

Date: August 31, 2015
To: Laura Bailey, WMAP
From: Kevin Worden, EV
Re: Lands of Wind Energy Associates – road widths

As we have discussed, the Hinesburg Road Standards (Table 1) includes an 18ft Traveled Way Width (with 2ft shoulders) for Class 3 Roads which function for property access. The Traveled Way Width is increased to 22ft for roads within the Village district. This table also includes sidewalk and curbing for roads within the Village district. The standards also state that “curbs may be required in the Village district” (section 7.18).

The original concept plan for Lands of Wind Energy Associates included potential road sections with 18ft Traveled Way Width, no specified shoulder or curbing and a 7'-6" greenbelt and 5' sidewalk on each side. See below:



The applicant is open to revising the proposed road section to include wider traveled way (lanes), shoulders and curbing as appropriate. Road widths should take into account many factors including Average Daily Trips, design speed of the road, emergency access, on-street parking (or not), frequency of driveways, suitability of other amenities such as bike paths, sidewalks etc and desired aesthetics.

There is an ongoing debate whether wider or narrower roads are better as related to safety, stormwater run-off, character and health of neighborhoods, etc. With this project, we have the opportunity to evaluate these various considerations and determine what the best width and configuration for this community will be.

Vermont State Design Standards

The Vermont Agency of Transportation Design Standards include the following table for Rural Local Roads. Note that the Average Daily Trips (ADT) for the Lands of Wind Energy Associates subdivision will likely be between 387 and 632 (based on 66 residential units). Using the table below, the lane widths for a road with a design speed of 25mph to 30mph would be 9ft with a 2ft shoulder.

Table 6.3 Minimum Width of Lanes And Shoulders for Rural Local Roads							
Design Traffic Volume	ADT ^(a) 0-25	ADT 25-50	ADT 50-100	ADT 100-400	ADT 400-1500	ADT 1500-2000	ADT Over 2000
Design Speed (mph)	Width of Lane/Shoulder (ft)						
25	7/0	8/0	9/0	9/2	9/2	10/3	11/3
30	7/0	8/0	9/0	9/2	9/2	10/3	11/3

Road width references:

http://www.ccrpcvt.org/vtwesterncorridor/documents/Vermont_Flexible_Design_Standards.pdf

http://vtransengineering.vermont.gov/sites/aot_program_development/files/documents/publications/VermontStateDesignStandards.pdf

http://www.vlct.org/assets/Resource/Models/o_vlrhighway.doc

<http://plannersweb.com/2013/09/wide-neighborhood-street-part-1/>

<http://plannersweb.com/2013/09/wide-neighborhood-street-part-2/>

http://onlinepubs.trb.org/onlinepubs/circulars/ec019/Ec019_b1.pdf

http://www.stormwatercenter.net/Assorted%20Fact%20Sheets/Tool4_Site_Design/narrow_streets.htm

Sample road width and configuration photos:



Randall Street, Waterbury (23ft pavement)



Tilden Avenue, Richmond (20ft pavement)



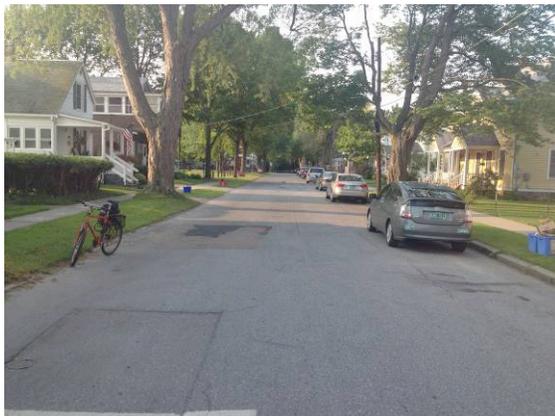
Baker Street, Richmond (20ft pavement)



Lawnwood Drive, Williston (30ft pavement)



Adsit Court, Burlington (20ft pavement)



Central Avenue, Burlington (26ft pavement)