

# **TOWN OF DERBY MUNICIPAL PLAN**

## **2009**

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## **ACKNOWLEDGEMENTS**

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## **HISTORY OF THE TOWN OF DERBY**

We take pride in our ancestor's diligence, foresight, and hard work in creating this town we call our home. A brief history of the settlement patterns of Derby as well as a history of the industrial and agricultural growth in this Town follows:

The Town of Derby shares a border with Canada to the north, and with the Towns of Holland, Morgan, Charleston, Browning ton, Coventry and Newport on its other edges. It is an area of lakes, ponds and streams, some rolling hills and some large tracts of level plains. Within its borders, Derby contains all or parts of Lake Memphremagog, Clyde Pond, Derby Pond, Salem Lake, Cobb Pond, Browning ton Pond, and numerous other smaller ponds. Major tributaries include the Clyde River, Johns River, Tomifobia River, Cobb Brook, and many smaller streams. Such an abundance of water played an important part in the growth of the Town, and will continue to do so as bodies of water constitute prime recreational resources as well as being necessary for an abundant community water supply. The main roads running north/south afford views of the Green Mountains to the west and White Mountains to the east along with their adjacent foothills. The Town is located on plateaus, which rise from an elevation of 695 feet at Lake Memphremagog, to 975 feet at Derby Center, and 1345 feet at Darling Hill in the northwestern portion of the Town. The gentle slope of much of the land and the ready availability of the water makes development practical, but only careful planning will ensure that the natural assets of the community are not destroyed in the process.

Settlement has been concentrated in the two Villages of Derby Line and Derby Center, with smaller clusters of population in Beebe Plain and West Derby. The recent trend of vacation homes has resulted in densely settled lakeshore areas, thus forming additional residential areas. Throughout the remainder of the Town, large dairy farms and smaller farms of varying types are found. Sections of swamps and wetlands along some streams have not been settled, and there is much open land between the existing roads, some of it used for pasture, some for woodlots, and some not in use at present time.

Long occupied by the Algonquin Indians, the area now known as Derby was first settled in the middle of the 18th century and chartered as a town in 1779. It grew rapidly since the land was conducive to farming and settlement, and in 1880 Salem was annexed to the Town. Commerce and industry was concentrated in the Villages, but lumbering, cattle farming, maple sugar manufacturing and crop farming were important livelihoods.

The Village of West Derby was incorporated in 1848. At the time West Derby was first settled, the City of Newport and West Derby were separated by water. In 1832 the two entities constructed the first of several bridges across the swamp and water to connect Newport with the Town of Derby. In 1918 Newport annexed West Derby with the Towns approval. The Town of Derby now occupies an area of approximately 37,696 acres including the two remaining incorporated Villages.

Derby Line occupies approximately 575 acres of the Town of Derby. According to historical records, it was first settled in 1798 and grew rapidly as a border village, where trade with England could be conducted through the Canadian province of Quebec. Its role

as a trade center and port of entry has given the Village an international character, a quality maintained up to the present time. Derby Line stands unique with the Haskell Library and Opera House, which straddles the border of both the United States and Canada. A number of nearby homes lie on the border as well, with portions of many of the residences divided between the two countries.

Where once the main street contained a tannery, a distillery, a foundry, and a slaughterhouse, it now consists of a U.S. Customs House, stores, post office and village service facilities.

The Village of Derby Center, settled in 1794, now occupies approximately 820 acres, truly situated in the very center of the Town of Derby, midway between Derby Line and Newport City. By 1850, the Villages contained 8 sawmills, two gristmills, a tannery, and a shingle mill, made feasible by the abundant water supply of the Clyde River. As the area changed from forest to pastureland as a result of the efforts of the early settlers, these industries disappeared and now the Village remains as a traditional center with schools, stores, Village Offices, and gas stations.

The Town is governed by the following appointed and elected officials: a Board of Selectmen, a Town Clerk, Listers, a Board of Civil Authority, a Zoning Board, a Zoning Administrator and a Planning Commission. Both Derby and Derby Line Villages use the services of Trustees to handle their separate affairs.

Dairy farming, the mainstay of Derby's agriculture has been gradually declining since the 1950s. In 1974 there were about 141 farms in Derby, in 1990 about 55, and now that number is 12 active farms. Not all this land was lost due to development; many of the farms have been consolidated into larger enterprises. Other types of agriculture in Derby include beef, sheep, honey, vegetables, elk, Christmas trees, and maple syrup production.

Forestlands are important to the Town for many reasons. They provide wildlife habitat, watershed protection, recreation space, and scenic vistas. They are also a source of renewable wood products including firewood, lumber and fence posts. Logging, a source of income for many residents also depends on a healthy forestland to economically support many of Derby's families.

The dominant economic force in Derby has been traditionally agricultural in nature. During recent years, however, this force has been supplemented with other economic forces, which reflect Derby's evolving nature toward a balanced mix of agricultural, trade and industrial influences. Derby's geographic location on the international border along with its ready access to a modern interstate highway system position the Town to take advantage of the free trade agreements between the US and Canada. This, combined with the areas abundant labor supply and highly attractive recreational resources, can make Derby a leader in economic and social prosperity in the 2000s.

## **INTRODUCTION TO THE PLAN**

This Town Plan is intended to preserve, protect, and enhance the many positive attributes of the Derby community, and minimize or prevent adverse impacts upon its residents. The Plan is the Town of Derby's foundation policy document for the next five years, created under the Vermont Municipal and Regional Planning & Development Act (24 V.S.A Chapter 117). Its purpose is to promote the common good and provide for the general welfare of the people of Derby.

This Plan will be implemented in a variety of ways. The Town should apply these goals and policies stated herein in all its deliberations, such as when making policy decisions, adopting Capital Improvement Plans, considering changes to the Zoning Ordinance, or considering development projects. A good Plan can put the Town on the path to responsible economic development and sound fiscal health while making it a good neighbor to surrounding towns and a working partner with future state initiated development.

As a part of the budget process, the Town can adopt a series of initiatives that will allow it to begin making investments in the infrastructure essential to responsible development. A principal initiative is the assignment of the responsibility for economic development from the government side, (meaning streamlining processes and eliminating regulatory obstacles), as well as obtaining funding through grants and other external funding initiatives for businesses wanting to locate in the Town of Derby. The economic development picture can only begin with this commitment from the Town government.

As we look forward, we must refine the strategic planning process to include a review of the program priorities and look to alternative funding mechanisms for promoting development. Town residents are an integral part of this plan and could look forward to a stable tax rate, convenient day-to-day services, and an expanding tax base resulting in an improved quality of life.

This Plan is best done with proper financial planning, prudent spending practices and by building a solid economic base through high quality development in a controlled environment.

The Planning Commission is grateful for the input received from interested citizens who gave their time and effort to participate in the development of this Plan.

## **GOALS AND OBJECTIVES**

General goals have been developed to reflect the desires of the local community. These goals are designed to create a balance between the local desire to allow for a reasonable rate of growth and the desire to retain the community's Village Centers as residential and commercial zones as well as protecting through zoning regulations shore lands, prime agriculture lands, and special scenic areas.

Our goals include the following:

A. Preserving the integrity of the environment utilizing generally acceptable engineering/scientific principles and sound economic evaluation toward a balanced protection of the present and future rights and equities of all future citizens. Environmental protection is a primary factor within all existing operations and future development within the Town and its surrounding communities.

B. Having environmentally friendly businesses locate in Derby to diversify the tax base and provide higher paying, skilled jobs.

C. Provide inducements for institutions of higher learning and research entities seeking accessible lands for the construction of educational facilities. Particular priority attention to technical schools and colleges that will provide a stream of technicians to support existing businesses in the area, and provide an inducement for businesses in targeted industries to relocate or expand to this area.

D. The development of an indoor recreation facility.

E. Infrastructure improvements through business contributions and through government facilities, additions and grants.

F. Promote sewer and water extensions to support a workforce development center and appropriate industrial development, bring high skilled, good paying jobs to the county.

G. Support affordable quality childcare. Many families lead lives that require full or at least part-time childcare outside of their homes and Derby recognizes that affordable, accessible, and quality childcare is a critical community need. Although the Town is not involved in providing childcare for local children, the Derby Elementary School does offer an after school program for grades 1 through 6. Most childcare needs are served by small, private childcare facilities that are scattered throughout the Town and neighboring communities. Small childcare services that care for six or fewer children are considered home occupations and larger facilities require more extensive permitting review.

## **PROTECTION OF THE ENVIRONMENT**

A principal aim of Derby is the proper use of the land and its other natural resources. Our land is some of the most picturesque in the Northeast Kingdom and is an extremely important asset and one of limited quantity. Our resources are the root of our vitality and quality of life. Preserving our natural resources can ensure that our future generations will experience life, as we know it today. The Town should support programs that will maintain or enhance the quality of the natural resources we have today. We want our lakes, ponds and streams to remain healthy in order to provide places for wildlife and recreation. We want to assure that all residents of Derby have clean, pure drinking water.

The Town should encourage the preservation of undeveloped woodlands and open spaces within the Town and Village wood lots. These areas help maintain a healthy population of wildlife and contribute to the Towns rural character. These resources also furnish our children with spaces to learn about and appreciate natural resources.

Sound forest management techniques and wise management of all land resources should be encouraged. Such practices will preserve wildlife habitats, wetlands, forest health, water, air quality, scenic views, and recreational opportunities. Forestland can be used for educational and multiple recreational uses for all.

Problems associated with these goals, objectives and possible solutions are as follows:

### **1. PROTECTION OF THE GROUNDWATER**

Ground water is difficult to purify once it is contaminated. Therefore Derby must take steps to protect its municipal water supplies and ensure adequate sewage disposal. This is necessary to protect the health of our citizens. The Town should encourage the use of alternative septic systems to best protect our groundwater from long term contamination. Hydrologic features, aquifer recharge areas, and watersheds which replenish surface and ground water supplies providing clean water for public consumption shall be protected from incompatible development.

### **2. SOLID WASTE**

The Town of Derby should encourage the reduction of the volume of solid waste material into the regional landfill. Solid waste management should be encouraged through recycling to reduce waste. Derby will continue to encourage an active recycling committee, helping with our recycling endeavor. A recycling and hazardous waste plan is on file in the Town Clerks Office.

### **3. LAKES AND STREAMS**

The Zoning Regulations and the State of Vermont Conditional Use Determinations will address streams, ponds, and wetlands and their preservation in their natural state. Natural vegetation within at least 100 feet of streams, ponds, and wetlands shall be preserved. To protect the ecological integrity of these water bodies, buffers greater than 100 feet in depth may be required where adjacent slopes are steep, or where other special problems exist.

#### 4. WETLANDS AND REMOTE AREAS

Wetlands provide a transition between terrestrial and aquatic systems, where the water table is usually at or near the surface, or the land is covered by shallow water. Benefits provided by freshwater wetlands include: flood and stormwater control, critical fish and wildlife habitat, protection of subsurface water resources, provision of recreational opportunities, pollution abatement, erosion control, educational and scientific research opportunities, open space and aesthetic appreciation, and provisions of nutrients for freshwater food cycles. Without some sort of restriction, development will invade wetlands and remote areas where there are special habitats in need of protection. Accordingly development must be encouraged in appropriately zoned areas and special habitats protected. A wetlands map has already identified key areas and development is severely restricted in these places. The Town may encourage the State acquisition of development rights around these to act as a buffer zone, around these wetlands.

#### 5. AIR POLLUTION

Derby does not have an air pollution problem at this time. However, to ensure that Derby does not develop such a problem, trees should be maintained and new ones planted for the purification of the air. Activities, industry and projects that substantially degrade air quality or result in a substantial decrease in air quality should be discouraged, and existing forests should be maintained.

## **LAND USE**

Use of land for different types of activities are predicated on many factors including soil types, topography, proximity to other existing land uses and road access. The Land Use map is development guides for the Town see Figures 1 & 2. Current settlement patterns and commercial uses were taken into consideration in developing this map as well as current zoning designations. The existence of a guiding land use map will help Derby avoid sprawl, and other undesirable growth patterns that occur when spot development prevails.

Municipal services consisting of water and sewer are essential for industrial and commercial growth, and for the higher density residential development. The Villages of Derby Line along with Stanstead Quebec and Derby Center have control over these municipal services. The Town should work with these municipal services to plan and control growth. Land with municipal water and sewer on or near the site should provide the economic incentive for appropriate development. Extension of municipal water and sewer service should be considered in the following areas of Town:

1. Quarry Road- Municipal services will enable future commercial and industrial development. This land is ideal for commercial and industrial uses due to its proximity to Interstate 91 and already existing development along Routes 5 and 105. Concentrating this type of development in appropriate areas with municipal services in turn protects less expensive rural lands from sprawl type development.
2. North of Derby Center- Extension of municipal services from Derby Center north along Route 5 toward Derby Line would allow for denser residential development. More neighborhoods like the Palin Farm Road development near the Village are desirable. This would accomplish the goal of curbing residential sprawl while keeping the environment cleaner by reducing the number of septic fields needed. In addition to water and sewer, sidewalks will need to be extended to connect these neighborhoods to the Village amenities-stores, post office, and library.
3. Tax Increment Financing District (exit 27)- There are 2600 acres of land in Derby and Newport that form a TIF district. The land area is large enough to include a mix uses for example a concentrated housing development, a vocational education center, and an industrial park. Municipal services to this area will enhance development opportunities.

## **LAND USE ELEMENTS**

### **INDUSTRIAL**

Land designated as Industrial is designed to provide a location for the establishment of industry, providing employment opportunities. Potential good highway access, water and sewer services are major considerations. A variety of types of manufacturing and offices will be permitted. The Town places great emphasis on minimizing adverse impacts (especially upon adjoining residential properties) including but not limited to noise, vibration, dust, odor, heat, light or glare. Industrial uses shall provide appropriate buffering from adjoining properties.

## COMMERCIAL

The commercial district shall provide areas for major shopping facilities, offices, banking facilities, major governmental operations and other satellite commercial operations. The area may provide access, parking, municipal services, adequate lighting, protection, good design, and similar related items for convenience and safety. There must be a continued focus on improving vehicular and pedestrian circulation, as well as improving amenities for pedestrians and bicyclists. Parking availability and aesthetics, as well as overall landscaping and streetscape issues, should also be addressed on a continuing basis. The Town and or Village must ensure that developers of properties in the commercial districts pay their fair share of the cost of required infrastructure improvements. General goals for commercial development would be to create and maintain a business environment, which is hospitable to locally owned and managed businesses, and to businesses which provide the necessities and niceties of everyday living to residents. We should create a place of diverse economic uses, serving residents and visitors alike: a true mixed-use environment, with different types of retail activity, residential uses, offices, restaurants, service businesses, etc. New development on, or redevelopment of commercial properties should provide for combined vehicular access and/or shared parking to allow for more efficient land use, better integrated open space, and improved circulation for vehicles and pedestrians. The Town should protect and enhance the community's public services, infrastructure, and facilities. There is the importance of an identifiable commercial core and avoiding the commercial sprawl, which is threatening and has already ruined too many Vermont communities; minimizing our traffic congestion problems; the value of protecting community spirit; etc. Projects that would have an undue adverse impact upon the community will not be considered unless the developer provides sufficient mitigation that will ameliorate the impacts and improve upon existing conditions.

## COMMERCIAL/INDUSTRIAL

Land designated as Commercial/Industrial is designed to provide location for the establishment of commercial enterprises and light industry. The area should provide good highway access and potential access to water and sewer. The area will provide a choice in types of development as well as a good potential for employment in Derby. Again, the Town places great emphasis on minimizing adverse impacts (especially upon adjoining residential properties), including but not limited to noise, vibration, dust, odor, heat, light or glare. There shall be appropriate buffering from adjoining properties.

## VILLAGE COMMERCIAL

The Village Commercial District encompasses the traditional village business districts in Derby Line and Derby Center. The Village Commercial District is characterized by mixed land uses that are typical for traditional Vermont village centers and by the presence of municipal water and sewer services. Land uses include single and multi- family residential, a variety of small- scale commercial, governmental and civic uses.

## DERBY CENTER

The Village Commercial District in Derby Center has a range of traditional mixed land uses. These include commercial enterprises, such as retail establishments, restaurants, lodging and business, and professional offices. Civic, governmental and residential uses are also present. The voters of Derby Center Village passed a resolution in 1992 that the zoning on Main Street should remain Village Commercial and should not be rezoned commercial, as the village residents did not want residential uses to disappear from the

village core. There is no indication that the resident sentiment has changed appreciably since 1992.

#### DERBY LINE

In Derby Line, the Village Commercial Districts has been declining for a number of years. Many retail establishments have closed, leaving behind empty storefronts and a loss of basic goods and services. This is in stark contrast to the central business district in contiguous Stanstead, Quebec that continues to thrive. Residential land uses have gradually replaced commercial uses and are starting to dominate the Village Commercial District. This trend should be stemmed through provisions in the zoning bylaw. Balance can gradually be restored through a sustained effort over a number of years to promote new commercial development in Derby Line Village Commercial District. The presence of the U.S. Customs facility provides a measure of stability to the Village Business District.

#### VILLAGE RESIDENTIAL

This area is primarily for single and two family dwellings with public utilities provided or proposed.

#### RURAL RESIDENTIAL

As specified in the Zoning Ordinance, these districts are intended to provide land area for residential uses. Non-residential intrusions should be minimized or prevented. The land should not have severe limitations for on-site sewage disposal and the lots should be of sufficient size to provide space for septic tanks and drainage fields, with provisions for the necessary space between these uses. Soils directly affect land development, since poor qualities of texture, wetness, permeability, stability, or depth to bedrock/hardpan can create limitations for septic systems, roads and building foundations. Soils with limited development potential should support a lower density of development than soils without such limitations.

#### RURAL LANDS

As specified in the Zoning Ordinance, this district is intended to provide land area for low-density residential development, as well as for farming, forestry, and other rural land uses. Lots for residences must be of sufficient size to provide for adequate septic disposal and a water source with appropriate spacing between each. An important goal of this district is the conservation of open space and natural resources.

#### SHORELANDS

Shore lands- the land between the normal mean watermark of a lake, pond or impoundment exceeding twenty acres and a line 500 from the mean watermark. This district should provide for the protection and control of water pollution; preservation of shore cover and natural beauty; and for the maintenance of safe and healthful conditions which will provide for multiple use of the waters in a manner that provides for the best interests of the citizens of Derby.

#### SPECIAL LANDS

This is the area of the community that should have the least intensity of development as it is generally mountainous, has poor access, and in many cases, has shallow soils.

## PUBLIC LANDS

Public lands are those lands held in fee by some body of the State, Federal or Municipal governments. Uses of public lands are determined through a combination of State, Federal and Municipal statutes.

## SOURCE PROTECTION AREA

To promote the health, safety and welfare of the community by protecting important water resources of the Town from any use of land or buildings which may reduce the quality of such water resources. See Figure 3A, for S.P.A for Derby Center, Figure 3B for Derby Line.

## GREENSPACE

Appropriate design and use of greenspace is critical to the look and feel of the Town, and to the success of any development project. Depending upon the site, this may mean protecting existing green space from destruction, enhancing existing greenspace, or creating new greenspace where none exists.

Greenspace shall be provided for its own inherent value, and to soften the effects of the built environment for the residents and visitors alike. This intent is to maximize the qualitative effectiveness of greenspace and landscape design from both aesthetic and ecological perspectives, not just to satisfy quantitative requirements for land coverage, or size or number of plantings.

Goals and Policies for greenspace design:

A. Greenspace shall be in usable, visible locations, and of appropriate size and shape, to provide visual relief, shade, pedestrian comfort, aesthetic beauty, screening, noise reduction, and/or stormwater infiltration as appropriate in each location. The Zoning Ordinance will be revised to address these issues.

B. As new local roadways are proposed (more specifically in Commercial areas) and any forthcoming street tree management plan, street trees shall be planted wherever possible. Appropriate species will tolerate roadside conditions, relatively disease-resistant, and will grow to be tall, stately specimens providing shade and beauty. A mix of different species and ages of trees should be planted, so that the potential for complete loss of trees is minimized.

C. Generally speaking, greenspace is more effective in larger, continuous blocks; too often green space is split up into tiny, formalized areas, none of which are large or distinctive enough to satisfy intended goals. However, there may be cases where small greenspace areas are appropriate, such as those required to help break up large expanses of asphalt in parking lots.

D. Where appropriate, adjacent landowners should be encouraged to consolidate greenspace area into larger, more functional blocks. This is especially true when a master plan approach is used for development plans on multiple parcels, where greater control over this design element may be available. This also holds true for other types of projects, especially those on vacant land such as residential subdivisions. In these cases, a critical area and natural land analysis shall be conducted, so that the most appropriate areas for both conservation and development are identified up front. This technique, which should be described in greater detail in the Zoning Bylaws, will help ensure that new development

is appropriate for its size, and minimizes adverse impacts upon the land and the community.

E. Trees are important community resources, and are an important element in attractive, beautiful and livable towns. Existing mature trees, both on-street and on-site, should be protected. Appropriate measures and precautions shall be taken to protect, maintain, and enhance trees, flowers and shrubs.

#### SPECIAL ISSUES

The Zoning Bylaws should be clarified with respect to pre-existing, non-conforming use and noncomplying sites and structures. In many cases, their sites and structures long predated zoning, and may legally remain as they are without regard to current Town bylaws, goals, and design guidelines.

In certain cases, it may make sense from building safety, site planning, aesthetic, transportation and/or streetscape perspective to allow these buildings or sites to be substantially altered, or demolished and reconstructed to be more complying, even if not fully complying status. This may be appropriate where the Planning Commission and the Zoning Board determines that significant progress toward the goals in this Plan can be achieved, and where the Zoning Board of Adjustment determines that there will be clear and compelling benefits for the Town.

This can potentially serve several municipal goals: keeping commercial development where it belongs, encouraging reinvestment in or rehabilitation of existing sites and structures, bringing older buildings up to current codes, and bringing these parcels into greater conformance with current design standards and principles.

#### MOBILE HOME PARKS

Derby has four mobile home parks varying in size. These parks have existed prior to the enactment of zoning. The industry trend over the past thirty years is to construct longer and wider trailers. The newer, longer trailers cannot be placed on most of the designated lots due to the setback limitations. Regulations such as front, side and rear yard setback requirements may be waived, however, these will be evaluated by the Zoning Board of Adjustment on their individual merits.

## **TELECOMMUNICATIONS FACILITIES**

(and similar or related structures, including cable or telephone services)

Towers and related infrastructure require careful consideration. These structures tend to be located in highly visible locations on mountaintops and ridgelines, and the need for additional facilities is projected to increase dramatically in the next five to ten years.

The Zoning Bylaws should incorporate appropriate guidelines and regulations, governing at least the following areas: aesthetics, integrity of residential zones (that is, intrusion of commercial structures into residential areas), preferred locations (as Nelson Hill), and collocation or clustering of tower facilities. Many towns now realize the potential for adverse impacts caused by the placement of towers and related infrastructure, and seek the cooperation of all parties in resolving these concerns. The Town of Derby is quite concerned about the aesthetic and environmental impacts of tower facilities. When planning new infrastructure or upgrades to existing systems, special consideration shall be given to any primary or secondary impacts that would reduce resource values (including but not limited to aesthetics and streetscape design, agricultural land, timber resources, natural areas, wildlife habitat, and historic sites). In addition, when a new facility is planned, there must be clear evidence that the proposed location is necessary based upon economic considerations, potential impacts on resources values, and the resulting public benefits.

In all cases, appropriate and suitable techniques shall be used to minimize or prevent any adverse impacts from the placement of towers and related infrastructure.

A. All such facilities shall be located in appropriate areas, respecting the integrity of residential areas, aesthetic concerns, and natural resources issues. Through the Zoning Bylaws, the Town may specify reasonable areas where these facilities may be located. This is important on a macro scale (general areas in Town) as well as a micro scale (specific desirable placement or location: for example, below ridgelines, tucked into groves of trees and the like).

B. Wherever possible, facilities shall be co-located at or on existing structures or facilities, unless the Planning Commission and Zoning Board determine that separate facilities will create less visual and aesthetic impact.

C. Towers and related facilities shall only be as tall as absolutely necessary.

Where towers are located within tree lines, they should be made to be extendable, so they can grow with the trees, and remain the minimum height needed above the treetops.

D. Unless required by the FAA, towers shall not be illuminated. Where required, lights shall be shielded in order to minimize aesthetic impacts, and so that light is cast only where needed.

E. Structures shall be designed in order to minimize aesthetic impacts. Equipment sheds can be hidden in trees; depending on site-specific circumstances, tower structures may be screened by lattice, of appropriate colors and minimal reflectivity, or even disguised as trees or steeples. Towers and related infrastructure shall be screened from view to the greatest extent possible.

F. Electric or transmission lines shall be installed so as to minimize aesthetic and ecological impacts. For example: clear-cut swaths, created for power lines or access roads

which go straight up the mountainside, often create far more adverse impacts than the towers they serve, and are not acceptable.

G. Any permits granted for these facilities shall be for a limited time period. This will allow for periodic review, and new permit conditions reflecting advances in knowledge, experience, and technology. Equipment shall be downsized as technology advances, and removed when no longer used or needed. These requirements can minimize aesthetic intrusion, while maximizing the potential to serve a greater number of users in the same physical area. A bond may be required to ensure that funds are available to accomplish these purposes.

## **RECREATION AND LEISURE**

Increasingly, the citizens of this country have more time to devote to recreational pursuits. Derby is fortunate to have a variety of places for its residents to enjoy their leisure time. A 270 acre municipal forest, a well kept 16 acre park in Derby Line, tennis courts in both Derby and Derby Line, a public beach area, two libraries and an international opera house are just a few of the opportunities for Derby residents.

Derby's goal is to encourage a wider variety of recreational and cultural opportunities for its local citizens. To accomplish this goal an active permanent recreation committee should organize and develop recreation activities the Town residents can participate in. The Salem Beach House with its upgraded facilities, enlarged beach and picnic areas can be a focal point for many activities. Further constructions of bicycle paths and cross-country trails would enhance Derby's recreational opportunities. There is also a demand for a multi-sport facility, which could house an ice hockey rink, swimming pool, indoor track, indoor tennis courts, aerobics and exercise rooms.

## **PRESERVATION OF RARE AND IRREPLACEABLE AREAS**

The Recreation Committee could designate areas (centers or corridors) to be preserved as natural area/parks with walking/hiking paths for use by school children, environmentalists and for outdoor activities by Town residents. Areas around the waters (Derby Pond, Salem Lake, Little Salem, Brownington Pond, Cobb Pond and that section of Lake Memphremagog that is within the Towns boundaries, as well as the Clyde and Johns Rivers) could be managed including boat landings and public beaches to wet lands preservation by a committee serving as shoreline managers. Their Action Plan would state their goals to preserve water quality, specific vistas and other recreational resources. This would, also, be effective for initial water/septic considerations as development occurs. Buffer areas would lessen the impact of indirect discharge to recreational resources. Other significant protected wetlands may exist within the Town and should be verified before proposing land development on or near these areas. See the National Wetlands Inventory Map on the wall of the Zoning Office at the Municipal Offices.

The 270-acre municipal forest provides valuable timber, wildlife, and recreational resources, filters air pollutants, and have important recreational, economic and aesthetic value.

Historical houses and routes could be determined by the Historical Society by an affixed medallion to house exteriors or with markers to lead the history student through early years of Town. The Haskell Opera House, the Community National Bank building in Derby Line, the Derby Academy dormitory building as well as the Richard Provost Farm (1873) and the Barbara Frawley House (1800) are examples to begin a comprehensive list of early history sites. Development of a self-guided tour through Derby, with the help of a brochure, would tell the tourist of activities, past and present within the Town.

Seasonal events (foliage vistas, sugaring, snow mobile trails, camping grounds etc.) with related accommodations and retail could be listed for the occasional visitor. Information could be provided about the VAST trail, bike paths, tennis courts, Baxter Park, the 4-H Camp, Public Beaches, boat landings the Motor Cross course, IROC and play areas at the schools.

Model farms (as determined by the Farm Bureau) might be designated tourist stops. Owners could market dairy, garden and maple products, horse drawn rides, petting zoos as well as providing the tourist with an appreciation of the farming operation. A flexible plan should be effective for any farming operation.

Although these policies place a great deal of responsibility on existing committees, subcommittees should be formed or new committees could be initiated with their own plan of action. Each one would have its own issues and become part of the Town Plan.

## **DEVELOPMENT TRENDS AND IMPACTS ON ADJACENT TOWNS**

Derby, in its planning activities, must consider planning activities of neighboring communities and the State of Vermont. Growth in the state affects growth in all parts of the state, and growth in one segment cannot be considered without looking at growth in other areas. In looking at growth, Derby will consider economic development, housing, transportation, government and education. Derby should also consider the impact of industrial and commercial growth in surrounding towns.

With an abundance of land available for industrial and commercial growth within the Town, and a lower tax rate than neighboring Newport City, Derby should recognize the impact industrial and commercial growth would have on the county seat. New business development along the Derby/Newport Road that keeps local residents from traveling to the Burlington area is welcome and will attract residents from all over the surrounding area. Derby recognizes the need for additional commercial business, but also wants to consider that larger chain stores could also have a detrimental effect on smaller, locally owned businesses. The location of any large chain store could be beneficial for Derby if located appropriately near the interstate. Local Newport businesses would prosper from more local area residents coming to the Derby/Newport area rather than traveling to Burlington or out of state.

Derby should also recognize the impact on other communities in Orleans County, especially, Holland, Morgan, Brownington and Coventry which border Derby. These communities have a low tax base, little municipal infrastructure, and minimal development. Growth in Derby could impact these communities if they became bedroom towns for Derby. This could impact roads, schools, and ultimately the tax base of these towns.

Derby hopes to provide the economic opportunities not only for its own residents, but for members of the surrounding communities as well. Opportunity for children to learn to swim is provided at Salem Beach in Derby, but some children also go to the Town of Morgan for swimming lessons. Derby should continue to contribute financially to projects in other towns that work to the benefit of Derby residents as well as those living in other towns.

Businesses friendly to Canadian trade will benefit both Derby residents and the Canadians that come here to shop. Derby Line shares utilities with its Canadian neighbors, as well as its library/opera house, which lies in both the USA and Canada. Derby students from grade seven up, share facilities and class space with students from all over the northern portion of the county. This bonding between youths from different towns will contribute to good relations between communities in the future as well. The Derby Planning Commission should meet periodically with their counterparts in adjoining communities to discuss their mutual interests and concerns. Derby has both appropriate areas for economic growth (proximity to I-91 and an already busy Route 5) and the infrastructure to accommodate that growth. Newport has the infrastructure, but limited areas for expansion. The other communities may have room, but lack the infrastructure. Derby therefore is well situated to provide the economic impetus the area so badly needs.

## **ECONOMIC DEVELOPMENT**

Derby wants to maintain its Vermont Character along with open spaces, residential areas and scenic vistas. It is also vital to commit certain space to industrial/commercial use if Vermonters are to be able to thrive economically. Such industrial/commercial areas will help develop a tax base, provide economic life (jobs) to the community, and must be so located to enhance the community.

Derby can play a positive role in educational, industrial and commercial development in Orleans County due to its location near I-91 and the Canadian border. It is important to plan for continued growth to occur in a controlled manner. If this desired development is to occur, action must be taken to accommodate such economic enrichment to the Town:

Utilize the TIF district, which allows certain tax revenues to be set aside to offset the infrastructure cost of new developments.

Support the development of an industrial park to serve as an enticement to economic development. The Scott Industrial Park on Citizens Road would be ideal.

Target development to include utilizing historic workforce skills.

Focus on developing new businesses, or expanding existing businesses that are environmentally friendly and that complement existing and planned infrastructure.

Rural Economic Action Partnership (R.E.A.P)

The Derby Town Plan is consistent with the USDA approved Rural Economic Action Partnership strategy and project list.

The REAP designation will give all Towns in the Northeast Kingdom special access to USDA Rural Development Programs for business and industrial loan guarantees; business intermediary loan funds; rural waste water treatment grants and loans; rural rental housing loans; and rural housing rehabilitation. REAP designation also give preference for federal enterprise community and empowerment zone programs.

There are economic development issues, which will affect both the tax base in Derby as well as the lifestyle of the area. To ensure appropriate industries locate in Derby, the Town has taken the following steps:

- A. The Town will continue to be represented on the Newport/Derby Development Committee.
- B. The Town should aggressively pursue tax/revenue bonding and federal and state grants to support construction of infrastructure to make the proposed industrial zones viable.
- C. The Town should continue representation on the NVDA board.

## **HOUSING**

Derby's Zoning Bylaws allows for all types of housing including single family dwellings, mobile homes, four mobile home parks, two family dwellings, multi-family dwellings, condominiums, and seasonal or vacation homes. Adequate public improvements in the form of municipal water and sewer services and utility infrastructure must be available in both quantity and quality near the existing Village Centers in order to encourage construction of additional housing in those areas where the Town can best provide municipal services. The Zoning Bylaws must also provide that a sufficient quantity of land is zoned for residential development with respect to current needs as well as making adequate provisions for the foreseeable future.

Derby must also consider the value of limiting the number of single and two family dwellings that are converted into multiple one and two bedroom family apartments. These modifications drive families with children out of residential neighborhoods and replace them with a younger, single population, which could have an effect on the character of the area.

The Town is presently the site of some forms of affordable housing. Several mobile home parks are located in the Town and a senior citizens housing project (21 Main) was constructed in Derby Line some years ago. An area non-profit provider of affordable housing, Gilman Housing Trust Inc., (GHT) has purchased and rehabilitated thirteen (13) units of housing in the Village of Derby Line and has inspected an additional thirty-four (34) units of housing. GHT has also helped to close the Derby Villa Mobile Home Park in Derby Line for health and safety reasons. The Housing Foundation Inc. HFI has provided professional services in converting the Derby Mobile Home on Route 5 and GHT converted Hackett's Mobile Home Park on Shattuck Hill Road into a cooperative ownership among the tenants. GHT has also converted two buildings in Derby Center Village into affordable housing units. One of the units is the historic Derby Hotel; the other is the Kidder Block. GHT has also converted a building in Derby Line Village.

It is highly unlikely that the Town will choose to develop housing on its own. However, the Town has in the past and will continue to work cooperatively with the private sector and non-profit organizations.

In addition, the Zoning Bylaws could specify maximum residential densities in different areas of the Town based upon consideration of location, land capabilities, access to utilities, efficient utilization of available land, and neighborhood characteristics. In this regard, it is noted that in those areas of the Town that are not served by municipal water and sewer systems, State subdivision regulations may impose additional restrictions on the density of housing units in particular neighborhoods, based upon the carrying capacity of the land in those neighborhoods.

The Town should monitor the rate of development of new housing units through review of building permit applications to facilitate planning with respect to upgrading municipal infrastructure. Periodic evaluation of the effect and relevance of the provisions of the Zoning Bylaws will assure that the foregoing goals are addressed in a manner that

complies with applicable laws and the regulations while avoiding unnecessary imposition upon individual rights and unreasonable financial burdens.

## **TRANSPORTATION**

The growth of an area requires that its transportation system be adequate for the ever-increasing needs of its population. Currently the transportation plan for the Town of Derby is limited to highways as there are no other intercommunity transportation facilities and all other intercommunity transportation facilities are terminals and depots located outside of the Town. The nearest bus terminal is in Newport. Also in Newport are truck terminals, freight depots and similar transportation facilities for freight and passengers. The highway transportation plan is based on the Regional Transportation Plan.

### **GOALS**

- A. Ensure a viable transportation system for all citizens and business.
- B. Provide for safe and effective vehicular traffic flow on State and local roadways.
- C. Provide alternatives to automobile and truck transportation including pedestrian, bicycle, rail, and mass transit systems.
- D. Be prepared for and supportive of future alternative transportation modes.

### **OBJECTIVES**

- 1. Coordinate with and assist Vtrans in providing the highest level of economically viable service on State roadways.
- 2. Actively pursue non-local assistance (technical and financial) to maintain and upgrade local roadways.
- 3. Coordinate and support pedestrian and bicycle facilities.
- 4. Develop and support a viable functional roadway classification system.
- 5. Ensure roadways are designed and constructed to the highest possible standard based not only on current usage patterns but also upon expected traffic patterns and volumes.
- 6. Maintain a high level of access design for local development.
- 7. Develop a capital improvement system for upgrading and paving local roads.
- 8. Ensure that roadway signage is consistent with State and national standards.
- 9. As new local roadways are proposed, ensure that they provide continuity with the roadway system by providing through connections to other roadways and avoiding cul de sacs of excessive lengths.
- 10. As new private roads are proposed, ensure that they are designed to provide viable emergency service and avoid excessive cul de sac length.
- 11. Support the continuation and upgrading of the local mass transit system (RCT) including provisions during roadway design and site design to ensure adequate provisions for bus stops.
- 12. Retain current Town rights of way to ensure viable access to the local roadway system as land continues to develop.

### **FUNCTIONAL CLASSIFICATION:**

Functional classification is a hierarchical system of classifying roadways based upon the function the roadway performs. These functions range from carrying traffic through a region to collecting traffic from local streets traveling to other land uses in the region or local area. Design standards and access controls are more stringent the higher the function of a roadway. For example, the principal function of an arterial roadway is to accommodate through traffic. As such, arterial roadways should have fewer access points

with more stringent design standards such as turn lanes and larger radii than local roadways whose principal function is to provide local land access. Attached is the proposed functional classification map (see Figure 4). The Town's sole principal arterial is interstate 91. A variety of minor arterial and major/minor collectors are presented. Roadways not shown on the map are considered local roads whose primary function is to provide local land uses access. The functional class system presented is generally consistent with the State of Vermont's functional classification with the exceptions noted below. The exceptions result from both local experiences with the current function of the roads and also the use of this plan as a planning document, which anticipates future use of a roadway as opposed to current use. The differences between State and Town functional class are as follows:

- A. Route 5 Derby Center through Derby Line-the State considers this a major collector. The Town considers this section of Route 5 a minor arterial as significant through truck traffic uses this segment due to weight restrictions on the interstate and it provides a direct route to Canada.
- B. TH1, Holland Road and TH5, Hinman Settler Road- the State shows these to be minor collectors. Given their function of carrying traffic from adjacent communities through the Town, a major collector function is more applicable.
- C. TH7, Shattuck Hill Road and TH35, Derby Pond Road- the State classifies these local roadways, but they perform a collector function by connecting to higher order roadways.
- D. TH32, Schuler Road-This roadway provides direct access to Interstate 91. The State classifies this as a local roadway. While volumes are low at this time, this roadway will carry increased volumes over time, with much of the traffic destined for interstate 91 or Newport. This is a function which warrants a collector status.

#### CURRENT & FUTURE ISSUES AND POTENTIAL SOLUTIONS

The Town has identified general transportation issues and specific roadways or locations, which will need future improvements. The specific nature and timing of these improvements or changes need refinement as part of the implementation of the plan. The locations and issues are:

1. Route 5 Derby Center to Newport. This roadway experiences delays and congestion as a result of excessive access, poor access design, and lack of turn lanes west from Shattuck Hill Road. Solutions include installation of a center turn lane, or other turn lanes west of the Quarry Road, consolidation and reduction of access points, stringent access control limiting new access, realigning existing and proposed access, and designing both private and public roadway access consistent with national standards. The Planning Commission has alternative access schemes available for the section between Quarry Road and Shattuck Hill Road. Figure 5. Presents the preferred alternative, which has no new direct access to Route 5 and realigns Crawford Road with Shattuck Hill Road. This Plan would allow signal installation at both Quarry Road and Shattuck Hill Road as signal warrants are met. West of Shattuck Hill Road, turn lanes (either individual or a center left turn lane if access control/modifications are instituted) should be considered.
2. Intersection of Route 5 and Route 105. This location is likely the busiest and most problematic intersection in Town as it involves two minor arterial roadways, both of which State roadways requiring Vtrans approval and implementation. The current T intersection is oblique and has no turn lanes on the north/south approaches resulting in delays,

congestion, and shortcutting through private property. The intersection volumes currently meet Peak Hour Signal Warrants (indicating a signal is warranted). As the area grows, the current problems will be exacerbated. The Town should work closely with Vtrans to ensure that the State performs a detailed professional analysis of this intersection and develops a long-term solution. Any short-term solutions should be implemented in the context of a long-term solution. Attached in the Appendix A is a memorandum dated Oct 14, 1998 from the Zoning Administrator, which provides a brief overview of existing conditions and alternative solutions.

3. Route 5 Derby Center through Derby Line. As noted this roadway carries through truck traffic to and from Canada as a result of interstate weight restrictions. This truck traffic is inappropriate for the design of the roadway and results in negative impacts on the Village of Derby Line and Derby Center through which it passes. A solution is to remove the interstate weight restrictions.

4. The intersection of Caswell Avenue with Main Street in Derby Line is oblique and has substandard sight distance to the north (Canada). This location should be analyzed to determine alternative designs, which might improve sight distance. Land acquisition may be necessary to accomplish any redesign.

5. Intersection of Route 5 and TH41 (Crawford Road). Commercial development is proposed along the north end of Crawford Road. The intersection should be analyzed by the VTRANS and a long-term solution developed and approved. The intersection should be reconstructed to 90 degrees and realigned to create a four-way intersection with TH7, Shattuck Hill Road-see Figure 5. Alignment with Shattuck Hill Road is highly desirable to ensure viable traffic flow. Realignment will require land acquisition.

6. TH30, West Street between Route 105 and Route 5. This street performs a minor collector function. The roadway is not paved. It has recently undergone a major facelift with the embankment on the north side shored up to prevent eroding into the roadway. The roadway should continue to be upgraded and possible, paved at some future date.

7. Intersection of Route 5 and TH22, Nelson Hill Road. This intersection has inadequate sight distance to and from the north particularly in light of the functions of these two roads. The grade on Route 5 should be lowered to meet appropriate sight distance criteria.

8. TH32, Schuler Road- This roadway connects directly to interchange #27 on Interstate 91 and will perform a significant collector function in the future for those who live in south Derby and Brownington. The roadway should be improved and maintained to control the speed of the motorists in the rural area, provide viable access to the interstate and allow it to function as a collector.

9. Hinman Settler Road- This collector highway is unpaved and contains uneven surfaces. Upgrading the road is an ongoing function. This roadway should also remain unpaved to control traffic speed.

10. Route 111- The pavement is in extremely poor shape and signage does not meet desirable standards. Repaving (possible reconstruction) and signage improvements are required on this major collector.

11. TH41, Crawford Road- This collector is unpaved and contains vertical and horizontal curves inconsistent with its collector function. Commercial development is planned along this roadway. As additional development occurs along this roadway it should be upgraded and paved.

12. TH41, Pine Hill Road- This is an unpaved collector for commuters from south Derby and Coventry. The road should be maintained and improved, but left unpaved.

13. TH35, Derby Pond Road- This collector roadway is unpaved and contains uneven surfaces. Paving is appropriate to allow it to perform as a collector function.

14. TH6, North Derby Road- This collector contains uneven surfaces and should be upgraded and repaved to allow it to perform a collector function. The road also provides a connection from the Beebe Spur Bike Path through Customs in Beebe Plain to the continuation of the bike path in Canada. Any upgrading of this roadway needs to account for continued and increased usage by bicycles.

15. Quarry Road-Currently serves a mixture of residential, commercial, and industrial traffic and dead-ends approximately 2 miles north of Route 5. The intersection with Route 5 requires upgrading (increased radii, two southbound lanes, and possible turn lanes on Route 5). Further, as land to the north develops, Quarry Road should be connected with Darling Hill Road to improve safety via alternative access and lessen usage of Route 5. With this connection, Quarry Road would perform a sufficiently higher order function as to be designated a collector.

16. While bicycles are typically used for recreational purposes, occasional utilitarian use does occur. The Town should support the development of bike and walking paths and ensure that sufficient consideration is given to bicycles when roadways are improved. This typically takes the form of additional paving width to allow a wider shoulder for bikes.

17. The Town supports upgrading and expanding the current mass transit system as provided by RCT. More routes in Derby are desirable, as well as access to and from surrounding communities, and major urban centers.

18. Access to both State and local roadways is critical component to ensuring safe effective traffic flow. As development occurs, the Town will review request for new access carefully. Direct access to collector and arterial roadways should be granted only if alternatives such as shared access or access to an existing or new local road is not feasible and if it meets appropriate standard criteria such as alignment with existing roads, provisions of turn lanes, 90-degree approaches, and similar design criteria.

19. New industrial development, which is accessed from unpaved roads, must contribute toward upgrading and paving that portion of the roadway leading to the development.

20. There are a number of sites in Town, which likely will redevelop into new or upgraded uses. When these sites redevelop, the design should be consistent with current zoning bylaw requirements to the extent possible. This is particularly important concerning parking and access. Significant effort should be made to ensure that revised access, which meets standard design criteria, be required as sites are redeveloped and/or require additional zoning permits.

21. While the Town has no airport, rail, water or freight terminals, the Town strongly supports the continuation and upgrading of these facilities in other communities as they provide a direct transportation benefit to the businesses and citizens of Derby.

22. Sidewalks provide viable pedestrian access. The Town should fully support maintenance and extension of the sidewalk system.

#### IMPLEMENTATION MECHANISMS:

A. Planning Commission/Selectboard/Road Commissioner- meet at least annually with the State Agency of Transportation to assess problems, review proposed construction, and update plans for future upgrades.

B. Planning Commission/Selectboard/Road Commissioner- develops five-year capital improvement programs for local roads to develop funding, upgrading, and paving priorities, financing and decision-making mechanisms, and schedule Appendix for preliminary plan.

C. Planning Commission/Road Commissioner- develop monitoring program for local roadway volumes and problems.

D. Planning Commission- Amend Zoning Bylaws to contain specific access design criteria and controls for new development and redevelopment based upon national design standards and roadway functional classification.

E. Planning Commission/Selectboard- meet periodically with affected adjacent communities to coordinate approach to Vtrans to improve State roadways, e.g., Work with Morgan and Holland to obtain improvements on Route 111; work with Charleston, Brighton and Island Pond to finalize improvements on Route 105.

F. Planning Commission/Road Commissioner- as part of Zoning Bylaws or Subdivision Regulations, adopts regulation/criteria for new public and private roadways to ensure effective classification.

G. Planning Commission- actively pursues planning grants for financial assistance in the preparation of # 2,3,4 & 6 above.

H. Planning Commission/Selectboard/Road Commissioner develops criteria for roadway signage for local roads.

I. Selectboard/Road Commissioner- Continue to monitor speed limits on local roadways and modify as appropriate based upon volumes, design and function.

## **EDUCATION**

Presently public education is provided to the children of the Town of Derby, the Village of Derby Line and the Village of Derby Center through Derby Elementary School located on Elm Street in Derby Line, North Country Union Junior High School on Route 5 in Derby Center, and North Country Union High School in Newport.

### **DERBY ELEMENTARY**

Derby Elementary School provides education for children in kindergarten through sixth grade. Total enrollment for the 1999-2000 school year was 447 down 1.9% from the previous year, reflecting a trend of declining enrollment. The decline spans the past eight years.

The grade school and kindergarten are located on Elm Street on the outskirts of the Village of Derby Line. The grade school was built in 1972 and opened in 1973. The kindergarten school building opened in 1970 but was not converted into a kindergarten until 1973. Presently, the schools are operating at a comfortable capacity. Every room is utilized in the schools and there are no unused spaces. Currently both the instrumental and chorus classes share the same space three times per week. Since 1973, several services have been added to the school program, which requires space. These include full time nursing, guidance, speech therapy and special education services. Beginning in 1997, the School Board undertook several projects to modernize the buildings.

In 1998 the kitchen usage doubled by serving breakfast as well as a hot lunch. The kitchen crew prepares 10,500 breakfast and lunch meals per month. There are currently a total of 8 bus routes, with some busses carrying up to 72 passengers. The busses travel over 75,000 miles per year.

The school facility is heavily utilized by various organizations in the community. During the snowy months there are two shifts of Border Hoop Basketball 5 days per week, and adult volleyball evenings. Civic and youth groups hold meetings in the library. The gym is used on Town Meeting Day and for elections.

### **NORTH COUNTRY UNION JUNIOR HIGH SCHOOL**

The Junior High location in Derby, on the eastside of Route 105 just north of intersection of Routes 105 and 111, is the former site of Derby Academy. The site is located on 10 acres of land.

This main portion of the building is 35 years old with an addition on the eastern side, which doubled the space constructed in 1989. Within the older portion of the building are 17 classrooms, the computer room a gymnasium with a stage, the living arts room, and the industrial arts room. The addition includes four more classrooms, two science labs, a band and chorus room, the library and a cafeteria.

The Junior High was designed for a maximum of 450 students; with the present enrollment of 324 there is more than adequate space for future growth. There are no plans to expand the physical structure. The size of the school site allows ample space for future expansions

of the building, parking area, and sports fields at such time these improvements become necessary.

The public, on a regular basis uses the building. Recreation activities, sports, meetings, craft fairs, ski and skate swaps, are just a few of the activities that take place on the school ground after school hours. The Town of Derby has used the gym for voting.

#### **NORTH COUNTRY UNION HIGH SCHOOL**

North Country Union High School is located on Veterans Avenue in Newport City. The building was constructed in 1967 and was designed for approximately 1000 students. With a present enrollment in excess of 1,100 the building is overcrowded.

The course of study at NCUHS has been designed to meet the needs of both the college bound students as well for those who will enter into a career upon graduation. For those who seek to enter into a career out of high school, the North Country Career Center offers classes in automotive design, building trades, culinary arts, office technology, marketing, metal fabrication, computer aided design and drafting, graphic arts and photography and medical classes.

To address the education needs for the entire community, a Workforce Development Center is in the planning stages at this time. This facility will replace the Career Center providing the high school with space to expand. The new building has one potential site donated by Citizens Utilities located off the Access Road in Derby.

The community utilizes the high school for many functions from concerts to car shows. Both the Community College of Vermont and North Country's Adult Program utilize the building for adult education classes. A local church holds its weekly worship services at the high school. An interactive TV site is used by the public, and students tape school board meetings to be replayed on the local cable channel. Finally, local sport teams use the gymnasium and grounds for their games.

#### **PROPOSED: WORKFORCE DEVELOPMENT CENTER**

The existing regional technical center in Newport will be recast into a workforce development center (WDC) to provide technical training and retraining young and adult students to industrial skill standards at the high school, skills certified, and associate degree levels.

One location for the WDC is the donated Citizens Utilities land on the Access Road, near exit 27 of I-91. It is planned that the State will appropriate the funds to build a WDC, with a completion date of 2002. Additional water and sewer lines will be required to support economic development in the area and for the new WDC. Alternative sites could be considered within the Town of Derby, within reasonable proximity of municipal services.

The WDC will maintain a technical training curriculum that fosters regional economic development and maintains a knowledge pool of cutting edge technology.

Training partners will be physically located at the WDC, including but not limited to: North Country Career Center, Vermont Technical College, the University of Vermont,

Lyndon State College, Community College of Vermont, and other educational institutions whose application are currently under review.

The WDC is expected to graduate 150 secondary, and 75 associate degree students per year after the four year start up.

Traffic flows will include shuttle bus service every four hours between the WDC and North Country Union High School, and Lake Region Union High School.

## **ENERGY**

Energy is a scarce resource that should be considered in any comprehensive land use planning process. Homes and businesses use a variety of energy sources for heating- fuel oil, gas, wood, electricity, the sun and coal. With a heating season that generally lasts seven months of the year, it is clear that energy consumption is a significant issue for everyone. Substantial economic savings can be realized through energy conservation. Every dollar not spent on energy is available for local investment or savings, and to meet other basic needs. Of course, reducing energy usage also reduces the adverse environmental impacts of energy production, transport, and use. Energy conservation can be facilitated through effective land use planning, building standards and design, and improved transportation efficiency.

Effective land use planning can promote energy conservation. Development densities should be highest toward the center of Town, which is also served by municipal water and sewer, with lower densities in the outlying areas. By directing new development in this manner, we limit the potential for costly and energy-inefficient scattered development. By allowing customary home occupations, the Zoning Bylaws also helps support energy efficiency by reducing the need for some residents to commute to work.

The siting, design, and construction of the buildings strongly influences the amount of energy needed for heating and cooling, as well as the amount of electricity needed for lighting. Proper subdivision design, building orientation, construction, and landscaping provide opportunities for energy conservation measures such as less vehicular travel, passive solar space and domestic hot water heating, natural lighting, and photovoltaic electricity production. Additional energy savings can be realized by retrofitting existing building with insulation, more efficient doors and windows, weather-stripping, compact fluorescent lights, and more efficient appliances.

Renewable energy resources offer long-term advantages over non-renewable sources. Solar, wind, hydro, and wood or wood gasification may become more prominent in the Towns energy mix. The Town should support efforts to research and develop these other alternative, ecologically sound energy sources.

The Town of Derby should make an effort to minimize its own energy consumption by using appropriate conservation and efficiency practices, and should support programs that are designed to increase public awareness of energy issues and to encourage homeowners to conserve energy.

Major development proposals should fully and effectively address energy conservation and efficiency concerns.

Land use planning should be consistent with the objective of encouraging energy efficiency.

Renewable energy resources should be protected.

Consideration should be given to small-scale, short-term improvements (insulation standards, weatherization projects) as well as larger-scale, long term projects or improvements such as park-and-walk strategies, pedestrian and bike paths, solar orientation of buildings, re-evaluation of allowable development densities in areas served by water and sewer, subdivision design, and mass transit opportunities (including rail and bus).

## **LOCAL GOVERNMENT**

Private citizens activities are not enough to create a community that meets people's needs and desires. Derby does boast a large number of persons who volunteer their time and talent to serve on various boards and who together help make our Town a better place to live. However it is a goal of the local governmental units to provide in a democratic and efficient manner, the level of services required by the citizens. The local governmental units have to play an important role as both a coordinator and a leader. It is the objective of the local government, including the Selectboard, Village Trustees, Zoning Board, Planning Commission and Trustees for the municipal utility services, to provide the necessary regulations and facilities to carry out the needed functions. Necessary facilities include municipal offices, public utilities including water and sewer service, public safety facilities such as fire, ambulance and police protection, open and recreational areas, and schools.

## **UTILITIES AND FACILITIES**

There are two providers of public sewer service within the Town of Derby; the Village of Derby Center and the Village of Derby Line. However, neither Village has any treatment facilities of its own. The Village of Derby Center Sewer Operations and Maintenance owns and maintains the lines and pump stations within the Village and Town, and has an allocation in the wastewater treatment plant in Newport City, Vermont. The Village of Derby Line owns and maintains lines and pump stations in Derby Line and pumps its wastewater to be treated at the wastewater treatment plant in neighboring Stanstead, Quebec.

### **VILLAGE OF DERBY CENTER SEWER OPERATIONS AND MAINTENANCE**

The Village of Derby Center Sewer Operations and Maintenance owns and maintains lines and six pump stations in Derby and has an allocation it has purchased of 150,000 gallons per day in the wastewater treatment plant in Newport City, Vermont (see Figure 6). The Village of Derby Center presently produces an average of 62,200 gallons per day. There are about 67,000 gallons of committed reserves leaving only 20,800 of uncommitted sewerage allotment. The Village intends to pursue obtaining an increase in its sewerage allocation as provided for in their agreement with the city of Newport.

The capacity in Newport City's plant was purchased in 1980, in anticipation of the construction of the present wastewater treatment plant, largely with a loan from Farmers Home Administration.

The sewer lines are almost entirely within the Village of Derby Center and between it and Newport City. The sewer lines are mapped. An inter-local agreement between Derby Village and the Town was completed in 1993. This agreement allows service to people outside the Village.

### **NEWPORT CITY WASTEWATER TREATMENT PLANT**

Newport and Derby's wastewater is processed at the treatment plant, located on T.P Lane off of Western Avenue. The Newport City Wastewater treatment plant upgrades were completed in 1984 with a 1.2 million-gallon per day capacity and a 20-year design and review. Currently it is treating an average of about 800,000 gallons per day of which approximately 62,2000 gallons comes from Derby.

Due to the wastewater treatment plants excellent operation record, and the composition of the wastewater it receives, its permitted capacity might be able to be increased another 200,000 gpd without additional construction.

### **VILLAGE OF DERBY LINE:**

The Village of Derby Line and Stanstead Quebec have an interlocking agreement for wastewater treatment. Derby Lines wastewater is treated at the wastewater treatment plant in Stanstead, and Derby Line pays half the cost of the operations of this plant. The plant in Stanstead was built in 1965 to handle Stanstead's wastewater. The plant was upgraded and expanded in 1981 when Derby Line signed on and was officially opened on May 25, 1982.

It now has a 400,000-gallon per day capacity, of which it presently uses 300,000 gallons on average. The plant provides primary and secondary treatment. Prior to 1990 the liquid sludge was taken to the Magog treatment plant for dewatering and disposal. In 1990 a new building to house a dewatering belt press and special trailer was added for approximately \$600,000. The dewatered sludge is transported to a landfill in Canada.

Operation costs are shared between Stanstead and Derby Line on a pro rated basis according to usage. There is adequate capacity for the future.

#### MUNICIPAL WATER

There are three Public Water Systems that provide some citizens in Derby with water: the Derby Center Water Company, the International Water Company, and the Beebe Quebec Water System.

Residents who do not have access to municipal water utilize private wells. The Derby Center Water Company serves the Village of Derby Center but also has some hookups in the Town outside of the Village (see Figure 7). The International Water Company serves the Village of Derby Line, the Town of Derby, as well as the Canadian Towns of Stanstead. The Beebe Quebec Water System serves Beebe, Quebec and a few homes in the Town of Derby, formerly the Village of Beebe.

#### DERBY CENTER WATER COMPANY (DCWC)

The Derby Center Water Company serves many residents within the Village limits, as well as residential and commercial entities outside the Village boundaries. As of January 1, 1997 the primary water service for the DCWC is Lake Derby. Secondary source is a drilled well which has a 500 gallon per minute capacity approved for 350 gallons per minute with a 350 gallons per minute pump. Both water services are chlorinated.

Water is pumped into two reservoirs, each with a 285,000-gallon capacity and fed to users via a gravity system. Average daily demand is 160,000 gallons with a peak capacity of 750,000 gallons. There are 68 fire hydrants on the system. Roughly 1/3 of hook ups are outside the Village and account for 50 percent of the water used.

An interlocal agreement for water was approved by the Town and Village in 1992 and remains in effect. A water ordinance is in effect. The Village has an interlocal agreement with Newport City to provide up to 10,000 gallons per day to the proposed Industrial Park, with back up capabilities for the Newport Water System.

The DCWC is supplying high quality water and has ample capacity for the foreseeable future.

#### INTERNATIONAL WATER COMPANY (IWC)

The International Water Company (IWC) serves the Town of Stanstead, Quebec, and the Village of Derby Line. A Board of Trustees, seven members from Stanstead and four from Derby Line administers it.

The primary water source for IWC is two drilled wells in Stanstead, one at 240 gallons per minute capacity and one at 2,220 gallons per minute capacity. Holland Pond, located in the Town of Holland, is now a back up source for use only in an emergency. Water is pumped

from the wells (and/or Holland Pond) into a 950,000 gallons reservoir in Derby Line. Water is treated with chlorine at its source.

Average usage of IWC water is between 14 million and 16 million gallons per month, which is well below the systems capacity.

#### **BEEBE QUEBEC WATER SYSTEM (QWS)**

This system services Beebe, Quebec, and several residences in the former Village of Beebe in the Town of Derby. The water source is six wells, four located in the Town of Derby, and two in Beebe, Quebec. The water is treated with liquid chlorine. Distribution lines are gravity fed.

The only capital improvement currently being considered is a new chlorination building.

**CONCLUSIONS:** Recent improvements by DCWC, IWS and BQWS assure the residents in their service area of reliable source of quality water. The present capacities should easily handle any increase in demand, which might take place within the time frame of Town Plan 2002.

## **IMPLEMENTATION OF THE DERBY TOWN PLAN**

This Plan sets forth the goals of the Town wishes to achieve, and the policies by which the Town will manage its affairs. As with most significant endeavors, implementing these goals and policies will generally happen through a multi-pronged approach. It can occur through the adoption and application of companion documents and tools; these may include but are not limited to, the Zoning Bylaws, Sign Ordinance, and Capital Improvement Plan. It is important that purposed documents and proposed changes to current documents are consistent with this Plan, to help to achieve the goals stated herein.

Implementation of this Plan can occur through the process of Act 250 review, where development projects are reviewed for conformance with this Plan (by explicit intent and direct reference throughout applicable sections of other Town documents and programs adopted under specific statutory authority, such as Town Ordinances and Capital Improvement Plan). This is a comprehensive, thoughtful Plan, which should be considered as a whole when questions of interpretation arise.

### **ZONING REGULATIONS**

Currently the Town of Derby has enacted a set of Zoning Bylaws. These bylaws will be updated to reflect the intent of this Plan and the sociopolitical climate in Derby

### **SITE PLAN REVIEWS**

Review of all uses including planned residential developments according to criteria established in the Zoning regulations and by the Planning Commission to ensure that all development will be done according to the Town Plan. The review should be conducted in a way that considers the best interests of the community.

### **SUBDIVISION REGULATIONS**

Subdivision regulations are designed to assure orderly community development and to assure that any of this development that may ultimately become a public responsibility will be done in such a manner that it will not place an undue burden upon the community and in turn, upon present taxpayers. By adopting adequate subdivision regulations, and properly implementing them, a community can help ensure that its physical plan, that is its streets, sewers, water lines, and similar infrastructure will gradually improve and any available public funds can be used to upgrade the existing street network instead of having to be diverted to newly accepted streets.

### **PUBLIC EDUCATION**

An aggressive education program to help people understand how to make our community work better will do far more than excessive rules and regulations. A great deal of cooperation in a community depends on residents understanding how one operation affects another, and how things an individual can do will affect the Town and its environment. Some ways to accomplish the education process are distributing pamphlets with guidelines for homeowners or those obtaining permits, at Town meetings, and at schools.

#### CAPITAL IMPROVEMENT PROGRAM

No Capital Budget exists at this time in Derby. However 24VSA section 4756 requires such in order for a municipality to use the Vermont Bond Bank. The Planning Commission should produce a Capital Improvement Program. Such a program will help the Town determine when major funds will have to be expended and how these funds could be obtained.

#### PLANNING AS A CONTINUOUS PROCESS

It cannot be emphasized too strongly that planning is a continuous process, and the Planning Commission must be flexible enough to update a community development plan when necessary. The Planning Commission, therefore, must periodically review and revise the Town Plan.

#### ADVISORY ROLE

Lastly, and probably most importantly, if the development Plan is going to get proper implementation it is important that all local bodies work together to solve emerging problems. This will help assure that these special problems will be considered in light of the community development plan, and the various bodies can work to be sure their individual projects work together with all other in Town. The Derby Planning Commission wants to thank all members of the Derby Selectboard and Zoning Board that gave many many hours and weeks of their time to help write this plan.



**FIGURE 2**

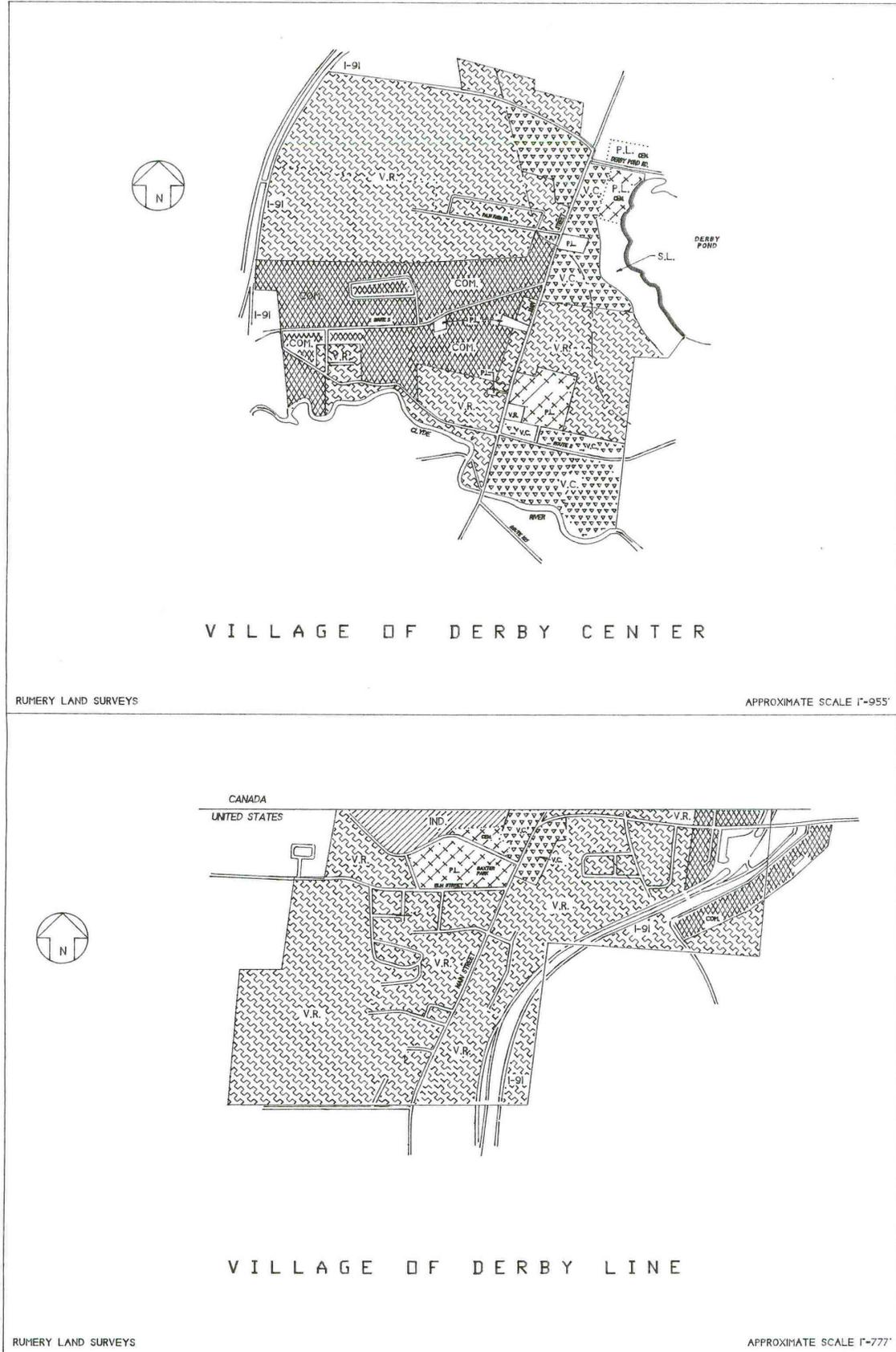


FIGURE 2

**FIGURE 3**

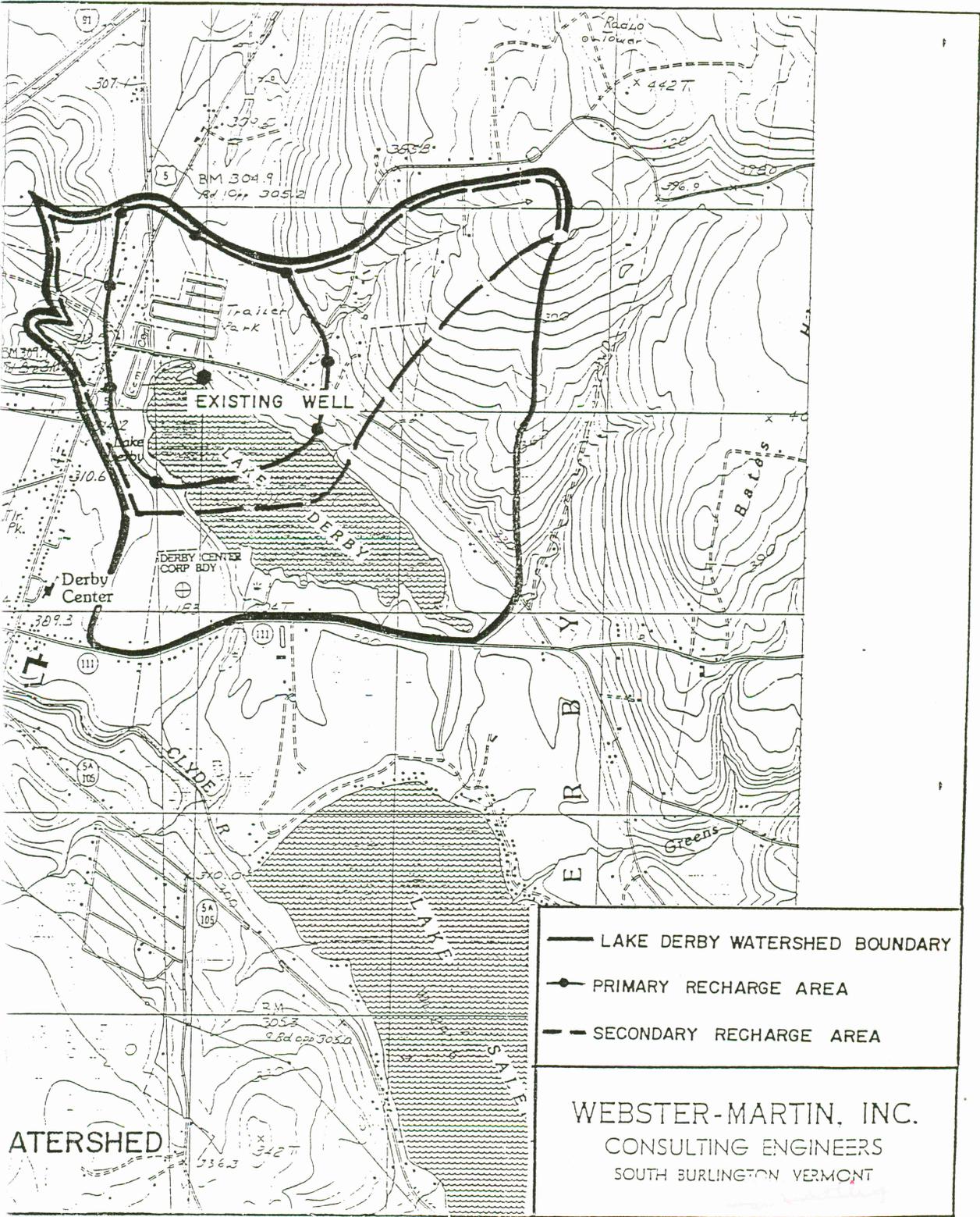
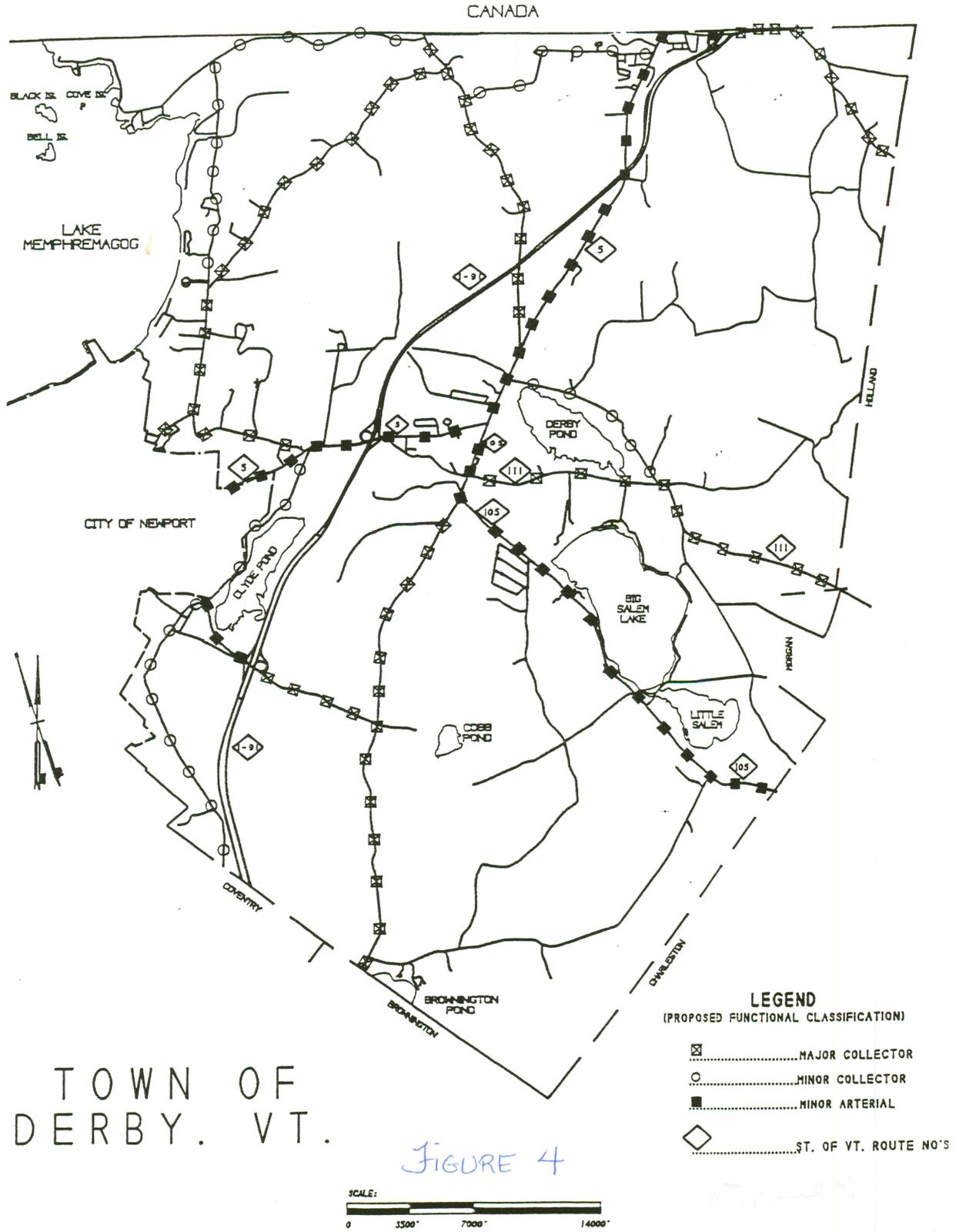


FIGURE 3

**FIGURE 4**





**FIGURE 6**

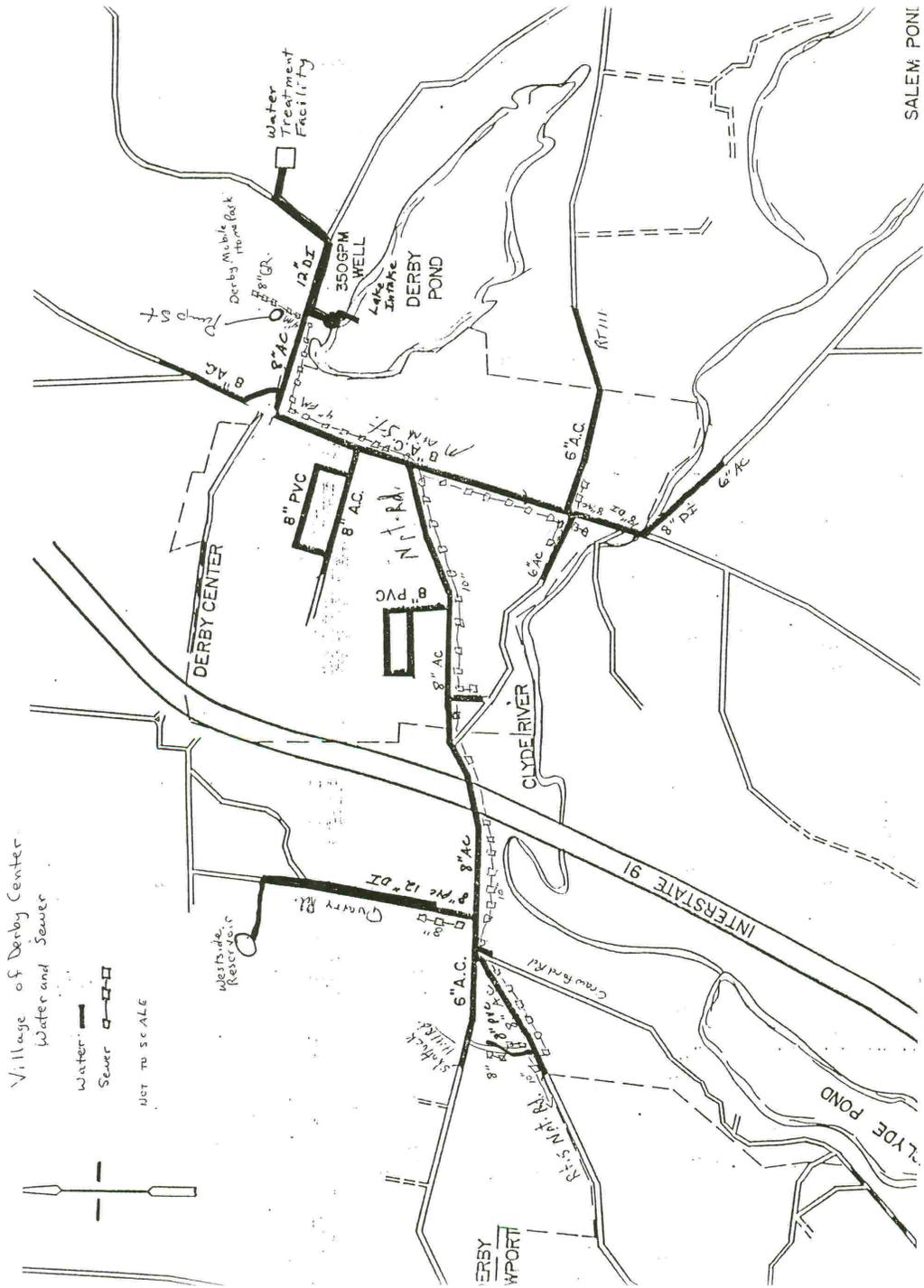


FIGURE 6

**FIGURE 7**

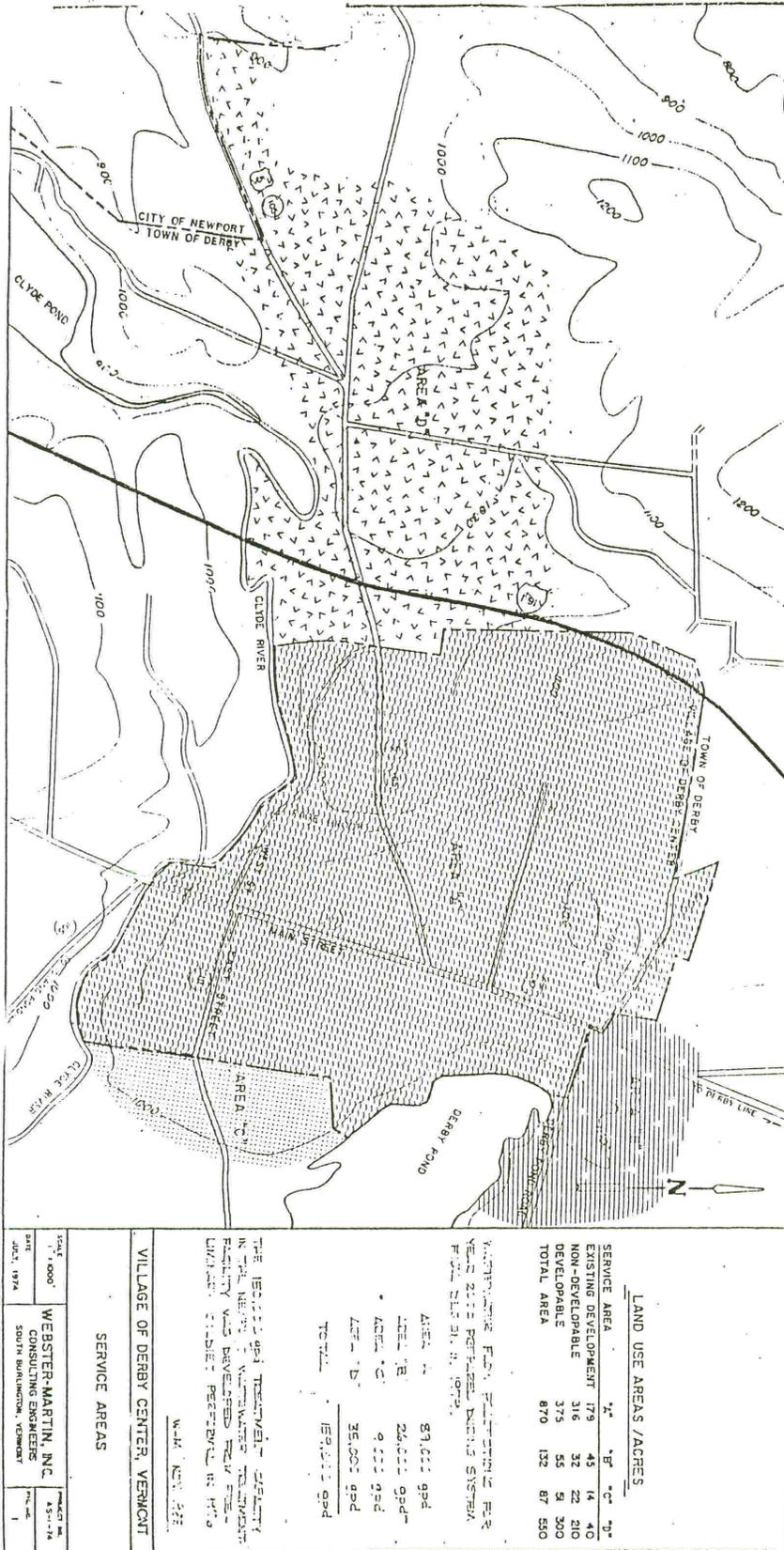


FIGURE 7

**APPENDIX A**

Appendix B

MEMORANDUM

TO: Planning Commission

FR: Mitch Wonson, Zoning Administrator

DATE: Oct 14, 1998

RE: Review of Intersection of Route 5 and Route 105 in conjunction with Town Plan Update

Existing Conditions: The intersection is a T-intersection with joint Routes 5 & 105 (State designated minor arterials) comprising the west approach. Route 5 turns to the north (north approach) to Derby Line & Canada and becomes a major collector. Route 105 turns south (south approach) and retains a minor arterial status. Each approach is one lane, with the west approach being stop controlled. While it is assumed there is a general three rod right of way for each roadway (some additional right of way was apparently obtained in the southwest corner in the last two years), anecdotal evidence from local AOT staff, as well as surveys of Main Street to the south, suggest the north-south corridor has a five to six rod right of way. Right of way of these dimensions would allow much greater flexibility for improvements with less need for land acquisition. Traffic operations are complicated by the oblique angle of the west approach, slightly offset access to a restaurant/bar to the east, and lack of defined access/separation for the mini mart/gas station in the southwest corner. The twelve hour traffic count prepared by the State in August indicates the following:

- \* The predominant movement is to/from the west/south (50+%)
- \* 79% of the south approach is left turning vehicles
- \* 71% of the north approach is right turning vehicles
- \* The west approach is more evenly split at 38% left and 62% right
- \* Peak hour traffic signal warrants ( MUTCD Figure 4-6 3/89) are met for approximately eight of the twelve hours counted.

Existing Operations: The intersection currently experiences delay, congestion, and awkward time consuming turn movements. Principal observed difficulties are:

- \* Significant queuing on the west approach. This results from the high volume and generally one lane configuration which precludes right turns if more than one car (one truck) is waiting to turn left. Personal experience reveals occasional queues of 15 to 20 vehicles during the PM peak
- \* As a result of the queues noted above, vehicles cut through the mini mart to proceed from west to south on Route 105, resulting in occasional short queues on this site
- \* Awkward and difficult turn movements for trucks to/from the west/south due to the oblique angle of the west approach. These truck movements both are slow during periods of congestion and have caused significant damage to the recently installed small island adjacent to the mini mart. While the traffic counts did not indicate a heavy truck volume, there is likely higher than average truck traffic given the function of Route 105 accessing northern Essex County and northern New Hampshire and the I-91 weight restriction requiring certain trucks to utilize Route 5 north to the border.
- \* Through traffic on the south approach ( occasional queues of 7 to 10 vehicles) is delayed as a result of the high volume of left turn movements.

Future Conditions: It is expected that future traffic operations will continue to worsen until improvements are made given natural growth in traffic, the minor arterial function of the roadways involved, and expected commercial development in the future. Concerning this last point, the traffic study prepared for the unbuilt Derby Plaza shopping center at RT 5/ I-91 projected approach volume increases of approximately 200 peak hour vehicles as a result of the center alone. Additionally, the Town has approximately 225 acres of planned and zoned commercial land north of the intersections within two miles.

Alternative Solutions: Given the function classification of the roadways, current volumes and operations, and anticipated future volume increases, this location is a viable candidate for analysis and development of a long term solution/improvement plan. While short term measures are warranted, these should be integrated as best possible with a long term solution and not considered ultimate improvements. Principal objectives of a long term solution ( in addition to typical traffic considerations of safe effective operations) would include the provision of turn lanes with sufficient queuing distances to avoid unreasonable delay, realignment to eliminate the oblique intersection angle, and likely signalization.

Three very basic long term alternatives are shown on the attached graphic (Figures 1 -3) . These are obviously highly conceptual and require detailed analysis of volumes, queuing requirements, levels of service, signalization warrants, right of way needs, and cost. From a conceptual standpoint they would provide long term viability; however, all would probably require some measure of land acquisition dependent upon current right of way and whether 5-6 rods is available along Main Street. The most “high tech” solution would incorporate turn lanes/through lanes on all approaches if warranted. Figure 1 realigns Route 105, making it the through road with the north approach intersecting at right angles. This would provide the greatest continuity for the arterial roadway and make the predominant movements through movements. It would likely require significant right of way acquisition and elimination of the mini mart. Figure 2 realigns the west approach to the north. This would result in a 90 degree intersection and could provide sufficient stacking distance dependent upon design and right of way acquisition. The cost of right of way acquisition in this quadrant would likely be far less than in the southwest quadrant given the residential nature and use of the buildings in this location. A principal concern is the need to create an S curve approach to bring the road back into alignment to the west. Figure 3 realigns the intersection slightly to the south and, with acquisition, could also provide reasonable operations.

Potential short term improvements are shown in Figures 4 - 6. The key constraint appears to be right of way particularly given the oblique intersection angle and necessary geometric design. Right of way acquisition may or may not be necessary dependent upon current right of way locations and ability to shift roadway centerlines. The solutions obviously can be “mixed and matched” and clearly require detailed traffic operations and design analyses. The principal objective would be to provide sufficient queuing on the west approach while maintaining overall effective operations and minimizing impacts on the integrity of the State system. Figure 4 provides a two lane approach from the west. This appears feasible from a right of way perspective, but would require shifting the existing centerline. A key constraint is the ability to provide a viable approach given the oblique angle of the right of way. Figure 5 incorporates a north approach right turn lane with two eastbound lanes. This would likely be a simple improvement, but may not significantly improve traffic flow even with 70+% right turns.

Figure 6 provides a north bound bypass lane. This likely would reduce delays on the south approach, but would require realignment of the adjacent sidewalk. Land acquisition is again dependent upon current right of way locations.

Incorporation into Town Plan: The extent of the discussion concerning this intersection ( and other problem locations) is clearly up to the Commission. It is appropriate to at least present the concerns in a limited fashion and, more importantly, incorporate the need for analysis into the implementation section in some manner. Initial implementation would be to request the State AOT to perform a detailed analysis oriented towards developing a viable long term solution. Once concurrence is reached on a long term solution (including preliminary design and right of way needs), more specific implementation mechanisms can be developed to allow timely construction. These could include:

- \* Designation of land needed for rights of way on a Town official map. This has the effect of precluding development on this property.

- \* Coordination of access control with a long range plan protecting the integrity of the future traffic operations

- \* Incorporation of improvements into a capital improvement program

- \* Actual right of way acquisition as land comes on the market and prior to additional development. For example, if Figure 2 were the preferred alternative, the two properties north of the west approach are currently on the market and likely could be acquired at a reasonable price.

- \* “Banking” of any matching funds which would facilitate ultimate construction.

Route 5 / 105 Intersection Alternatives

