

## INTERSTATE INTERCHANGE TEAM

This team was asked to look at the existing Mixed Use zone by the interstate and assess its potential as well as the impact of its build-out. Three different areas were included in this question—each with a different potential build-out, density, physical access, and impact on the resources (economic, social, and ecological) of the town.

The first step this team undertook was to contemplate “whether or not the town needs development.” If so, what kind, and how would it be linked to water, sewage treatment, and roadway access. The team recognized that as the town grows to accommodate the future, this area of Middlesex is not badly positioned with its easy access to the interstate and Middlesex’s proximity to both Montpelier and Burlington. The pressure for open land to develop will eventually come to this area of Middlesex.

After a field trip to the Colby and Atwood properties, the existing industrial development along Route 2, and a renewed look at the village, the following concerns were identified. The need to:

- ?? Develop a set of separate identities for this zone that do not compete with mixed-use development in the village core
- ?? Define what is meant by industrial/commercial development, i.e., no emphasis on commercial in a retail sense
- ?? Identify the capacity of the land for on-site sewer and water
- ?? Identify the market potential for senior housing, rural residential and mix of home businesses, commercial condominiums, rural small-scale hi-tech industrial, hi-tech/low-tech eco-businesses, etc.
- ?? Understand the differences between Route 2 and Center Road for truck access and maneuverability, need for curb-cuts, and visibility from the interstate

The Interstate Interchange team realized that first starting with and meeting the needs of the village core would be prudent as it would allow for mixed-use planning in the industrial/commercial zone to be complimentary and non-competing. This zone is divided into two main properties, first being the Colby property and the second smaller parcel being the Atwood property. Some of the fundamental agendas and parameters of this group were to take advantage of location but to not over-develop. In addition, the team advocated the potential for transferring development rights from remote locations to more accessible ones



*Nat Goodhue explains Exit 9 Build-out Analysis*

### **Mixed-Use Industrial/Commercial Zones**

A potential build-out study produced by Julie Campoli, Landscape Architect with Terra Firma, as a proto-typical interstate interchange mixed-use development was reviewed, as were the drawings by Jean Vissering, Landscape Architect. The team took these into account and developed its own potential build-out of the west side of Center Road (Atwood and Colby), as well as a separate analysis for the east side property (Atwood). Criteria included were:

For building development patterns:

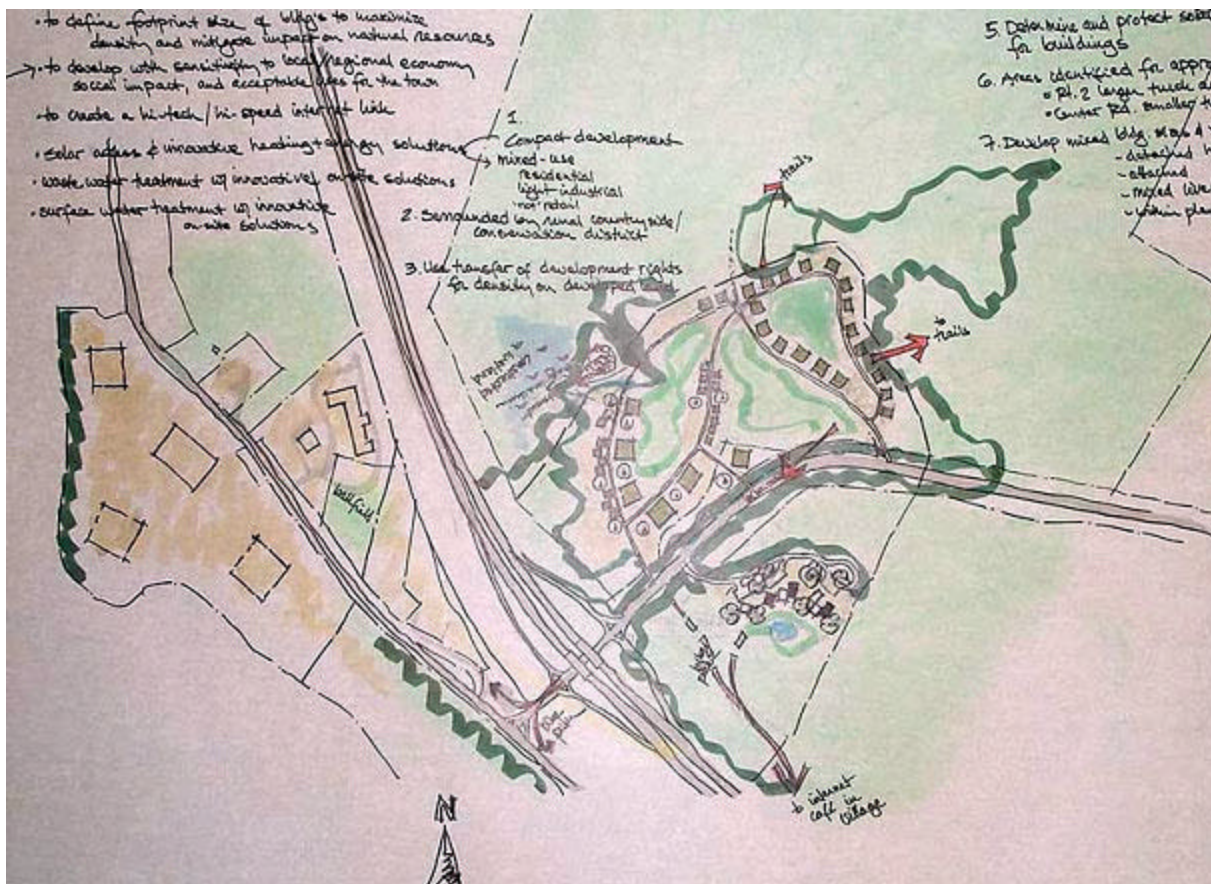
- ?? Use a mix of densities and building sizes that work with the lay of the land—views, topography, vegetation, etc.
- ?? Allow variable set-backs to make the Atwood parcel usable as an industrial/commercial building site
- ?? Create an interface between residential, industrial, commercial, and home-businesses
- ?? Develop a high-tech/low-tech strategy for attracting a mix of business and residential development, including home-businesses

For infrastructure & energy needs:

- ?? Work with Verizon to provide high speed internet
- ?? Develop wind power generation
- ?? Create an on-site sewage treatment using alternative and innovative technologies as a demonstration project
- ?? Use constructed wetlands for storm-water mitigation
- ?? Use passive solar orientation and earth-berming for mitigating heat-loads and environmentally-sensitive materials for construction

And in particular for the east side:

- ?? Work with the lay of the land for roads, building footprints, water run-off, etc.
- ?? Identify the differences (environmental and economic) in a build-out of Rural Residential vs. Mixed-Use zoning
- ?? Use the allowable rural residential number of homes as a measuring stick for what is doable on this property, with an increase allowed for clustering and smaller footprint houses



Drawing 1 - Detail Industrial Plan - Colby and Atwood Properties

## Transfer Developing Rights (TDRs)

- ?? Move or transfer development rights from remote sources to more accessible village ones (see *Drawing 2*)
- ?? Allow residential development to meet expected population growth
- ?? Utilize ecological principles in designs
- ?? Use a Living Machine technology for treating sewage disposal
- ?? Provide wind power generation
- ?? 20 Units (residential) is based on the number allowed under Rural Residential
- ?? Small lightweight industrial and mixed-uses
- ?? Maximum footprint 7,000 – 10,000 sq. ft. buildings



*Drawing 2 - TDR potential*

## **Conclusions and Analysis for Interstate Interchange Team**

1. One drawing depicts the general pattern of development using transfers of development rights (TDRs) to create a compact pattern of development bordered by a rural countryside. The drawing shows all development rights of the Atwood 15.5-acre parcel on the east side of the road being transferred to his 1-acre parcel on the west side of the road. This should be amended to show some of the development rights remaining on the 15.5-acre side of the road because the narrow 1-acre parcel is not large enough to accommodate 15 acres of development rights. The west side does, however, lend itself to the 10,000 square foot building Mr. Atwood was concerned about.

2. The plan drawing depicts both a rural residential and a mixed-use plan for the Atwood 15.5-acre parcel. The residential option might be 3 detached houses or 6 town houses in three structures with a neighborhood commons, i.e., the fourth building. The mixed-use option might be 3 to 6 offices with a shared building for support functions. Or if mixed-use requires truly mixed use, the three buildings could each contain an office, a home and an apartment.

3. The overall pattern of development, including green space within, as well as surrounding the development area, environmentally-sensitive site design, and building orientation and design, size of footprint, design of roadways, and compatible adjacent land uses may be more important than detailed prescriptions of uses within the buildings.

4. Additional development of the existing industrial/commercial area was seen as a positive move. Building that zone out to completion makes use of the easy access off of Route 2. In addition developing (or allowing) a greater mix of use for the properties adjacent to the existing zone on Route 2 was seen as positive for those properties and as a buffer for the industrial/commercial zone.