

BREM 093-10-31-2014



MEISNER BREM CORPORATION  
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October 31, 2014

Lisa Davis Lewis  
Carlisle Board of Appeals  
Town Hall  
66 Westford Street  
Carlisle, MA 01741

Re: 100 Long Ridge Road  
Septic System Information



TOWN OF CARLISLE  
CHARLENE M. MITCHELL

Dear Ms. Lewis and the members of the Board of Appeals:

At the continued public hearing #6 of October 27, 2014 the Board requested the names of the various septic system alternative technologies that I am considering, as the Civil Engineer for the 100 Long Ridge Road, 40B Project. I responded verbally with a list of four potential products. This correspondence is intended to document this response.

The sewer piping system and septic system component locations for all three proposed septic systems are clearly shown on the related Site Plan (40 Scale). The question posed is what sort of Title 5 Innovative/Alternative Technology (I/A) systems are being considered. As you probably know, I/A systems are proprietary systems which improve or enhance wastewater treatment or disposal to conventional Title 5 systems. Mass DEP's current website (obviously not recently updated) on I/A actually states:

*MassDEP encourages the development of I/A technologies with performance superior to conventional systems. As of December 2003, approximately 2200 I/A systems were installed and operating in Massachusetts, and several hundred more are approved and installed each year.*

Obviously, since 2003 many thousands more I/A systems have been installed. This is technology encouraged by the Commonwealth of Massachusetts Department of Environmental Protection (MassDEP) and the Carlisle Board of Health.

Personally, I am confused as to why there is opposition to the voluntary proposed use of environmentally superior (and more expensive) designs in this situation.

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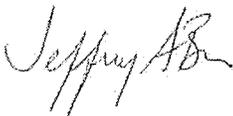
There are presently 18 different I/A systems approved by MassDEP for use in secondary treatment within nitrogen sensitive zones. Any or all may be explored for use prior to final design but the four technologies that I mentioned that I intend to explore first are as follows in no particular order:

- MicroFAST Treatment System by Bio-Microbics (X236074, 2-19-2013)
- Waterloo Biofilter System (X252561, 11-1-2012)
- NORWECO Singulair Bio-Kinetic Wastewater Treatment System (X253266, 2-26-2013)
- Amphidrome & Integral Amphidrome (W106451, 2-19-2013)

For discharge and infiltration into the ground I am also exploring the use of the PERC-RITE Drip Dispersal System (X250379, 5-23-2012). This is shown on the referenced plan as the grey shaded area.

I trust that you will record this information for the record.

Sincerely,



Jeffrey Brem, P.E.  
Meisner Brem Corporation

cc: Client  
Attorney Doug Deschenes