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September 9, 2011

Board of Selectmen
c/o Mr. Charles J. Christello, Town Manager
Town Hall Building
10 Nickerson Avenue
Middleborough, MA 02346

Re: Initial Engineering Review
WRPD Application – Residences at Star Mill – 35 East Main Street
ADE Project #2518.16

Dear Board Members:

Atlantic Design Engineers, LLC (ADE) has completed our initial engineering review of site plans for the above referenced project relative to a Special Permit request under the Water Resource Protection District (WRPD) bylaw. The plans are dated 08/01/11 and are prepared by Advanced Concepts Engineering Corp. for the Heritage Companies of Quincy, MA.

We have the following comments:

1. It appears that portions of the new northerly parking area could possibly be excavated within 2' of historical high groundwater (there is a 5' – 6' cut). No soil evaluated groundwater information was provided but narratives indicate that groundwater depth could be shallow on the site.
2. There are several existing catch basins near the building that may be remaining or removed and replaced but there is no information on the plans regarding where these structures discharge to (They are not tying into the new drainage system). If these are to remain and presently discharge to the wetland, we would recommend that water quality measures be incorporated to improve the quality of the discharged stormwater.
3. It appears that approximately 18,000 SF (0.4 acres) of new impervious area (parking/driveways) are proposed at the northern end of the site. The Zoning Analysis Table on Sheet 3 of the plans indicate that the existing impervious coverage is at 36.71 %. Mathematically adding this additional 18,000 SF (0.4 acres) of impervious area would seem to result in an impervious area percentage exceeding the maximum 40% allowed. However, the proposed conditions table has the impervious coverage percentage as 38.54%. We question how this number was derived, considering the addition of the 18,000 SF of pavement. In addition, the lot area shown in the tables decreases from an existing lot area of 11.035 acres to a proposed lot area of 7.33 acres. If a portion of the lot is being carved out, this would make the impervious percentage numbers even higher.

   In summary we question how the project meets Section XII G.3(a) and/or Section XII G.3 (j).

P.O. Box 1051
Sandwich, MA 02563
(508) 888-9282 • FAX 888-5859
email: ade@atlanticcompanies.com
www.atlanticcompanies.com

4. The portion of the proposed parking area (± 4 spaces) within the 25 foot zone is not allowed by the bylaw. It appears that alternatives may exist to relocate these spaces to the northwest, outside of the 25' zone.
5. There is a stormwater drainage outfall shown on Sheet 7 that is within the 25 foot zone. Insufficient information is provided for this area of the project as to what is discharging to this drainage facility and to show that there is no alternative to this location. This is needed to show compliance with Section XII G.3.(i)(iii).

If you have any questions, please do not hesitate to call me at (508) 888-9282.

Sincerely,

ATLANTIC DESIGN ENGINEERS, LLC.

Richard J. Tabaczynski, P.E.
Vice President

Cc: Advanced Concepts Engineering Corp.