understand why village development is being proposed for Exeter
- 92% agreed that they understand what a future village might look like in Exeter.
- 90% affirmed that they understand transferring development rights can protect farms and forests from being developed in the future.

It is clear that while the village development concept enjoys broad support, some residents may want more information. To that end, all of the studies and plans presented at the public workshops are presented in the following report, so that readers can decide for themselves whether village development is worth exploring further as an option for future growth in Exeter. Over the course of early 2012, the Planning Board and the Project Team will continue working on zoning and other implementation options for consideration by the Exeter Town Council.

Key Findings

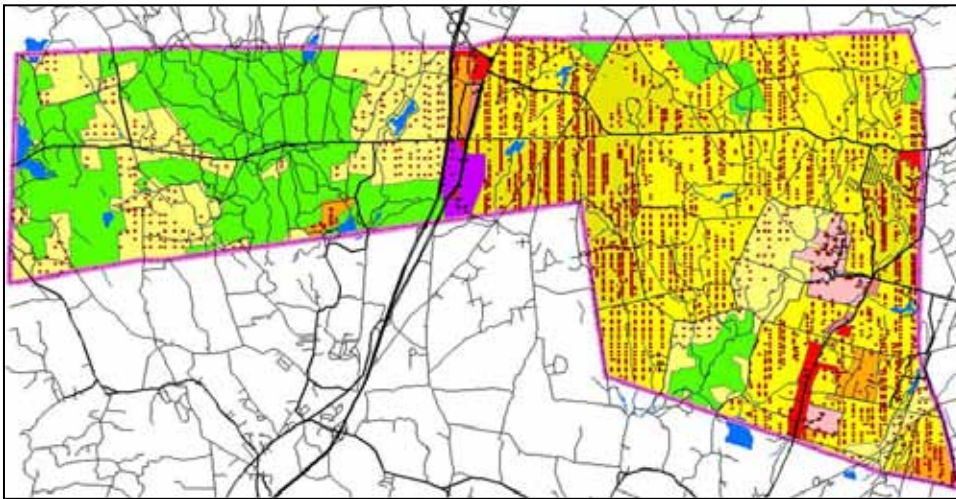
1. When built-out under existing zoning, Exeter will add approximately 3,000 new homes - which more than doubles the current number.
2. 91% of Exeter residents polled are very concerned about the future impacts of growth since it will:
 - destroy rural character
 - eliminate working farms and forests
 - increase traffic
 - add more town services
 - increase property taxes
3. 84% of residents polled believe that village development is the best way to achieve the “Vision for Exeter” that was approved by the Planning Board and Town Council and is currently included in the Town’s comprehensive plan.
4. Village Growth is better than existing large lot development for:
 - protecting Exeter’s community character and quality of life;
 - preserving farms, forests, and water quality;
 - improving the tax base;
 - reducing traffic; and
 - providing balanced housing needs
5. There are 4 sites that were determined to have the potential to support a village. The best sites are at the intersection of Route 2 and Exeter Road and the Route 95 interchange area.
6. The transfer of development rights is an effective land use technique to preserve farms and forests while respecting private property rights. It preserves land without the use of public funds. 78% of residents polled support Exeter’s use of TDR.
7. Village growth would only be allowed as a trade off for permanently protecting farm or forest land.
8. Village growth can be carefully controlled by rural design and architectural guidelines that are appropriate for Exeter.
9. Village growth is currently not allowed in Exeter.

Recommendations

1. Due to the strong public support for village development, the Town Council should authorize the planning board to move forward with completing the necessary land use regulations to allow village growth. These regulations would be subject to public hearings and Town Council approval.
2. Village growth should be allowed at the sites that received the most public support and have the best potential to support a village: the intersection of Route 2 and Exeter Road and the Route 95 interchange area.
3. Since village growth is so beneficial to the town and other sites may be more attractive to the private sector, it is recommended that the town allow a village to be proposed in other appropriate locations. Any additional village location should be carefully reviewed and approved by the Planning Board and Town Council with applicable public input.
4. Village growth should only be allowed if it is going to permanently protect farms or forests that the Town determines to be important to protect. Any additional density in a village should only be allowed by taking development rights from another parcel that will be protected from future development.
5. The town should adopt Transfer of Development Rights (TDR) to allow development rights from farms and forests to be moved to a proposed village site.
6. The Town should also allow developers to pay a fee in lieu of transferring development rights if the developer can't find a willing land owner who wants to sell their rights. The fee would be established in a restricted account that could only be used to purchase land. The fee should be commensurate with the true cost of purchasing the most valuable farms or forests in town. Said fee could also be leveraged with other State or Federal funds to purchase open space.
7. The Town should encourage the formation of a municipal land trust. The land trust would be responsible for assisting with the transfer of development rights process and acquiring land if a developer selects the fee in lieu of TDR option.
8. The Town should also consider the need to create a village commission. This group should be appointed by the Town Council and represent a diversity of expertise and interests. The commission's charge should be to assist in working on any unforeseen obstacles that may hinder village growth that are beyond the scope of the planning board such as helping to create and/or manage a public water supply etc.

II. Alternatives for the Future – What are our choices?

Throughout the Vision for Exeter process, the focus has been on identifying the town's choices for the future and then comparing them objectively to see which alternative(s) might be best for the Town. The buildout prepared as part of Phase I represents the choice made when the town adopted the current zoning ordinances. It describes what would happen if every available parcel of land was subdivided and developed according to the existing requirements for lot size, frontage, etc. About



Buildout Analysis: following the rules described in Exeter's current zoning ordinance, new homes, represented by red dots on this map, were placed in any area that is available for development. While the process does not take parcels into account, and simplifies potential road layout, it provides a useful estimate of the amount and general location of future growth.

analysis found that there is room for about 3000 new homes on two- to five-acre lots, more than doubling the number of 2,273 existing homes. The impact of these new houses on schools, town services and the environment is described further in section IV of this report, but what is the effect on a particular neighborhood?

a quarter of the land in Exeter is already protected. Most of the remaining land, 72.3%, is zoned for residential development, with just 2.6% zoned for business or industrial use. Focusing on the residential zones, the buildout analysis found that there are some 27,000 acres in the residential districts, of which about 6,700 acres are either already developed or undevelopable, leaving about 20,300 acres for development. Subtracting land for the new roads that would be required to meet the required frontage for each new building lot, the analy-

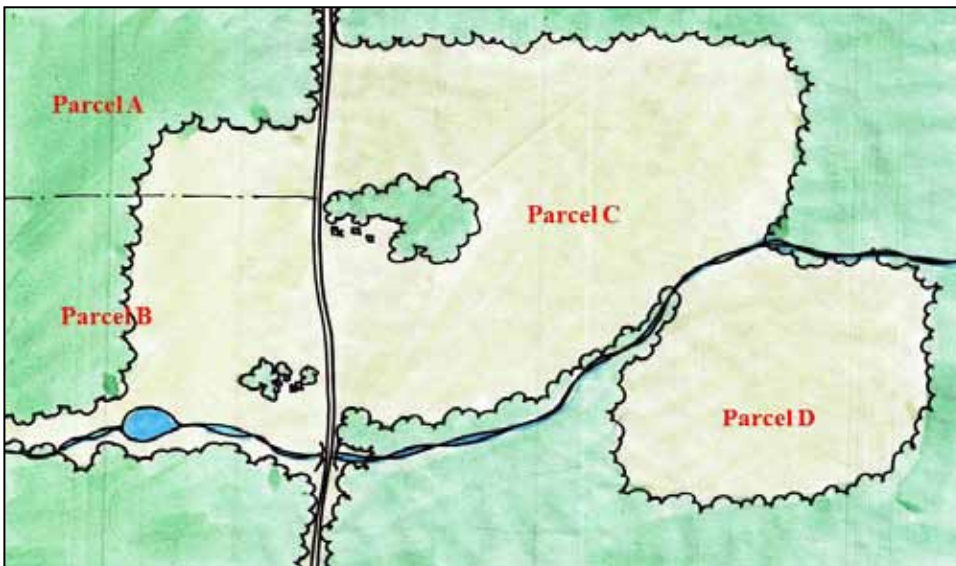


Figure 1. Existing Conditions for an Imaginary 500-Acre Site

The diagram at left (figure 1) illustrates an imaginary site of about 500 acres. Like many large neighborhoods in Exeter, it has some land which is open and undeveloped, some in forest, and a stream runs through part of it. There are four existing parcels in different ownerships, each of which has frontage on an existing road, and one of the parcels already has a farmhouse on it.

Figure 2 shows the area subdivided under the “conventional development” approach required under the current zoning. It assumes a required density of four units per acre. New roads provide access to lots within each parcel, and there is room to build each house without getting too close to the stream corridor. With some land taken up by roads, wetlands, and the odd corners of lot, the resulting buildout is 100 lots.



Figure 2. Conventional Development under Existing Zoning

Figure 3 illustrates what is possible using the town’s existing Conservation Development ordinance. Starting with the same 100 units possible under the conventional plan, the conservation development approach allows for those units to be clustered on smaller lots within the most appropriate area of each parcel. This results in four new neighborhoods close to the existing road, each of which is laid out with some interior park spaces as well as to provide views from many of the homes across the protected open space. If the clustering on each of the four parcels were coordinated as shown, a large contiguous block of open space could be permanently protected in the center of the area, amounting to 400 acres of the 500 acre site.

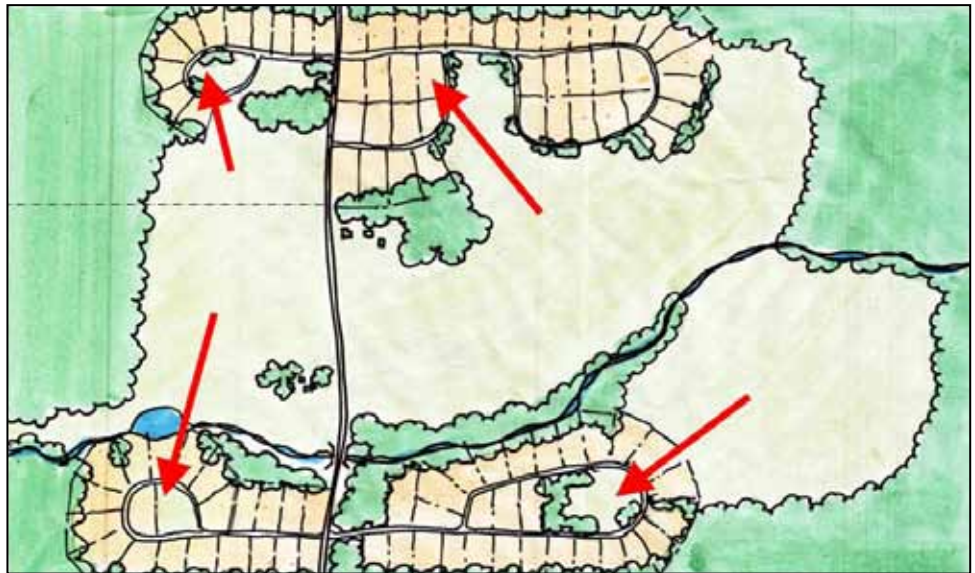


Figure 3. Conservation Development

Under the village development scenario (Figure 4) the same 100 house lots are clustered together in a single area of the site. Like conservation development, this limits the buildout to the same 100 homes that could be built under the conventional plan, but it allows them to be placed in the part of the site most suitable for a village. Because they are all in one place, less road is needed to reach the new homes, while parks and other amenities can be shared by everyone in the neighborhood. A particular benefit is that the existing stream corridor, a large block of adjacent woodland, and most of the farmland is protected as a single undisturbed unit in this scenario. This allows wildlife habitat and water quality to be preserved and farm operations to continue as before.

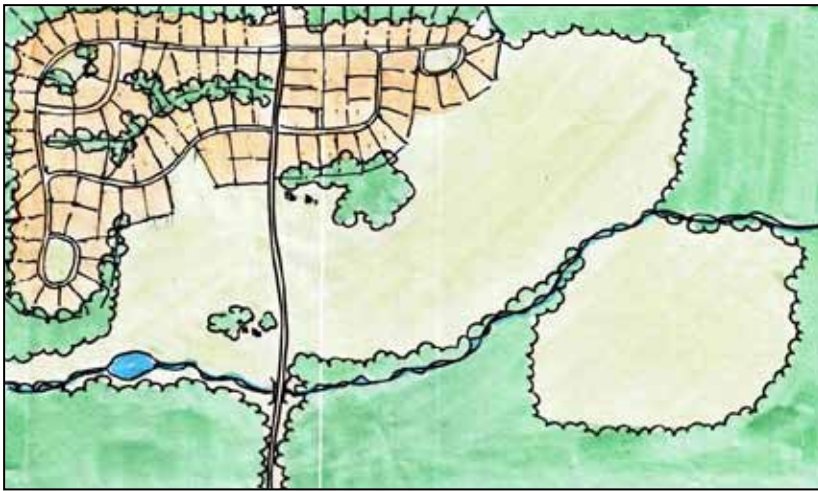


Figure 4. Village with 100 one-acre Lots.



Figure 5. Village with 200 half-acre Lots.

The village scenario is not currently allowed by Exeter's zoning, nor is the final alternative (Figure 5), Village Development with Transfer of Development Rights (TDR). TDR is a fairly common zoning strategy which allows development rights to be purchased in one area and sold to allow greater than normal density in another. In this illustration, instead of 100 one-acre lots in the village, the town would allow 200 half-acre lots. As shown in figure 6, this is accomplished by requiring the developer to purchase the development rights to a separate 500 acre parcel and using those to increase the allowable density within the village. Development would be limited to the same 100 acre footprint shown in the previous scenario. While the lots would be smaller, they still provide plenty of room for a typical house. Meanwhile, 900 acres of open space would be permanently protected – all without any expenditure of public funds.

This is the basic scenario under which a village could be created in Exeter. Regardless of the final density, the idea is that no more land could be developed under the village scenario than what is currently allowed under the existing Conservation Development ordinance. The big difference is that there would be much more flexibility in where that development occurred

within a given neighborhood. If TDR was included, and the site could support extra homes, the number of houses in the village could be increased by transferring units from open space areas off the site, which would then be permanently protected. Any increase in density in the village site would only be possible through the permanent conservation of farmland and other resources, ensuring that there would be net benefit to the town.

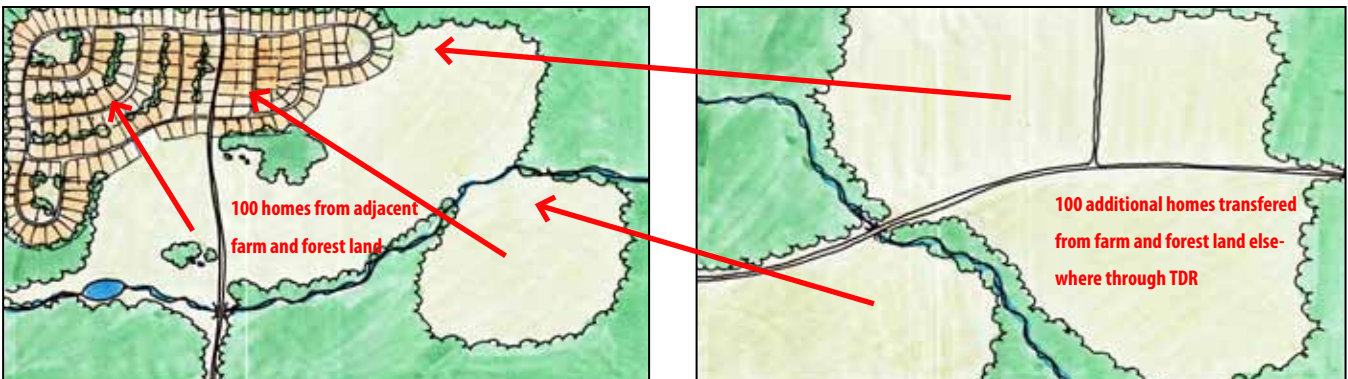


Figure 6. Additional homes in the village balanced by permanent protection of open space through Transfer of Development Rights (TDR).

III. Why Build a Village?

The village as the basic building block of community

A hundred and fifty years ago, Exeter was a town of villages. With names like Arcadia, Millville, Austin, Pine Hill, Lawtonville, Liberty, Hallville, Fisherville, Exeter Hollow and Slocum, each village was the unique product of generations of people living and working in a particular landscape. Most are little more than museums now, with a tiny white church or school house the only reminder that hundreds of people once lived out their days within walking distance. And while their descendants would probably not want to give up the choices and prosperity gained in the 20th century, they may well wonder what economic or social forces created those villages and then carried away communities that were once so full of life.



Villages have been around for thousands of years, and still serve as one of the most basic building blocks of human communities. In its simplest form, a village starts with dwellings gathered together to share a water supply or similar resource, to provide a space for group tasks, or to allow for shared defense. They typically are laid out to encourage social interaction, but allow for privacy as well: even very simple villages quickly develop a hierarchy of public and private spaces, paths and gathering areas. Village designs vary with their physical and social context, from a group of dwellings supporting an extended family, to a more complex arrangement that often reflects the social structure of the community. As villages grow over time, they develop unique buildings and spaces which support the various social and economic activities within them. These might include religious or government structures, community gathering areas, manufacturing districts, and market places.



An 1884 map of Exeter identifies at least 10 distinct villages.

As villages grow over time, they develop unique buildings and spaces which support the various social and economic activities within them. These might include religious or government structures, community gathering areas, manufacturing districts, and market places.



As societies grow, villages evolve from groups of houses to increasingly complex arrangements of spaces and uses. Photos (left to right) from Niger, Madagascar and Mali by Yann Arthus-Bertrand.





Villages like this one outside Exeter, England, have retained their traditional character because of strong national land use controls based in part on maintaining the ability to grow food locally (photo courtesy Microsoft Bing Maps).

In all of these examples, the form of the village changes over time in response to the functional needs of its inhabitants. For most of human history, villages were inhabited by hunters, gatherers, fishermen or farmers who had an intimate relationship with and dependence on the surrounding landscape. Right through the 19th century, most people needed to walk from their home in the village to the nearby fields and pastures. The size of the village, meanwhile, was limited by the carrying capacity of the surrounding landscape to provide food for the inhabitants. As the population grew and this carrying capacity was reached, the village stopped growing and the excess population moved off to start



Early New England villages (Hadley, Mass.) brought the English forms and customs with them. A common provided shelter for livestock, and the village was ringed by agricultural fields (photo courtesy Microsoft Bing Maps).

a new village somewhere else. Of course a certain number of villages – especially those at a strategic location for defense, communication, trade or other purpose – grow to become towns and cities. Systems evolve to ship food and other raw materials into them from the surrounding countryside. Remaining rural villages that may have once been economically independent find new opportunities in providing food and other goods to meet the demand of nearby cities and towns, and together become part of a regional economy.

This, of course, is an oversimplification of how human societies develop, and there are libraries of books that describe the incredible variety and complexity of past and present civilizations. But throughout the world the village remains as the essential building block of human society. Even as cities and towns grow, villages – in the form of urban neighborhoods – remain as a basic unit, perhaps because it is easier and safer and more socially rewarding to live and raise kids in a community of a few hundred families, where people know who belongs and look after each other.



As time went on, villages like Little Compton, RI developed a complex mix of residential, commercial, religious and government uses, all within a walkable center (photo courtesy Microsoft Bing Maps).

community of a few hundred families, where people know who belongs and look after each other.

The Puritan settlers of New England brought the village concept with them. Houses were drawn up around a common where livestock was pastured for the night. Lands surrounding the village were parceled out to individuals, but most people lived in the village and walked to their fields. Over time, farmers moved out to the countryside, but village centers remained as the focus of community life, and depending on the need included home, church, school, commerce and industry – a mix of uses that remain in many of our historic towns and villages today.

The Suburban Century

Yet over the course of the 20th century a revolution occurred that went well beyond the historic growth of villages into towns and cities – and that was the automobile. For the first time, nearly the entire population had the option of living miles away from their places of employment. The suburban lifestyle – pioneered by railroad and streetcar suburbs that grew out from most cities, continued into the surrounding countryside. Many historic villages were subsumed by a tidal wave of bland single-family homes on broad suburban streets and cul-de-sacs. A generation of engineers devoted themselves to creating a new hierarchy of suburban streets, collector roads, and interstates that would allow the residents of suburban towns to drive easily to their jobs in the city. Then someone discovered that there really was no need to keep those jobs in the city – why not move the company out to the suburban office park, with cheap rent and low taxes? Commerce followed, and downtown Main Streets withered under the onslaught of suburban shopping malls and strip centers, with their abundance of free parking.

Supported by government subsidies and welcomed by consumers, the emptying out of cities and growth of suburbs defined the late 20th Century, and the results are well-documented. In addition to the social, environmental and visual problem associated with suburban sprawl, however, there is a growing concern that automobile-oriented growth patterns increasingly put suburban and rural towns at an economic disadvantage compared to transit-friendly, walkable urban centers. While the American Dream was fueled by cheap and plentiful oil and gas, it made sense for families and businesses to move to the suburbs. Commuting was easy, and most families could afford for one parent to stay home with the kids. As energy costs escalate, however, the suburbs will be at an economic disadvantage compared to places whose density and infrastructure allows people to live without a car.

And then there's the lifestyle issue. Today, in 58.1% of married couples with children under 18, both parents work (bureau of labor statistics). It's a safe bet they'd prefer to spend less time commuting and don't want to spend their home time driving the kids everywhere. Meanwhile, young people are delaying marriage and child-rearing, and choosing to move back to cities abandoned by their grandparents – made possible by the revitalization of many urban centers over the last 30 years. Combined with growing concern about global climate change and other issues important to this generation, the two-car suburban lifestyle will likely become even less attractive as time goes on.

These economic and demographic trends are touted as a great opportunity for cities like Providence, but what do they mean for Exeter, where most future growth is limited to four and five acre house lots? It is likely that the growth will continue, but that the market for Exeter's large-lot subdivisions – not to mention existing homes – will shrink. Growth will continue, but it will likely be through haphazard frontage development rather than large subdivisions. Continued development of four and five-acre lots – which seems like a relatively low density – will protect neither the rural activities of farming and forestry, nor the rural visual character valued by residents. Thus each new home gradually degrades the rural character and lifestyle that brings people to Exeter in the first place. With homes spread across the countryside, moreover, no centers of activity form that could support business and commerce. The stagnation of commercial growth along Routes 2 and 3 will likely continue.



The automobile allowed people to leave the city and move to the suburbs, but the resulting pattern forces reliance on the automobile.



Faced with loss of rural character, many towns have adopted large lot zoning like these three-acre lots in Saratoga County, NY. Despite the low density, the working landscape disappears and rural character changes into just another form of suburbia.

Villages for the 21st Century

Villages can be part of the solution. They embody a wealth of ideas for how to provide for a happy, healthy and prosperous lifestyle while minimizing social, economic and environmental costs. They can help protect farmland and the natural environment. They can support economic growth and increase the tax base. They can provide homes for people at all stages of their lives, and provide amenities that increase quality of life. Finally, they can help create community.

A village can help protect the natural environment. The rural landscape is made up of a combination of natural and human elements. Natural areas are anchored by ponds, rivers, streams and their associated wetlands. Forested areas provide for wildlife habitat, and capture and filter rain-water so it can percolate into groundwater aquifers. Forests provide timber and other products and recreational opportunities. We think of farmland, by contrast, as a man-made landscape, but it is increasingly seen as a complex of soil, water and plants that must be preserved and managed as a functional system. Overlain with these natural and human systems are the roads, houses and hamlets that allow people to access and make use of them. The conventional large-lot approach to development ignores these systems, focusing primarily on providing roads and building sites. Natural ecosystems and working farms that been around for generations can quickly be destroyed when road building and other construction sever critical functional connections. Even though the new houses themselves take up only a small percentage of the landscape, the character and quality of that landscape is lost when those underlying systems cease to function.

A village can help protect farmland. Around the country, villages have been used to channel growth away from farmland and can even help pay for conservation. In Chesterfield Township, New Jersey, a technique called Transfer of Development Rights has been used to help preserve more than 7,400 acres of farmland. As part of a masterplanning process, the township identified farmland that they

wanted to protect. They also located an area for a planned village and created a detailed plan and design guidelines to guide how the village could grow. Developers wishing to build in the village do so by first buying development credits from the farmers in the countryside. This process transfers development rights from the farmland to the village, providing permanent protection for the farms and allowing the village to grow. To date about half of the potential village of 1,200 homes has been completed.



The Village at South County Commons combines aspects of a pedestrian-friendly village with the economic model of a regional destination shopping center. Multi-family housing and a hotel help to support retail shops on the main street

A village can support economic growth and increase the tax base. Many towns have looked to village growth to enhance economic activity. Even if a town has an existing village or downtown, there may be little room for growth at the scale desired by regional development companies

and their corporate tenants. This was the case in South Kingstown, which in 2000 created a mixed use zone which became The Village at South County Commons. The project contains some 850,000 square feet of mixed uses, including retail stores, office space, a cinema, gym, day care and a hotel, as well as apartments, condominiums and an assisted living facility. While the design is something of a hybrid between a traditional village and a shopping mall, and you have to drive down Route 1 to get there, it has been successful in both the marketplace and as a source of tax revenue for the town.



This image in Saratoga, NY shows an existing rural landscape which, like Exeter's has been created over centuries of farming and other human uses, overlaid with the natural patterns of forest, rivers and streams, ponds and wetlands.



Under current zoning, most of the landscape will be converted to three-acre house lots. Farmland, natural areas, scenic vistas and historic rural character are all lost forever.



Using a village approach, the same amount of growth allowed by current zoning is channelled into areas where it works best. This includes expanding existing villages and building new ones, as well as creating conservation subdivisions around the edges of some of the farms.

On a larger scale, Baxter Village, a new community in Fort Mill, South Carolina (a suburb of Charlotte, NC) was designed as a free-standing village on 1,033 acres. Residential neighborhoods with a total of 1,400 homes surround a traditional downtown with 380,000 square feet of commercial, retail, office and civic spaces. Everything has been carefully masterplanned to feel like a 19th century



The Town Square in Baxter Village, a suburb of Charlotte, NC.

town, with tree-lined streets connecting a series of parks and public spaces, and buildings based on traditional village architecture. Originally part of more than 7,000 acres owned by one local family, the village itself is the first phase of a larger master plan that includes preservation of a 2,300 acre greenway.

A village can provide a mix of homes to meet the needs of people at every stage of life. The conventional large lot subdivision requires a developer to make a huge investment in each home just to purchase the land and build a subdivision road. To recoup that investment he or she must build as big a home as the market will bear. Not surprisingly, the result is a monoculture of supersized houses. A village, however, uses much less land and requires less road and other infrastructure to service each house. While there may be no

million-dollar homes, development costs are reduced and the developer still makes a profit. Lots are kept relatively small, and attached units and apartments are part of the mix. As a result the developer has the flexibility to provide many sizes and shapes of home, and can vary the mix to meet demand. And when residents are ready to move on to a larger or smaller house, there are many choices in the same neighborhood – which means people don't need to move away from the area just to find a home that meets their needs.



Villages lend themselves to a mix of house types and sizes that cater to the needs of people at every stage of life (Warwick Grove, NY).



Simple amenities like a coffee shop and cafe that are impossible in a standard subdivision are easy to provide in a village setting.

A village can provide amenities that increase quality of life. Another bonus of reduced development cost per unit is that there is more money available to create amenities that actually make life better. In a conventional subdivision the developer spends most of the budget on expensive, over-built roads, land clearing for scattered house sites, and other infrastructure. Other than providing access to what may or may not be an attractive area, this investment adds no value to the project. In a village setting there is an opportunity to spend that money on parks, playgrounds and plazas, benches, ball fields, tennis courts, walking paths, fountain and community buildings. As a bonus, farmland, scenic views, water access and natural areas that are preserved through the village development process also add value to the project. Even though you may only own a 5,000 square foot lot instead of five acres, you share ownership of many times that amount of common open space. Each of these features increases the quality of life for residents, and provides tangible value that is reflected in the value of homes in the neighborhood.

A village creates community. Suburban subdivisions can be wonderful places to live, and sometimes they are also great neighborhoods. How many people, however, live for years on a suburban street and never get to know their neighbors? While village life isn't for everyone, many people yearn for the kind of random interaction that results from living a bit closer together and spending a lot of time walking and biking instead of driving. Each of the elements described above supports this community feeling. Shared amenities like parks and playgrounds get people out of their homes and bring them together. Retail and office uses allow people to spend more time in the neighborhood and less time commuting or driving to distant shopping centers. Protection of farmland provides opportunities for community gardens and community-supported agriculture. And perhaps of greatest value, a broad range of housing types brings young and old together and allows people to remain even as their life circumstances change.



Villages still matter. As the great recession turns into the new reality, simple economics will increasingly make the village approach seem like common sense. Right now the typical two-career, two-car family spends around 50 cents per mile to keep their fleet operating. Add hours spent commuting, hours driving kids around (or time they spend on school buses), hours spent driving to distant shopping centers. Contrast this with a family living in a larger town or city, who only needs one car (or none), who can walk or bike to places they work, play or shop. That's an economic gap that's only going to get wider. While Exeter is obviously not going to grow into a city, the village approach allows it to take advantage of some of the same immediate economic benefits, as well as allowing the town to adapt to changes that are likely over the coming decades. As we look to a future where energy is more expensive, villages have much to teach us about how to live a good life with less energy. They can also show us how to protect our communities from floods, drought, hurricanes and other extreme weather events that are likely to become more common. Finally, they provide a timeless example of how to live well without having to spend the economic and environmental capital which previous generations left to us, and which we'd like to preserve for our children and grandchildren.



The example of Wickford (above), Nantucket (top), and innumerable other New England villages demonstrates that a village setting can have higher property values and a better quality of life than suburban-style subdivisions in the same town.

A Vision for Exeter's Future

This then is the vision: a future where Exeter continues to grow, but where that growth is balanced with preservation of the town's unique rural character and quality of life. While construction of homes on large lots will always be allowed, some of that development pressure is shifted from the countryside to one or more villages. Each village grows over time, meeting the demand for more diverse housing choices within a classic setting of quiet tree-lined residential streets, parks, trails for exercise, and a dynamic community center. Surrounding the village will be permanently-protected farms, forests, and wildlife habitat. The result will be a model for future growth in Exeter that can be more resilient in the face of an uncertain future and more sustainable economically, environmentally and socially, while also preserving the best things from Exeter's past.

IV. Comparing the Costs and Benefits of Conventional and Village Growth Patterns

The imaginary future development scenarios presented in this report allow us to compare the physical dimensions of conventional development with the village approach. They also allow us to compare the alternatives from the various perspectives of economics, traffic, environmental impacts, and quality of life. Exploring the resulting costs and benefits shows that the town faces clear choices for the future, and that choosing to maintain the status quo will have a dramatic impact on the town.

Fiscal Impacts

It is often assumed that new development of any kind is an economic benefit to a town because it increases the tax base. When examined more closely, however, an increase in tax revenue generated by new development has to be compared with the increase in municipal costs for additional services required by that development. In Exeter, which provides few municipal services, the largest cost to the tax payer is for education. In fact, the average yearly cost for each student in the school system is \$11,743. (All facts and figures are from the Key Economic Development Findings report prepared by Pam Sherrill Planning, the full text of which is available in the appendix.) When this is compared to the tax revenue from an average home in Exeter (\$4,540,) it's clear that a new house with school

On average, large new houses in the countryside generate the highest tax revenue, but they also generate the most schoolchildren and add the most new road to the amount the town already has to maintain. The result is a net loss to the town of between \$800 and \$1,000. per year.



children will cost the town more than it brings in. Of course, every house doesn't have school-age children – in Exeter the town-wide average is 42 students per 100 homes. However, new homes have a higher proportion of students than older homes – while Exeter data is not available, in South Kingstown new construction generates nearly 60 students per 100 homes.

The following analysis is based on the imaginary development scenarios for the Exeter Road village site as presented in Sections 6 & 7 of this report. Staring with a Conventional Development plan under current zoning that would allow 89 residential lots in the area, we can compare the resulting fiscal impacts to a possible village scenario.

Annual Revenue from Conventional Development Scenario:

- Assessed value of a four- bedroom house on a large lot = \$450,000
- Tax rate: \$14.16 per 1000
- Annual Tax Revenue = $450 \times \$14.16 = \$6372/\text{year}$

Cost of Town Services:

- Each student costs the town \$11,473.58
- Annual Road Maintenance: \$1.29/foot or \$6,811 per mile.

Fiscal impact for 89 houses under the Conventional Development Scenario:

- \$6,372/year x 89 houses = \$567,108/year in tax revenue.
- Typical house has .58 students (based on new construction)
- 89 houses x .58 students/house = 52 students
- 52 students @ \$11,473.58 = \$596,626. annual education cost.
- 15,250 feet of new road @ \$1.29/foot = \$19,673. annual road maintenance cost.
- **Annual deficit: \$49,191.** [\$567,108 (tax revenue) minus \$596,626 (school cost) minus \$19,673 (road cost)]

Thus each new house in the conventional plan will, on average, cost the town \$553 dollars per year more in educational costs and road maintenance than it pays in taxes. This is only part of the story. Consider that each property in the potential development area is already paying taxes. This revenue would be replaced by the revenue generated by the new development, so it must be accounted for in



Good schools have always been supported by Exeter residents, and they remain the largest share of the municipal budget.

the calculation of the net cost to the town. The total assessed value of land and structures in the existing village site is \$3.6 million. At the tax rate of \$14.16 per 1000 this generates \$50,976 per year in taxes. These properties currently cost the town about \$8,800 in services, primarily road maintenance costs. Thus the current net revenue to the town is about \$42,000, an amount that can be considered part of the annual deficit going forward if the area is developed for 89 large lots:

- Current annual revenue to be lost: \$42,000.
- Annual deficit from new development: \$49,191.
- **Total annual cost to taxpayers: \$91,191. or \$1,025 per unit.**

How does this compare with the village approach? While the simplest village approach is based on the same 89 units possible under the conventional development plan, additional units could be added to the village using Transfer of Development Rights. In the last village scenario, a total of 356 new homes would be developed in the village. About two-thirds of these would be single-family homes. Yet because these homes are in a village setting, they are likely to be somewhat smaller, with fewer bedrooms, and will appeal to young couples and older folks less likely to have school-age children. Based on data from South Kingstown, a three-bedroom village home will generate fewer school children on average than the typical four-bedroom home on a large lot: .39 students per

home compared to .58. The remaining one-third of homes would be apartments or town-houses. These generate many fewer children on average: only about .05 students per unit. Thus 356 homes in the village would generate just 93 students (compared to the 207 students we might expect in a conventional plan. Thus, even if you assume each house pays lower taxes in the village than the conventional plan, the net revenue to the town is higher:

Annual Revenue:

- Tax rate: \$14.16 per 1000
- Assessed value of a three-bedroom house on a village lot = \$350,000
- Annual Tax Revenue for single-family house = $350 \times \$14.16 = \$4,956/\text{year}$
- Assessed value of a townhouse or apartment = \$300,000
- Annual Tax Revenue for single-family house = $300 \times \$14.16 = \$4,248/\text{year}$

Cost of Town Services:

- Each student costs the town \$11,473.58
- Annual Road Maintenance: \$1.29/foot or \$6,811 per mile.

Fiscal impact for 356 houses under the Village Development Scenario:

- $\$4,956/\text{year} \times 224 \text{ single-family houses} = \$1,110,144/\text{year}$ in tax revenue.
- $\$4,248/\text{year} \times 132 \text{ multi-family houses} = \$560,736/\text{year}$ in tax revenue.

Total tax revenue: \$1,670,880.

- Single-family generates .39 students x 224 houses = 86 students
- Multi-family generates .05 students x 132 houses = 7 students
- 93 students @ 11,473.58 = \$1,067,042 annual education cost.
- 9,700 feet of new road @ \$1.29/foot = \$12,513. annual road maintenance cost.
- Loss of existing tax revenue: 50 acres out of 500 developed = 10%
 $10\% \text{ of } \$42,000 \text{ existing revenue} = \$4,200 \text{ in lost revenue}$
- Total costs to town: \$1,067,042 (schools) + \$12,513(road maintenance)
 $+ \$4,200 \text{ (lost revenue)} = \$1,083,755.$
- $\$1,670,880(\text{revenue}) - \$1,083,755(\text{cost}) = \mathbf{\$587,125 \text{ net annual tax revenue,}}$

or \$1,649 per unit.

There is another fiscal benefit to the town that results from the village planning scenario, which balances an increase in the number of homes in one area with protection of nearby farmland and other open space. Under the Transfer of Development Rights (TDR) approach, the additional homes in the village would only be allowed through a process that protected a comparable amount of land elsewhere – a process that requires no public funding. Therefore the town not only gains in net tax revenue, but also saves money that it might otherwise have to spend to purchase conservation land. At a potential cost of approximately \$20,000 - \$25,000 per acre, and approximately 1000 acres of land protected in this scenario, the town saves between \$20 million and \$25 million. In addition, the farmland remains in active use and the town continues to receive the annual tax revenue.

Projected Annual Revenue and Municipal Expenses for Residential Development Scenarios



This chart illustrates the dramatic fiscal benefit that village development could provide to Exeter.

Conclusion

Therefore in this example, single family homes on large lots are estimated to cost Exeter approximately \$1,025 per home. However, the village residential units generate an estimated \$1,649 per unit more in property taxes than they cost in town services. **This is a net difference of \$2,674 per unit in the village scenario versus the conventional large lot development.** In the 89 home example, instead of Exeter losing \$89,225 on the conventional development the town would gain \$146,761* on the same number of village units, which translates to a net gain to Exeter of **\$237,986**. This positive net increase doesn't include the \$20-25 million cost savings for preserving open space without the use of public funds.

*The savings from village units is correlated with a reduction in school aged children. The example used in this study had only one third of the village units as one and two bedroom units, which is a conservative number. If the number of one and two bedroom units is increased, the net increase in property taxes would be expected to be greater.

Traffic Impacts

In order to estimate potential traffic impacts from village development, traffic engineers from Fuss & O'Neill analyzed impacts on each of the six village sites, as well as a more detailed assessment of the Exeter Road site (see appendix for the full traffic reports). Because each of the village sites is on one of the major state highways, their report provides separate information for each highway:

Route 102 – according to data collected by Rhode Island Department of Transportation (RIDOT) between 2004-2008, average daily traffic varied from 8,000 vehicles per day just east of route 3 to around 12,100 vehicles per day just west of Slocumville Road. Fuss & O'Neill estimated that the peak hour traffic would be approximately 1,100 vehicles and that noticeable congestion, such as having to wait before making a left turn, will not occur until traffic volumes reach approximately 1,500 vehicles per hour. More significant congestion can be expected as volumes exceed approximately 2,000 trips per hour. Therefore Route 102, at its busiest point, can handle roughly 400 additional vehicles during the peak hour before motorists experience noticeably increased congestion and approximately 900 trips during the peak hour before significant congestion will occur.

Route 2 – Based on the same 2004-2008 data from RIDOT, Route 2 carries around 13,000 trips per day just south of Rt. 102, rising to 14,800 trips per day at the South Kingstown line. With about 1,300 of these trips occurring at the peak hour, excess capacity would amount to about 200 additional vehicles during the peak hour before some congestion will likely be experienced, and approximately 700 vehicles before significant congestion can be expected.

Route 3 – Based on traffic counts conducted by Fuss & O'Neill in 2003, peak hour volumes north of Route 102 were approximately 500 vehicles, 1,000 vehicles south of Rt. 102 and 600 vehicles south of Rt. 165. Because Route 3 is a four lane roadway, there is much more capacity, and significant congestion would not be expected until traffic volumes reach approximately 3,500 vehicles.

Fuss & O'Neill concluded that excess capacity exists on each of the state highway corridors to support development efforts. They pointed out that the conventional development scenario ensures that all new development will be automobile dependent, while a village approach offers the opportunity for use of alternative means of transport that can reduce individual vehicle trips. Finally, the village scenario can have a dramatic impact on reducing the number of vehicle trips generated; mixed-use walkable communities have been shown to reduce vehicle trip impact over their conventional single-use development counterparts by up to 40%.

To estimate the increase in traffic produced by new development, Fuss & O'Neill used standard data for trip generation from the Institute of Transportation Engineers (ITE). Single family homes would generate the most traffic, with about 10.5 trips per day. In the Route 2 corridor there is a capacity of about additional 700 vehicles per hour before significant congestion could be expected, while Route 2 has excess capacity of 900 vehicles per hour and Route 3 can absorb 3,500 vehicles per hour. For our hypothetical conventional development example, with 200 homes on 1000 acres, we could expect 2,100 trips per day, of which about 190 would be at the peak afternoon hour. Even if we as-

sume the same number of trips for the village as for conventional development, this is well within the capacity of any of the three highway corridors. In fact the Route 2 corridor, which has the least available capacity, could accommodate about 740 new homes before significant congestion occurs. As you will see later in this report, this is at least twice the number of homes that would be contemplated for a new village on Route 2.

While the state highway corridors have plenty of excess capacity to support development, keep in mind that conventional development is much more likely to continue on the side roads away from the major corridors, where traffic would be much more noticeable. A village, by contrast, would have carefully planned entrances from one of the state highways, and could



take advantage of existing major intersections and traffic lights to ease access. In addition, the villages would include a range of house types, including townhouses, cottages, and apartments, that generate fewer vehicle trips on average than do single-family detached homes. A village, moreover, would be designed to make it easy to walk from one's home to a central bus stop, perhaps to take a short ride down to the new commuter rail station at Wickford Junction.

Costs and Benefits for Natural and Cultural Resources

Natural resources represent the physical base of soil, water, plants and animals that supports and sustains Exeter. They include thousands of acres of forest, much of it protected by the state, as well as areas of farmland, rivers, streams, ponds and wetlands. Just as important as specific features are the ecosystems that link them together into a larger functional network. As described and inventoried by the South County Greenspace project, these ecological networks tend to follow the river and stream corridors, but they are also connected by forested uplands that allow animals (as well as humans) to move freely around the area. If these large open space areas and connecting corridors become too fragmented the ecosystems they support will no longer function. Of more immediate concern to many, these same areas are the source of the water supply for most residents. As shown by numerous studies, if development continues to the point where just 10% of these open areas are converted to impervious roofs and pavement, significant decline in water quality is inevitable. The village approach can decrease impervious cover significantly compared to conventional development, ensuring that the overall level of imperviousness remains below 10%.



Calculations of excess capacity on Route 2 are based on its current 2-lane layout. Broad shoulders and ample site lines would allow for considerably more capacity to be generated with the addition of turning lanes and other approaches.

Rivers, streams, ponds and their associated wetlands form the core of Exeter's pristine ecosystems. They also play a key role in maintaining the water supply for much of South County.

The cultural landscape of Exeter is made up of individual pastures, barns, trees, stonewalls, country roads, etc., as well as the larger cultural ecosystems of which they are a part.



Cultural resources represent the results of hundreds – perhaps thousands – of years of human interaction with Exeter’s rich landscape. They include historic buildings and archeological sites, as well as features of the working landscape – farms and nurseries, barns, stone walls, fences, country roads, roadside trees, scenic views, even community gathering places like the Middle of Nowhere Diner – basically anything that people have made or upon which people place special meaning or significance.

As part of Phase I, participants identified and ranked some of these cultural resources as part of a “heart & soul” analysis. Consistently highest ranked were views of farmland from public roads, beautiful natural areas with trees and water, and historic buildings that represent Exeter’s rich heritage.

Like natural resources, individual cultural resources do not exist in a vacuum, but are always part of a larger landscape system – a “cultural ecosystem.” If you protect an historic house, for instance, but allow the farmland that once supported it to be subdivided into house lots, it no longer functions as a working farm landscape – but it also no longer contributes in the same way to telling the story of the town. Farm, forest, villages and the roads that connect them can add up to large cultural landscapes – think of a trip down the older parts of Ten Rod Road, or the swath of farmland along Route 2. Like natural ecosystems, if these cultural landscapes are fragmented and developed too much they will simply no longer function.

The buildout analysis prepared as part of Phase I was able to estimate the impacts to natural and cultural resources likely if the town is fully developed with three, four and five-acre lots as required by the current zoning ordinances. Using GIS, the analysis calculated that over 20,000 acres could be converted to house lots. Of this, over 11,000 acres contain sensitive forest, farmland and other natural resources that would be impacted by development:

- Forested lands lost: 1,749 acres
- Agricultural lands lost: 1,215 acres
- Steep Slopes Impacted: 503 acres
- Hydric Soils impacted: 2,883 acres
- Prime Farmland Soils Lost: 2,149 acres
- Aquifer Recharge Areas Impacted: 2,618 acres

Harder for the computer analysis to measure is the gradual degradation of water supplies that would take place as hundreds of new homes are built in Exeter over the coming decades. Each septic system, every lawn and driveway contributes excess nutrients and other pollutants to ground and surface waters that can travel quickly. New wells will increase the competition for limited groundwater. As stated earlier, as soon as impervious cover reaches the 10% threshold, declines in water quality of streams and other water bodies start to impact healthy ecosystems.

Like water quality, loss of ecosystem continuity and function will likely occur gradually, but once it reaches a tipping point can rarely be restored. Even though the density of housing is relatively low, in some areas it will quickly overwhelm the ability of natural systems to respond. Unfortunately the zoning map treats every part of the Exeter in nearly the same way: from an environmental standpoint there is little difference between three-acre and five-acre lots.

As with the other types of natural resources, farmland and farmers will likely fade into insignificance long before the buildout is reached. Like most other businesses, economies of scale play a big role in making farming pay. Larger farms, as well as groups of smaller farms, can take advantage of common resources and sources of supply -- water, equipment, labor, roads, seed, feed, veterinary services, equipment repair, etc. As farms get smaller and more isolated they can quickly become uneconomical if any part of this support system is unavailable. In addition there is the phenomenon of people moving to new subdivisions because they like the rural view, then complaining about the dust, noise and smells that go with it.

The benefits of the village approach start with the simple protection of thousands of acres of farm and forest land that is possible when development is consolidated into villages rather than sprawling across the landscape. When a series of village alternatives prepared by participants in one of the Phase I workshops was analyzed by GIS, the total amount of land impacted by development ranged from 3,000 acres down to just 500 acres. Even for the higher number, the amount of sensitive lands impacted was greatly reduced from the buildout:

- Forested lands lost: 1,001 acres
- Agricultural lands lost: 120 acres
- Steep Slopes Impacted: 121 acres
- Hydric Soils impacted: 40 acres
- Prime Farmland Soils Lost: 140 acres
- Aquifer Recharge Areas Impacted: 380 acres

Thus, even the least dense village approach uses up only 20% of the sensitive natural resource lands that would be impacted by the conventional buildout. The real benefit of the approach, however, is that it allows developers the flexibility to avoid the most sensitive areas entirely, ensuring that ecosystems continue to function and water supplies are protected. In addition to



The village approach provides the flexibility to put more homes in areas that have the best conditions for development, while preserving farms, forest and wildlife habitat.

protecting stream corridors and wetlands, upland open space corridors can be set aside in critical areas to provide for the movement of wildlife and provision for hiking trails and other recreational uses. Combined with continued efforts to preserve entirely the most sensitive parcels, this approach can help to protect entire watersheds, such as the Queen River, that are critical to the future environmental health and water supply for the whole region.

Farms make up only a fraction of Exeter's total land area. With Village Development and Transfer of Development Rights, much of the remaining farmland could be saved -- at no cost to tax payers.



Likewise, the choices allowed through the village approach make it possible for Exeter to continue growing without ruining the cultural landscapes that give the town its unique rural character and quality of life. Villages can be designed to incorporate historic sites and buildings, stone walls, archaeological sites, scenic views and special places into the community plan - protecting the resources themselves, but just as importantly adding to the character of the village and enhancing quality of life for residents. Just imagine how nice it would be to arrive at your village home by way of a country road rolling through preserved farms and forests, passing ancient trees and stone walls, and greeting your neighbors at a community building fashioned from a historic home or barn. These are the kind of amenities that cost a developer little, assuming they have the flexibility to design around

existing features, while adding substantially to the value of the project.

Finally, the village offers unique opportunities to combine development with the protection of farmland and enhancement of the agricultural economy. As with other types of resources, the flexibility that comes by reducing the development

footprint and being able to set aside at least 80% of a site for open space makes it relatively simple to preserve farmland as part of the village development process. But it also raises the possibility of villages that return to the original village idea, where a community is surrounded by and intimately connected with the landscape from which it draws its food and water. All over the country, people are rediscovering the value of locally-grown food, and there are numerous examples of planned development projects that include agriculture. Community-Supported Agriculture (CSA) farms, organic vegetable farming, permaculture and other creative techniques are becoming part of the mainstream.

Perhaps the most important implication of the village approach for agriculture is the ability to solve a fundamental economic problem - how to pass farmland to the next generation. Most of the new farming ideas are driven by young people who have the energy and know-how, but no farm and no money to buy one. Older farmers who may be ready to move on would like to keep the land in production but can't afford to give up their nest egg -- so they end up selling the farm for development. The village approach can solve this economic equation by providing the up-front cash to buy out the current farm owners and then including the farmland as part of a village masterplan that includes both conservation and development. Since the village can take advantage of the development rights that go with the farmland, the farm itself could be sold or leased to young farmers at a rate they can afford. Meanwhile the farm provides food and other benefits to the residents of the village, value that is directly reflected in the economic value of the new homes.

Costs and Benefits for Community Character and Quality of Life

Throughout the Vision for Exeter process, residents have been vocal in wishing that there wouldn't be any further development in Exeter. They moved to the town because of its rural character and small-town quality of life, so why do we need villages, anyway – can't we just leave well enough

alone? Yet as the town grows from today's 2,300 homes to more than 5,000, which is likely under current zoning, the rural qualities residents love will slowly disappear - especially if the current zoning remains as the only option. Even with four and five-acre lots, the view from the road will consist of a series of driveways every 300 or 350 feet along every road, with a house set back in the middle of the lot – perhaps hidden in the trees, perhaps out in the middle of a field. In any case, the sense of driving through the countryside will be replaced with a sense of driving through an endless suburban subdivision. Even if the roadside trees and stone walls are protected, rural character will be changed forever, not least of all because the active use of the landscape for farming, forestry, hunting, fishing and other rural pursuits will come to an end. True rural character is much more than having some extra space around your home and a decorative mail box – it's about having a town where open space is the dominant element, where the experience of traveling through the town is organized by river valleys, forests, ridgelines and swaths of farmland rather than strip malls and subdivisions. And it's about maintaining the working landscape of farms and forests, not to mention the people who work in that landscape.

Stopping development in its tracks is certainly one way to maintain rural character – but that's simply not possible. All the private land in Exeter is zoned for some form of development, and for many owners the development value of that land represents their primary source of wealth. You can rely on the fact that many people don't need to sell their land and like it the way it is. If you have enough money you can buy it from them. Or you can encourage forms of development that respect the existing landscape. Villages could be part of this approach.

By definition a village concentrates development in one area, generally close to the best roads, and serviceable by shared infrastructure. For a given number of homes it will therefore have the least impact on the active use of the rural landscape. As we have seen, the village approach also brings with it the ability to save 80-90% of the land in a given area as permanently protected open space, allowing new neighborhoods to be surrounded by farms, forests, wetlands and other natural areas that provide a wealth of direct and indirect benefits to the community. This could include greenways and nature trails, buffers to protect water supplies, and areas for hunting and fishing. Increasingly people are also looking to get more of their food locally. Community gardens, community supported agriculture farms, and small organic vegetable and livestock operations are thriving. Each of these elements is possible using the village approach, but largely impossible using conventional large-lot zoning.

Villages provide a mechanism to maintain the rural character Exeter residents want, while providing amenities that enhance the quality of life for everyone. They do so in ways that are much less vulnerable to everything from dwindling oil supplies to the kind of extreme weather events that we are likely to see more of as time goes on. For instance, if you had to live without a car, wouldn't it be better to live in a village where you can walk to a store for many of your ordinary needs, and where you're within easy shuttle or bicycle access to the commuter rail station? And if the price of oil rises enough to double or triple the cost of shipping food across the country, wouldn't it be better to have the option to grow at least some of your food locally? Village life is not for everyone, and no one will be forced to sell their house in the country to move to a village, but if development is going to happen, doesn't it make sense to do so in a way that benefits the town?

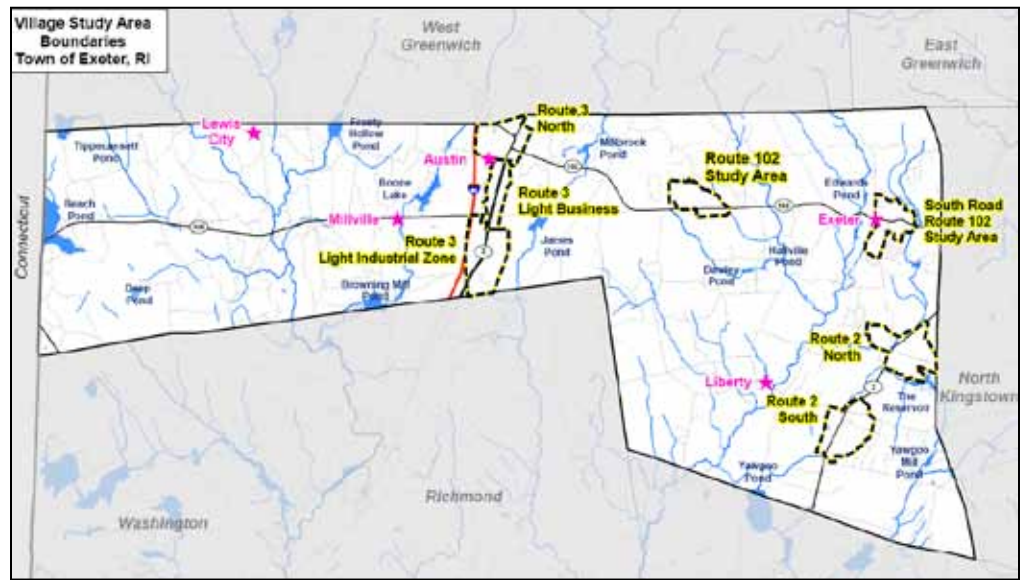


The rural landscape is nothing without working farms and farm families. Villages can help current owners pass farms on to the next generation.

V. Assessment of Potential Sites for Village Growth

Six sites were identified in Phase 1 by the public as potential sites for village growth (map, page 5). To determine their suitability for village growth, the consulting team prepared a Geographic Information System (GIS) analysis map for each site (figures 7-10). The analysis was based on existing data available from Rhode Island Geographic Information System (RIGIS). Orthophotographs – true color aerial photography taken in the spring of 2008 – served as the base layer. The first step was to overlay lands with major development constraints. This included surface waters, wetlands, hydric soils, vernal pools, ledge/outcrops and wellhead protection areas, as well as lands that are permanently protected. The next step was to overlay partial development constraints – factors that do not prohibit construction but which will make it more difficult and expensive. This includes soils with a seasonal high water table between 18-36 inches, floodplains, and slopes greater than 15%.

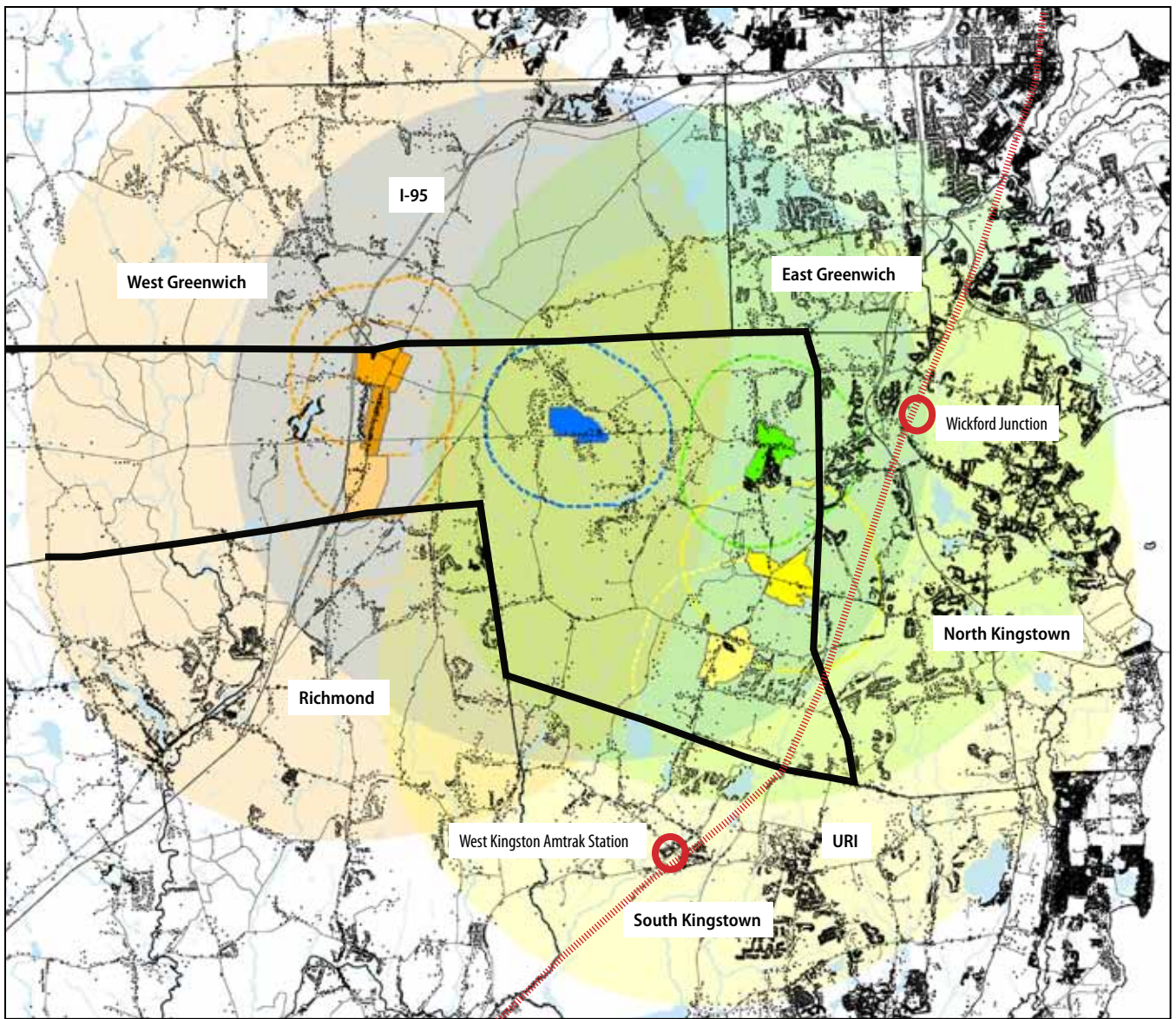
Map of Exeter showing location of village study areas. For the initial analysis a seventh potential site was added to the six identified through the Phase I workshops. This was the light industrial district at the South end of Route 3.



The resulting maps showed each of the six sites within its neighborhood context, and allowed the team to define a rough study area boundary for a potential village and determine how much buildable land would be available for future development. These study area boundaries were determined by the physical features that create a logical edge to a potential village, such as stream corridors and wetlands which would be difficult to cross with a new road; existing subdivisions; highway corridors; large protected open space parcels, town boundaries and steep slopes. While parcels can be consolidated into one ownership, these physical features cannot be ignored, and thus serve very literally as boundaries to each site. Where it made sense, existing parcel lines were used as the study area boundary line. As you will note in the maps, the potential village sites are not overly large, generally from 300-500 acres, which is a result of Exeter's complex topography and drainage patterns.

Development Context

The success of any of the village sites will to some extent depend on its development context, including the number of homes and businesses already in the neighborhood, access to regional highways and distance to transit stations. A map showing each of the sites in the context of Exeter and surrounding towns was prepared, using data from the statewide 911 property inventory to identify every home and business (Figure 7). This analysis demonstrates that village sites in the East part of



Village Study Area Boundary		1 Mile Study Area Buffer		<u>Building Count</u>
	Route 102 Study Area		Route 102	349
	South Road-Route 102 Study Area		South Road/Route 102	794
	Route 2 - North		Route 2 - North	538
	Route 2 - South		Route 2 - South	479
	Route 3 - North		Route 3 - North	327
	Route 3 - Light Business		Route 3 - Light Business	360
	Route 3 - Light Industrial Zone		Route 3 - Light Industrial	469

5 Mile Study Area Buffer					
	Route 102	6,448		Route 3	6,238
	South Road-Route 102	13,030		Route 2	13,746

Figure 7. Distance to Existing Homes and Businesses

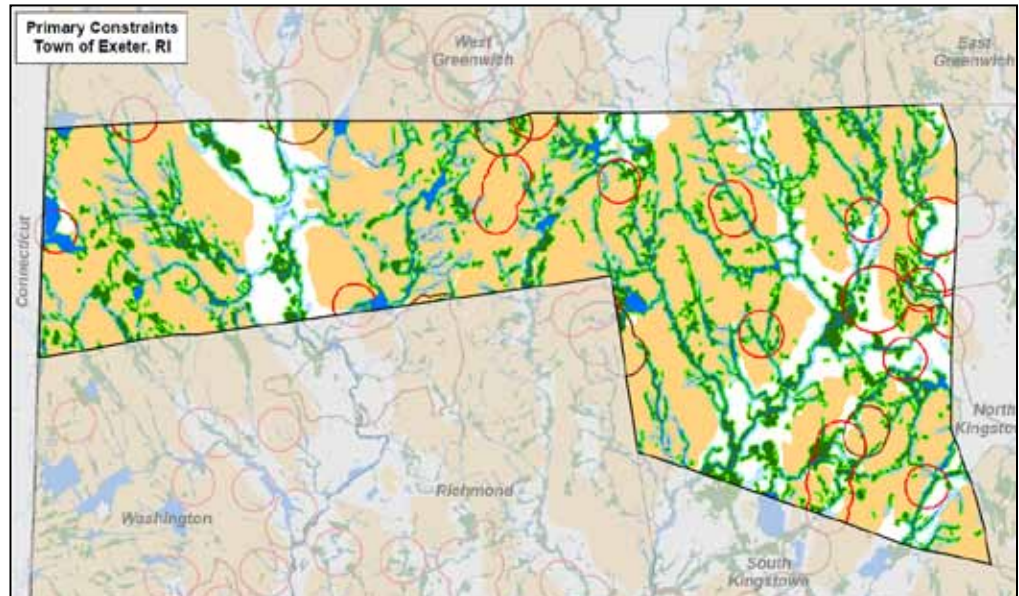
Exeter, especially along Route 2, would benefit greatly from access to the new Wickford Junction station, approximately 3 miles northeast, or the existing West Kingston station, about 4 miles to the south. Eastern village sites would also benefit by being able to draw from a larger existing population. The Exeter Road site, for example, has over 500 existing buildings within 1 mile, and more than 12,000 buildings within 5 miles.

Water Supply and Wastewater Disposal

As part of the assessment of the different potential village sites, Horsley Witten Group (HW) performed a GIS analysis designed to assess the potential for supplying drinking water and disposing of wastewater at each location. These planning level analyses used readily available data from Rhode Island Geographic Information Systems (RIGIS) to “screen out” soil types, geologic deposits, and other natural features that would make it difficult to yield adequate amounts of drinking water from subsurface aquifers or to dispose of high volumes of wastewater into subsurface deposits. Constraints that were used to remove subsurface areas included:

- Wetland polygons and associated 50-foot buffer.
- Stream lines and associated 200-foot buffer.
- Subsurface geology identified as glacial till.
- Any existing community wellhead protection areas.

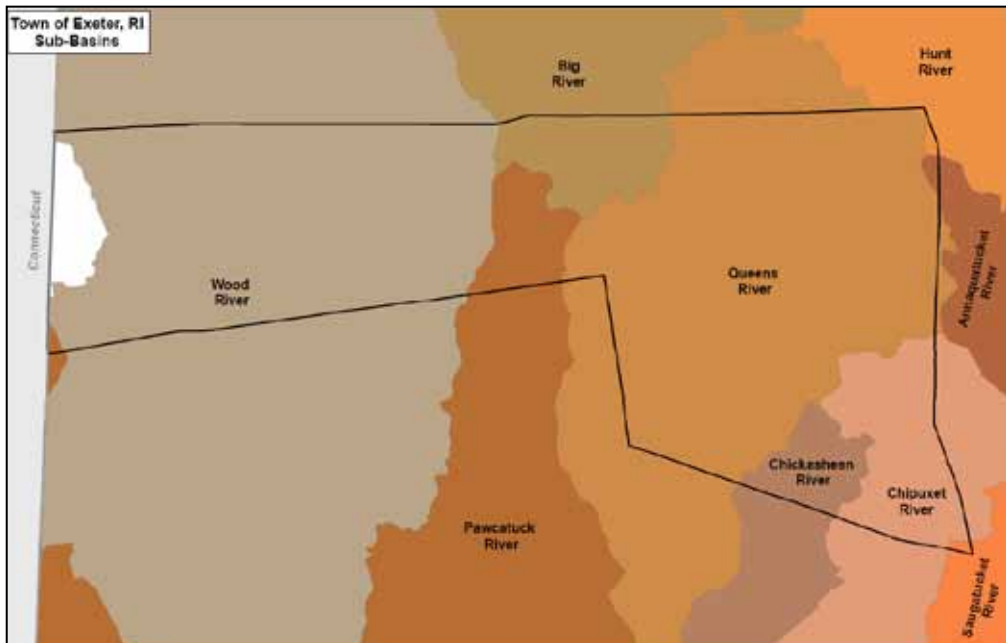
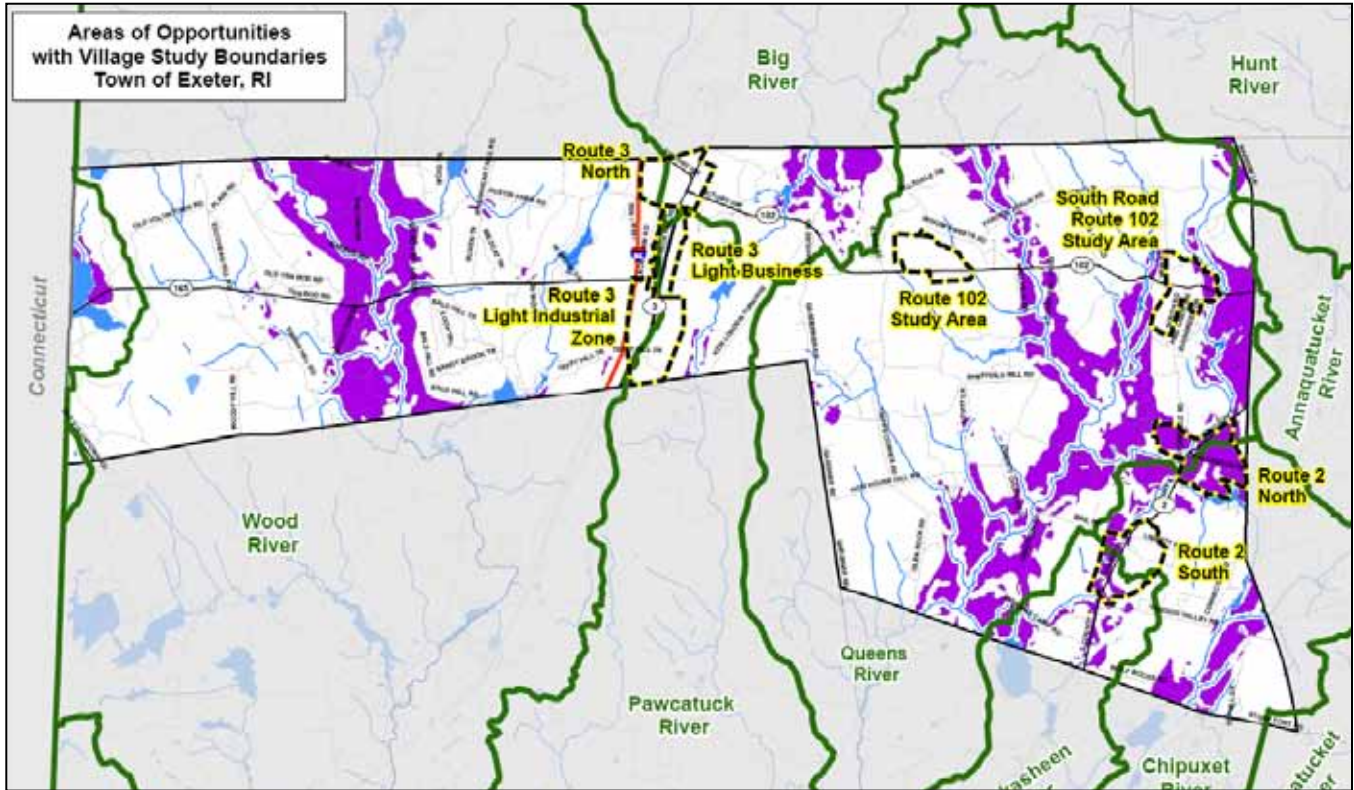
This map shows constraints that limit the availability of well water and the ability to dispose of high volumes of wastewater. Areas in white represent the most suitable locations for villages based on these constraints.



The results of this analysis demonstrated that only one of the village sites, the existing Exeter Road/Route 2 area, showed significant potential to both withdraw drinking water and dispose of wastewater. All other sites were significantly constrained. The Exeter Road site, however, includes land which drains into three different watersheds. This increases the risk of “inter-basin transfer”, which is a situation where water may be extracted from one basin and then disposed of in another. When inter-basin transfer does occur, it can significantly deplete groundwater levels in the “withdrawal basin”, causing stream flows to drop and impacting wetland resources in the watershed. RIDEM examines these impacts closely when permitting water withdrawals in the state and any future development of a well in this area would need to include an assessment of where the associated wastewater

would be recharged. Each activity—water withdrawal and wastewater disposal—would need to occur within the same basin.

It should be noted that despite having high levels of constraints from the perspective of wastewater disposal and water supply, these conditions, by themselves, do not preclude the development of more compact, village-style communities in the other areas assessed by HW. What would be affected is the degree to which village-scale densities can be achieved. Where a site is more constrained,

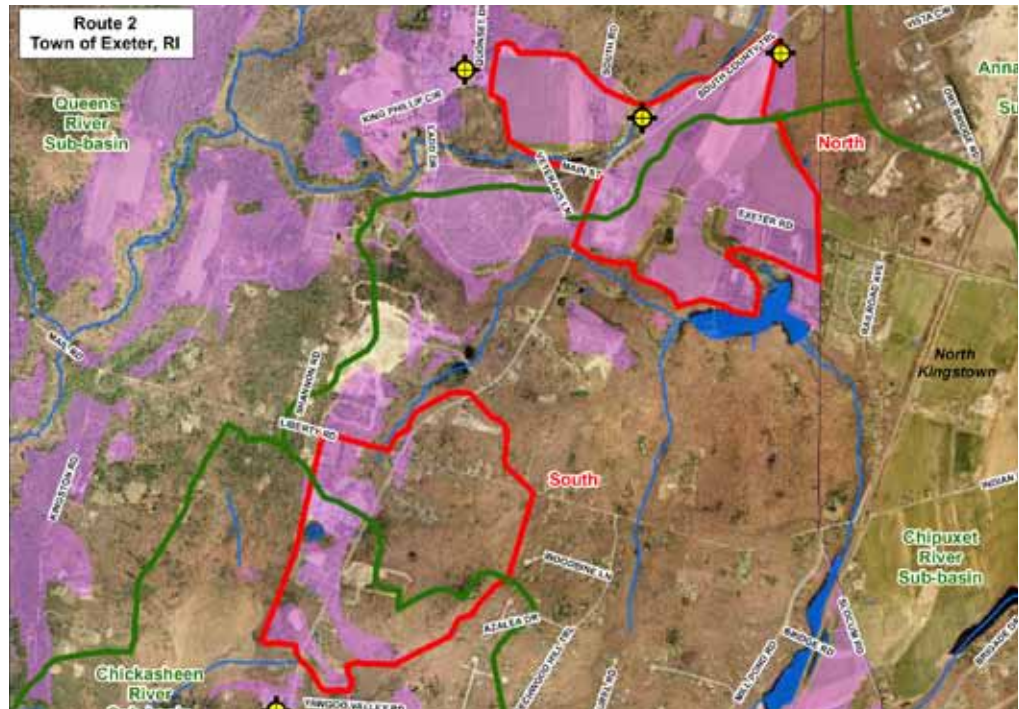


Most suitable locations for on-site wells and wastewater disposal systems are shown in purple on the map above. The overlay of potential village location demonstrates that those along the Route 2 corridor are the only ones with significant potential for on-site water and wastewater systems.

The map at left shows how Exeter is drained by nine or ten different river basins. Since transfer of water from one basin to another is regulated by RIDEM, village development on sites containing several watersheds must be serviced by systems that balance well-water supply and wastewater disposal within individual basins.

the scale of buildings, required setbacks for on-site wells and leach fields, and the area required for on-site wastewater disposal would shape the village in a way that limits its size and the overall density of development.

This map shows the most suitable areas for wells and wastewater disposal systems in purple, overlaid with the study area boundaries for potential village sites along Route 2. Mostly made up of flat, well-drained agricultural soils, the Exeter Road site appears to have the fewest constraints and the best soil conditions of all the village sites.

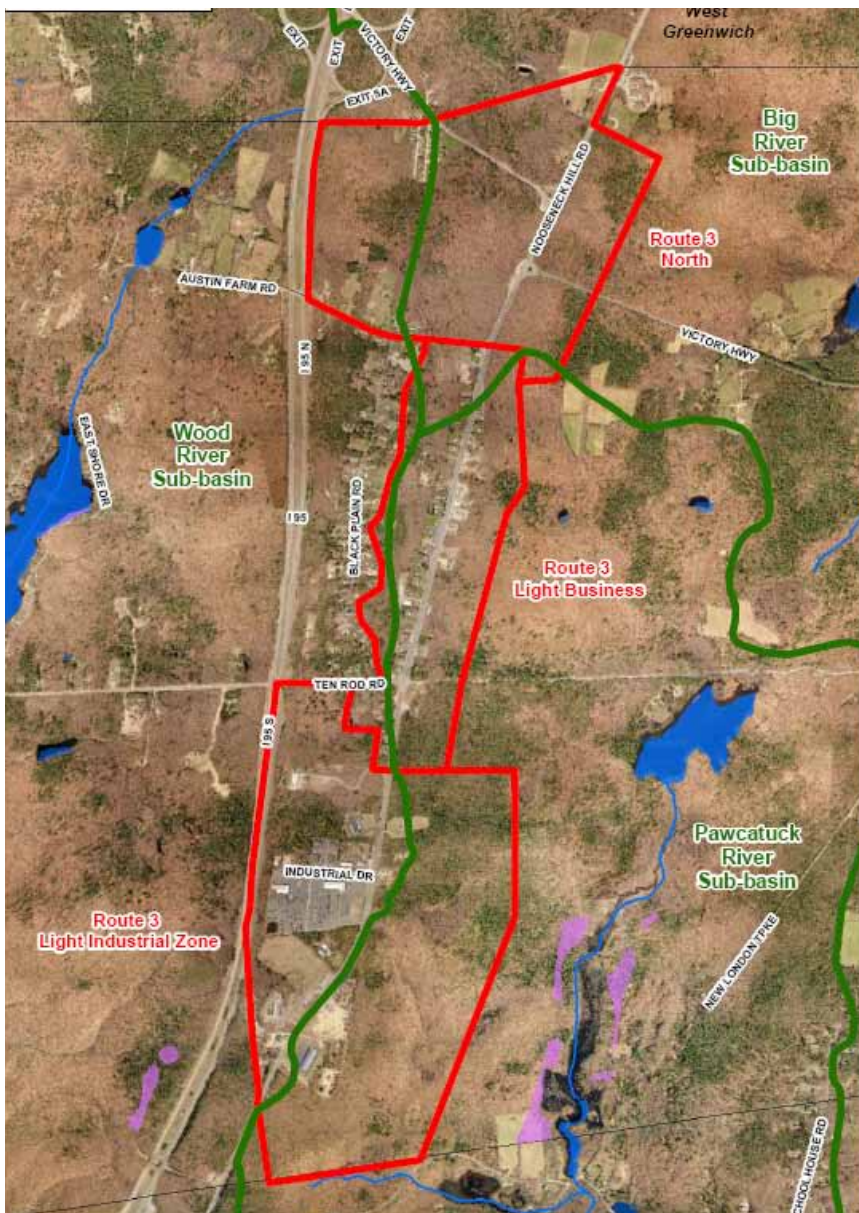
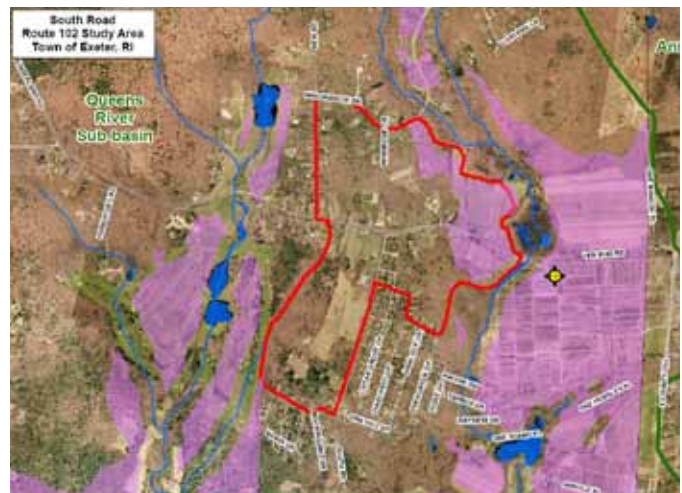


Conclusions

The sites were not ranked or a single site selected for a village. Each site can support development at higher densities than currently exist. The main issues limiting the size of a village are the “per unit” costs of providing water and wastewater treatment, the capacity of land to absorb wastewater at different scales, and the difficulty of working around existing land uses to assemble a meaningful development site. Based on the factors described above, as well as the availability of land, the surrounding neighborhood context and access to existing roads, the steering committee decided to present four of the sites to the public for further discussion at the September, 2010 public meeting. At the workshop residents agreed that when examined objectively there are some obvious criteria for identifying a good village site:

- Safe and convenient access to the regional highway network.
- Potential water supply in quantities sufficient to support the village.
- Soils suitable for shared wastewater treatment systems.
- Enough available developable land to make a village worthwhile.

After discussing the results of the third public workshop, as well as the subsequent ULI Technical Assistance Panel, the committee selected two of the sites as test cases to continue the process of exploring village development for Exeter. After a review of the detailed plans and village design approaches that resulted, and following additional public input at the fourth community meeting, the project team recommended that two of the original sites be designated as receiving areas: Exeter Road/Rt. 2 and the I-95 interchange area. See Section VIII for more information on the Planned Village District and potential sending and receiving areas.



The potential village site surrounding the Exeter Library on Rt. 102 (top left) appears to have limited potential to support a village-scale water supply and wastewater disposal system.

Likewise, the entire Route 3 corridor (left) has poor conditions for well and on-site wastewater. Obviously there are many homes and businesses in the area that are served by individual wells and septic, but it would require additional site investigation to determine the capacity of the area to support more extensive development.

The site at Route 102 and South Road (top right) displays a mix of soil conditions, wetlands and other factors that indicate it could support additional growth, depending on the parcels involved and the configuration of development. The potential for wastewater disposal is complicated here because the best soils are immediately adjacent to the stream corridors.

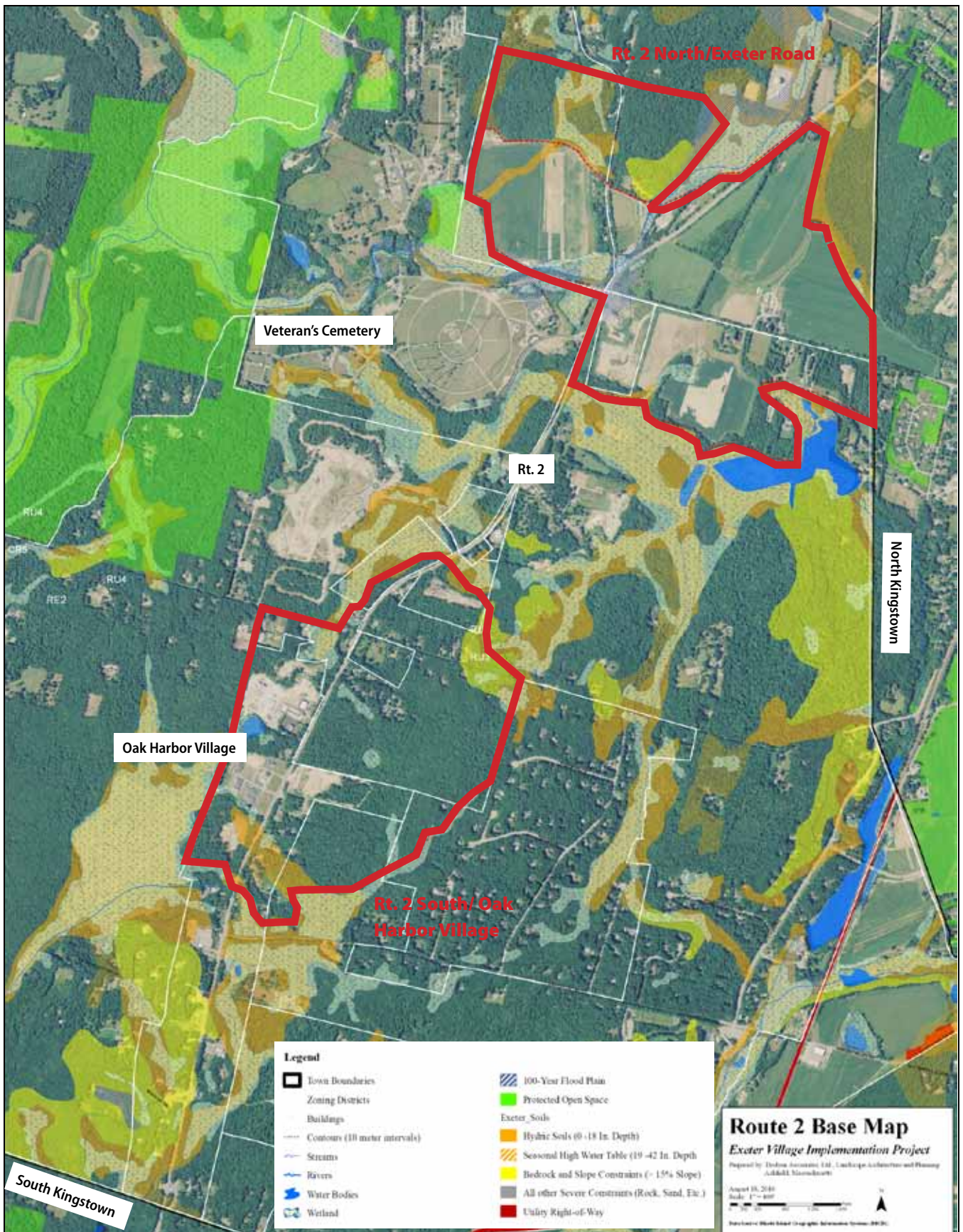


Figure 8. Potential Village Sites on Route 2 at Exeter Road and Oak Harbor Village

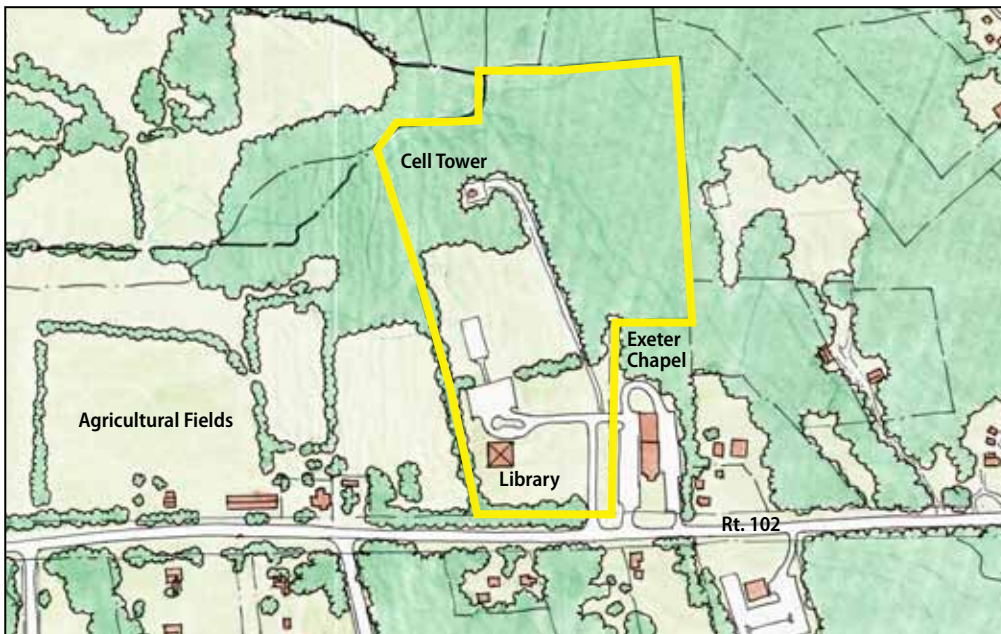
VI. Exploring Village Development for Exeter

Design Scenarios for the Route 102 village site

Figure 10 (left) illustrates the available area for village growth that was identified by the initial survey of potential village sites. The area is defined on the east and west by stream corridors, and to the north and south by existing streets and house lots. It includes the Exeter Library, and adjacent land which includes a site for a new town hall. The largest development parcel was partially cleared to create a golf course, which was never finished, but outline of the fairways remains. Along the Route 102 frontage there are several open agricultural parcels.



Existing Conditions: this maps illustrates current conditions on the Route 102 Village Site. Most of the land is heavily wooded, except for the farms along Rt. 102 and the fairways cleared as part of a never-completed golf course development.



An enlargement of the area around the library shows the potential site for the new town hall and other town-owned land. Restrictions placed on the property when it was sold to the town limit residential growth.

Aerial photographs show the existing open farmland along Route 102 and clearing for the abandoned golf course project on the hill to the Northwest. A more detailed view of the library site (below) shows the site for the planned new Town Hall facing the library green. (Photos courtesy Microsoft Bing Maps).



Potential Buildout Under Current Zoning: This plan shows additional frontage development along Route 102, and includes the preliminary plan for the Cobblestone Village development, which rises up the hill on the parcel that was previously cleared for a golf course. While the proposed Cobblestone plan is based on a traditional village model, its location on top of a the hill will isolate it from other nearby development.





Proposed Village Alternative: An alternative approach pulls the development off of the hill and brings new homes closer to the existing library. The library is joined by a new town hall and additional mixed-use commercial/residential buildings on the town-owned parcel. A new road connects across the back of the lots from the entrance to Cobblestone Village to the library. It could continue eastward from the library site to Widow Sweets Road, allowing current residents to get to the library and new town hall without having to pull out on Route 102.



While wetlands, streams and topography make it difficult to gather all the potential development in a single village cluster, it is possible to link a village core to the outlying neighborhoods with walkable village streets. Careful layout of streets and preservation of existing open fields allows for the same amount of development as is possible under the conventional development plan while preserving important open space features. Note: deed restrictions placed on the town-owned site and the east side of the Cobblestone village property at the time of their sale would not allow the plan as shown to be built.

Design Scenarios for the Exeter Road village site

The potential village site at Route 2 and Exeter Road includes about 500 acres of land, about half of which is in active agricultural use. As shown in a 2008 orthophoto (below), most of the farmland is along the road, with wooded land behind. To the west (left side of image) protected land along the Queen River abuts the Ladd Center and the Veteran's Cemetery. To the east is the border with North Kingstown. North and south, stream corridors and existing development form the boundaries of the study area. Streams and wetlands subdivide the site into three or four separate areas, but there is good access from existing road frontage to each part of the potential village.





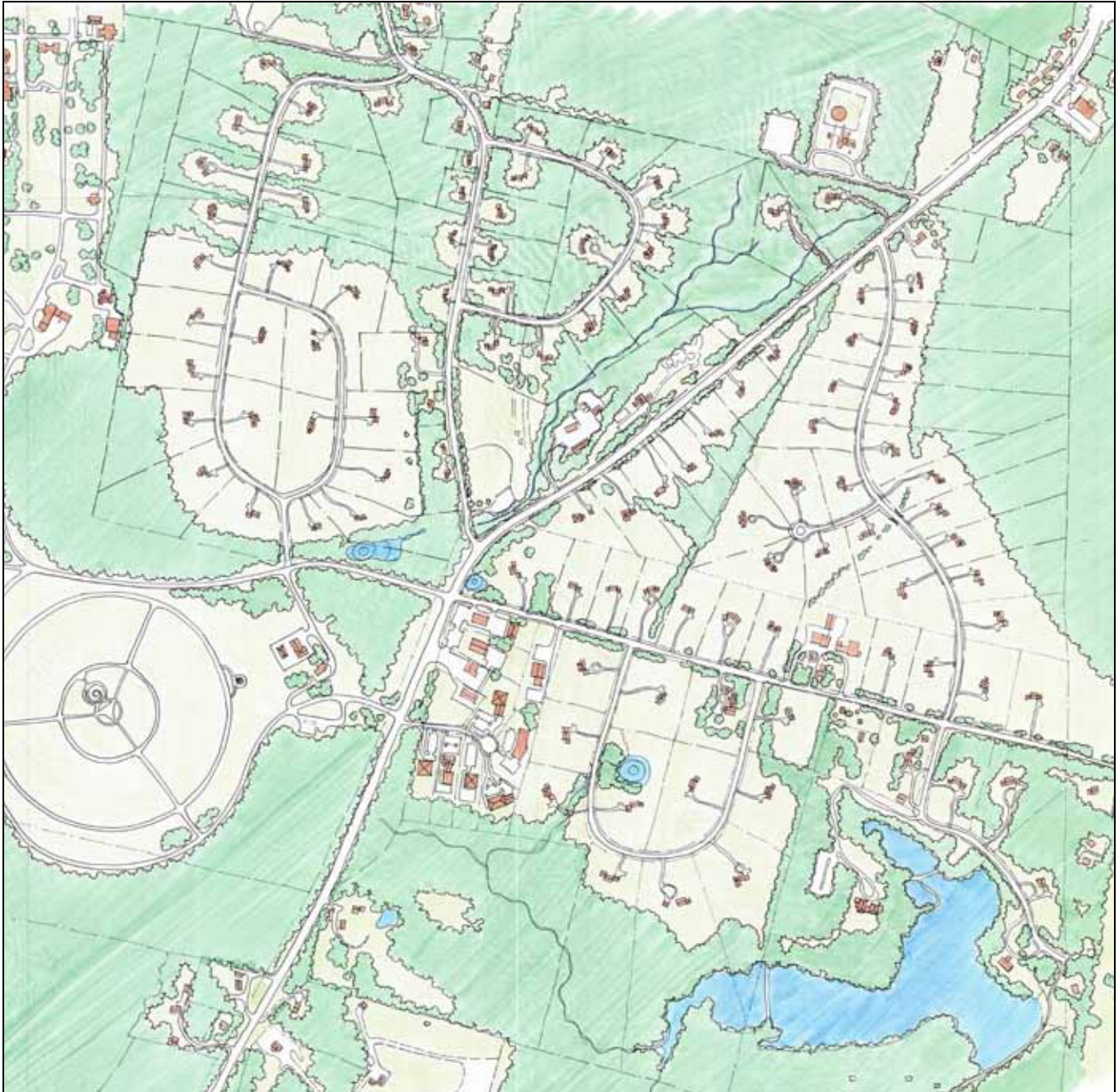
This aerial photograph shows the study area from the south, with Route 2 and on the left side of the image. Most of the farmland is owned by the Albert Family. The Canonicus Camp surrounds the pond at the lower right. (Photo courtesy Microsoft Bing Maps).



A base map of the study area was prepared showing existing conditions, with dark green for forest, light green for farmland and lawns, and tan for existing buildings. The dashed blue line shows the boundaries of the town-owned Reynolds property.

Conventional Development Under Current Zoning

Under current zoning the study area would be divided into a mix of 89 three and four acre lots. Within the light business/residential zone that surrounds the Exeter Mall there could be nine new commercial/office buildings. To service the new homes and businesses there would be total of 15, 250 feet of new road, or 171 feet of road per unit. Each lot would have its own well and wastewater disposal system.



Conservation Development



Using the town's Conservation Development ordinance, the same number of new homes and businesses could be clustered on those areas within each separate parcel most suited for development, leaving much of the farm and forest land undeveloped. Under the plan shown this would result in 89 half-acre residential lots and nine commercial/office buildings in the light business/residential zone. This would require 11,050 feet of new road, or 124 feet per unit. All structures would have individual well and wastewater systems.

Village with Half-acre Lots



In the first village scenario, the same 89 homes allowed in the conventional and conservation development plans are clustered in a village centered on Exeter Road. The nine new commercial buildings would also remain part of the plan, replacing the existing Exeter Mall buildings. The village approach would need just 7100 feet of new road, or 80 feet per unit.

This plan is an enlargement of the previous village scheme, showing how the new homes and businesses could be arranged around an irregular grid of village streets. The commercial area would remain on the Exeter Mall property, but some of the buildings would be turned to face an interior main street shared with residences. Other commercial structures would line the frontage along Route 2. Parking would be in a shared lot in the center of the commercial area, hiding the cars behind the buildings and allowing the street frontage to be more pedestrian-friendly. Residential building lots would line the new streets, and most houses would have views either of a new park or of the protected farms and forest surrounding the village. With half-acre lots, water and wastewater could be either individual or shared.

Some of the land protected through the village development process could be turned into recreational fields (lower right), and there would be room for a Community-Supported Agriculture farm (CSA). Other surrounding farm and forest land would remain in private hands, with conservation restrictions to prevent further development.

Village with Half-Acre Lots: Detail



Village with Quarter-Acre Lots

This plan explores the result of doubling the number of homes in the village using Transfer of Development Rights (TDR). Under this scheme lots would be 1/4 acre in size, allowing an additional 89 units to be transferred to the same village footprint. The TDR process would permanently protect farmland elsewhere (note that every house is not shown in this plan, just the boundaries of the house lots).

This scheme would require a shared water supply, but each house could still be serviced with an individual wastewater disposal system. The plan shows 178 total units: 160 single-family detached and 18 in attached units on 6 lots with three units per building. The commercial areas would remain as in the previous plan, with 9 buildings. With more lots to serve, there would be 9700 feet of road needed, but just 55 feet of road per unit.



Village with Eighth-Acre Lots



This plan shows a village with the number of lots doubled from the previous scheme to a total of 356 new homes. This is possible within the same village footprint by reducing lot sizes to 1/8 acre: a lot of about 50 feet wide and 100 feet deep. This is a very traditional village lot size, and easily accommodates a house, driveway and garage. This scheme shows some of the lots in the core of the village as attached units, with 5-10 units per building. This allows for a greater range in housing types, and provides an alternative for younger people and seniors who don't need a single-family house but still want to live in Exeter.

The centerpiece of the village continues to be a "Main Street" lined with commercial buildings, with parking hidden in the rear. All of this can be serviced with 9700 feet of new road, or just 27 feet per unit. There would be both a shared water supply and wastewater disposal system

While there are many more new homes in this scheme than the previous scenarios, keep in mind that this would only happen through a TDR process that in this case would permanently protect more than 400 acres in the immediate vicinity, and more than 1000 acres elsewhere in town -- all at no expense to the taxpayer.



Even though people live closer together in a village than they would otherwise in Exeter, there can still be a very high quality of life. Pedestrian-friendly streets, such as the center of South County Commons in South Kingstown (far left) provide a lot of uses within a small area, encouraging walking and making for a diverse and lively experience.

In residential areas, porches, front yards with picket fences and abundant landscaping provide a comfortable separation between public and private spaces. Because the developer spends much less per unit on roads and other development costs, there are additional funds for landscaping, parks and other amenities.



VII. Detailed design for the Exeter Road Village Site

Following review of the village planning alternatives for the Route 2/Exeter Road site, a final illustrative plan was prepared showing a village with a minimum lot size of 1/8 acre and a total of about 300 new homes (below). The plan uses the same overall footprint as the previous schemes, but all the details of access, parking, pedestrian and vehicular circulation have been worked out. Every residential and commercial structure is drawn to scale based on actual examples that have been successful in the marketplace. To encourage diversity of new homes, the model village scheme shows seven different housing types; thus within an overall density of about 1/8 acre per unit, densities within the village range from 25-30 units per acre for the apartments down to 2 units per acre around the edge of the village. The most numerous houses are on the standard 50'x 100' village lots.





Mixed-use



Village Core



Apartments



Village Edge



Townhouses



Duplexes



Cottages

This illustration shows the village in perspective from the south, with building types color-coded. The plan is organized so that the denser development is within the core of the village, with larger lots along the streets around the periphery of the village.

Two alternatives for the design of the mixed use "Main Street" at the core of the village demonstrate how the details can easily change while preserving the basic village design. In this case the difference between the schemes is the bottom image shows the new church that was begun on the site as the planning process was underway. The plan also shows the footprints of the existing Exeter Mall and post office buildings. These could both remain as the village grows around them, being replaced in time by newer structures along the proposed main street.



The Village in Context



Existing Conditions

This perspective shows the village from the south.



Conventional Development

This shows the same view, with the farms and forests divided into 89 house lots.



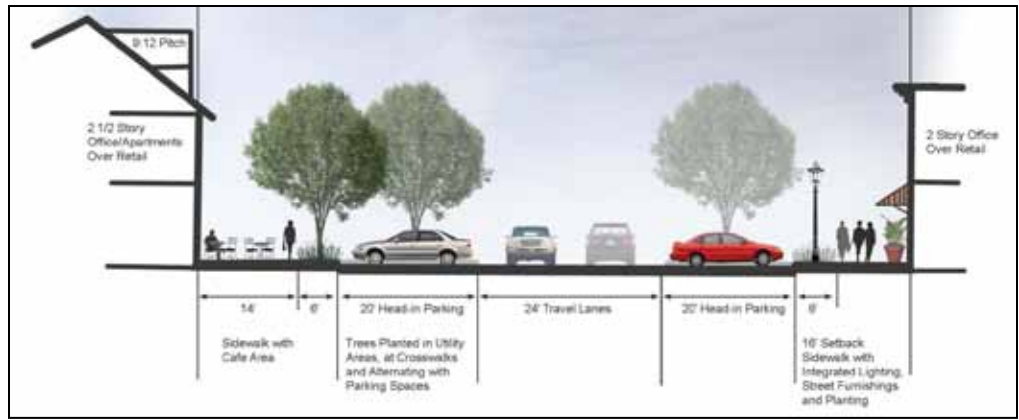
Village Development

This view shows the potential village, surrounded by permanently protected farms and forest land. Keep in mind that the extra units allowed in the village above and beyond the original 89 would only be allowed through preservation of additional open space elsewhere in Exeter.

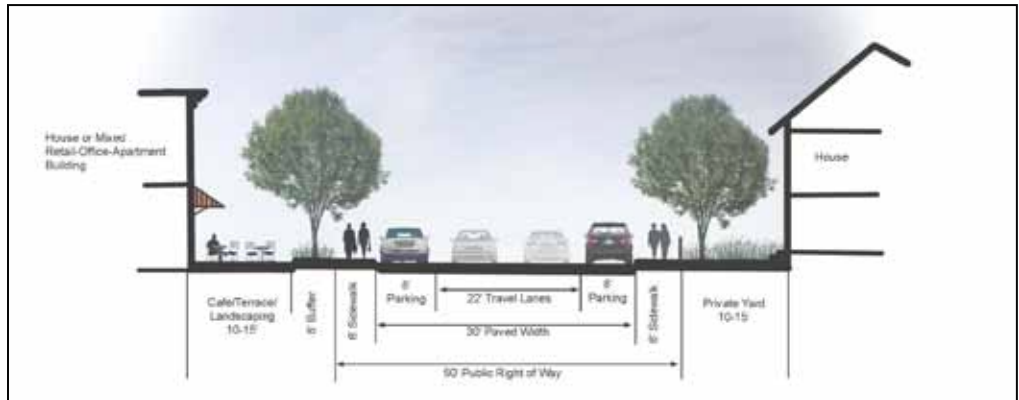
Cross -Sections of Village Streets

Each street within a proposed village will be carefully designed to accommodate proposed uses and density and to provide safe and efficient access for pedestrians, vehicles, and bicycles.

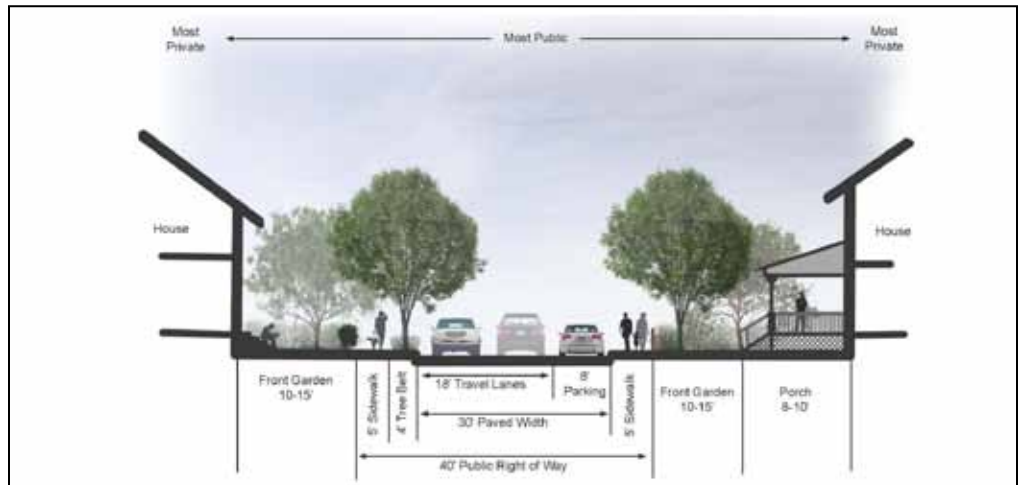
Commercial Street



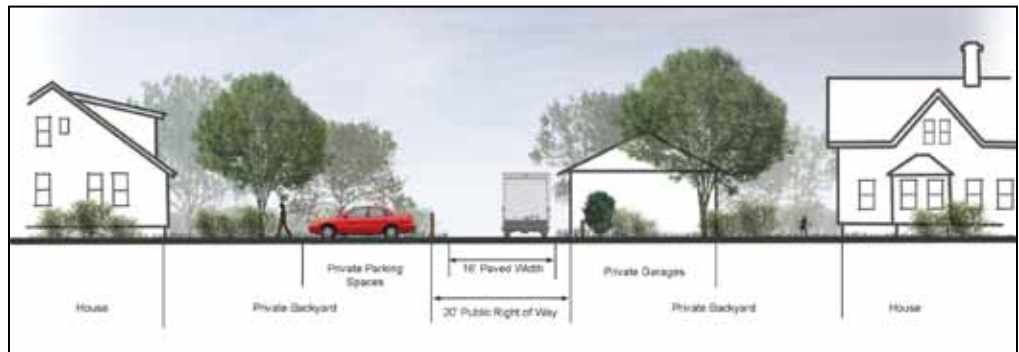
Primary Village Street



Secondary Village Street



Residential Alley





An aerial view of the mixed-use core of the village shows how the buildings would line broad sidewalks along a two-way street with angled parking. There could be a flexible mix of uses within the buildings, with retail and office space on the first floors, and upper story offices or apartments. Parking would be to the rear of the buildings, and most could have entrances on both sides.



A ground-level view shows the space along the street that is created by the walls of the various buildings, with slight variations in setback allowing for outdoor cafes, gardens, and display space for shops and other businesses. Parking is broken up by planted "bump-outs," which narrow the width of pavement at cross walks. Street trees are provided with enough room to accommodate future growth, and will eventually form a nearly continuous canopy.



This view illustrates a residential area on the east side of the proposed village. The homes surround a small park, which is connected by sidewalks to the rest of the village. Parking is in the rear, where garages are accessed from shared driveways or alleys. This allows for the street frontage to be attractively landscaped, and minimizes conflicts between cars and pedestrians.

VIII. Implementing Village Growth: Draft Ordinances

The Regulatory Amendments

As a final piece to the project, HW and Dodson worked with A Vision for Exeter and the Planning Board to develop a complete regulatory package designed to enable the development of a village suitable to Exeter. The regulatory package was informed in large part by the myriad illustrations developed as part of the outreach process and lengthy discussions with members of the community. The regulatory package included over 40 pages of material divided into amendments for the Zoning Ordinance and the Land Development and Subdivision Regulations. Descriptions of the important regulatory pieces are provided below. Complete drafts of each section are included as an appendix to the report.

The Village Ordinance

The core of the regulatory work is found in the Planned Village District (the “PV District”). This new district operates as potential new zoning district that requires an actual development application to be mapped. The criteria for where this district could be drawn focus it on the areas identified as the best locations for future village development as part of this study. Village development in Exeter is conceived of as an optional approach rather than a mandatory requirement, and the use of a “confined floating district” was appropriate to that goal. The PV District provisions lay the foundation for village development by setting the allowable uses and the permit procedures. Provisions of the ordinance related to the PV District also establish standards for dimensional requirements (setback, height, etc.), density limits for residential development, limitations on building footprint size, parking requirements, and requirements for affordable housing.

Transfer of Development Rights (TDR)

Another critical piece to the regulatory package is the use of TDR. During the outreach process, it was clear that residents of Exeter would consider development at village scales and densities only on the condition that TDR was used to achieve those densities. Therefore, a full set of TDR zoning ordinance and land development regulations were developed to enable the rights from existing forest and farm land to be transferred to the PV District. The full draft of the TDR regulatory package can be viewed in the appendix to this report, but key elements include:

1. Sending Area Identification: The Sending Area within a TDR program is the land that is targeted for preservation, whether as natural forest land or as a working farm. These lands are generally zoned for residential use and are therefore at risk for subdivision development. In Exeter, recognizing the widespread amount of undeveloped land that is zoned for residential use, the Town decided to include any undeveloped land in the RU-3, RU-4, and RU-5 districts in the Sending Area.

2. Receiving Area Identification: The Receiving Area is the area(s) in the Town to which develop-

ment rights from the Sending Area would be transferred. Of the eight possible village sites explored by Exeter, ultimately two were selected as potential Receiving Areas: 1) the area located around the intersection of Route 2 and Exeter Road and 2) the area located just off Route 3 adjacent to the I-95 Interchange.

3. Yield Determination: As part of the TDR analysis, a landowner in the Sending Area must determine how many units of housing could reasonably be expected to be developed at full build out. This process occurs through the use of a Yield Plan, which is a site plan for a subdivision reviewed by the Planning Board. If the Planning Board determines that the Yield Plan is acceptable, then each house lot depicted on the plan is vested as a “development right” which can then be sold through TDR.

4. “Scoring” of Sending Area Lands: As previously mentioned, the Sending Area in Exeter was identified as any land within the RU-3, RU-4, and RU-5 districts. This allows for broad eligibility across the community. However, A Vision for Exeter and the Planning Board also recognized that not all Sending Area lands have the same level of priority from a conservation perspective. The group therefore developed a scoring matrix that will be used to rank land based on a series of value based criteria. Factors such as proximity to the village core, quality of agricultural soils, proximity to aquifer protection areas and many other factors are weighed as part of the matrix and provide incentives for developers to pursue the development rights for higher value land.

5. TDR “Transfer Ratios”: A critical piece to any TDR ordinance is determining the value relationship between housing in the Sending Area and Housing in the Receiving Area. The question that needs to be answered is, “How many units is a developer allowed to build in the village for every development right to a single family home that he or she purchases?” For example, in the Exeter Sending Areas, housing could be built upon minimum lot sizes ranging from three to five acres. The value of these homes will obviously be different from a village-style home that could be built on much smaller lots or as part of a mixed use apartment concept. It was therefore important to develop a transfer ratio that establishes the number of alternative housing style units (such as apartments, town house, or small lot detached) that would be provided in return for removing the development rights for larger lot development. HW examined property values in Exeter and other South County communities for different housing types to develop a reasonable set of transfer ratios to include in the land development regulations. Transfer ratios proposed as part of the zoning are modest for detached single family units in the village, ranging from one development right yielding 1.2 to 1.7 small lot, detached homes. Ratios were also provided for townhouse and multi-family homes, with the highest possible yield for one development right being four multi-family units.

6. Fee-in-lieu of TDR Option: One of the more difficult elements of TDR to control is the feasibility of an actual successful sale of development rights. In some cases, there may be a willing buyer, but there may be no development rights available to purchase. In other cases, there may be development rights to sell, but the buyer and seller cannot come to terms on the price. In anticipation of these issues, Exeter developed a process through which a prospective applicant for Planned Village Development can provide a fee-in-lieu of purchasing development rights and move forward with an application. The appropriate fee is determined by the Town through a property valuation process and the fees are deposited in a restricted account that can only be used for the purchase of development rights.

Design Guidelines

The final major piece to the regulatory package includes the Design Guidelines that will allow the Planning Board to shape various design aspects of any Planned Village Development application. These illustrated guidelines build upon many of the narrative design guidelines that already existed within the Exeter Zoning Ordinance and supplement these guidelines with more detail and illustrations. Issues related to pedestrian mobility, bicycle and automobile circulation, diversity of building design, landscaping, signage and other elements are covered within the revised guidelines. Where appropriate, design guidelines were placed within the land development regulations to provide a greater level of flexibility for the Planning Board.

Housekeeping Items

As with any large-scale zoning ordinance reform, a number of so-called “housekeeping items” were developed to ensure that the new provisions for village development and TDR did not result in conflicts with existing language elsewhere in local regulations. Housekeeping items included the addition of definitions, specific exemptions from standards that would not apply to village development, and references to new requirements in the land development regulations.

A Planned Village District would include, as part of its official plan, a diagram like this one that would show in detail the location and extent of each development type. A phasing plan would ensure that as the village grows over time, each neighborhood within it functions as a complete whole.

