

Acton Survey & Engineering, Inc.

P.O. Box 666, 97 Great Rd. #6 • Acton, MA • 01720

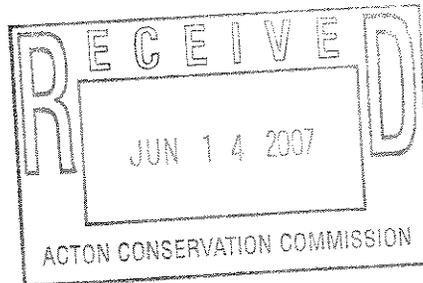
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June 12, 2007

Conservation Commission
472 Main Street
Acton, MA 01720

Re: Jeanson Homes, Inc.
Lots 2C & 3 Spring Hill Road
DEP # 085-0971
6562



Dear Commission Members:

Please find enclosed seven full scale and seven reduced scale copies of the Notice of Intent Site Plan for Lots 2C & 3 Spring Hill Road, which have been revised in response to comments by the Commission and abutters as follows:

- The bordering vegetated wetlands delineated on June 6, 2007 by Charles E Caron are shown along with the related buffer zones.
- The required wetland crossing will now alter 928 square feet of wetland and 961 square feet of wetland replication is to be provided.
- Revisions have been made to the house and driveway on Lot 2C to remove them from the new 75 foot buffer zone.
- The location of the fire pond is shown.
- The reserve subsurface sewage disposal systems are shown.
- The well location on Lot 3 has been changed.

To be better able to properly respond to materials presented to the Commission we desire that we receive copies of all such materials in a timely manner.

The Commission was presented with a print out of the Mass GIS data showing a potential vernal pool "half way down Spring Hill Road". We find that the location of the potential vernal pool is at the fire pond. The fire pond is not a vernal pool because it has a drainage area in excess of 100 acres tributary to it, it is several feet deep, it has not been reported to dry up, and water flows into and out of the fire pond. Ms. Jill Callahan of 7 Springhill Road spoke at the hearing about her children catching fish in the fire pond. This is additional evidence that the fire pond is not a vernal pool.

Spring Hill Road - 6-11-7

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A 1999 letter prepared by Oxbow Associates was read by Ms. Cynthia Harvey and presented to the Commission. The site and its environs are not listed or mapped by the Massachusetts Natural Heritage & Endangered Species Program as being a habitat for rare and endangered wildlife or species of special concern despite the reported observation of a spotted turtle, by Oxbow. We believe that to be considered valid the Oxbow letter should be updated by its author.

The required crossing extends across the narrowest point of the wetland formed by runoff being channeled through the horse farm to the south. The large wetland system that serves a connection between the conservation lands adjacent to Nashoba Brook will not be altered and the area between the wetland and Spring Hill Road and a substantial portion of the area between the wetlands and the proposed homes will be preserved.

Abutters spoke as to the need of preserving the use of the area for wildlife habitat and passage. It is our opinion that any consideration as to wildlife habitat and passage must consider the impacts of Duston Lane, the driveways associated with it, Spring Hill Road and the presence of a deer fence along a portion of Spring Hill Road..

The Commission questioned my statement that at the time of the previous filing the Wetlands Bylaw contained a "hardship clause". This office does not have a copy of the Bylaw in force at that time but the Commission's denial of that project quotes Section F10, "due consideration shall be given to possible effects of the proposal on such interests and to any demonstrated hardship on the petitioner by reason of denial as brought forth at the public hearing".

We were informed outside the hearing that DEP file number 085-0942 resulted in a denial by the Commission. However, construction of a driveway across a wetland at 93 Taylor Road has been initiated.

As suggested by the Commission, the location of the reserve soil absorption systems have been shown on the plan and an adjustment to the well location on Lot 3 has been made.

We should like to suggest that the Commission review the project in two parts. The first consisting of the wetland crossing and associated alterations within the buffer zone to allow access to the site and the second part is the alterations required for the house construction and supporting infrastructure.

A review of the second part will show that the placement of the houses and related infrastructure meet all the offset requirements of the Bylaw. As an example, if access to the upland area was available from the property to the south, no structures [the driveway] would be located within 75 feet of the wetlands and there would be no disturbance within 50 feet of the wetlands.

Spring Hill Road – 6-11-7

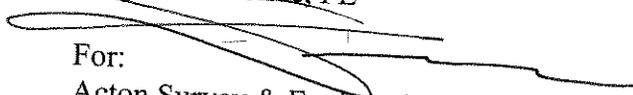
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A review of the crossing in and by itself will show that, as outlined in our letter of June 4, 2007 the crossing meets all requirements of the Acton Zoning Bylaw, the criteria established by State and Federal regulations and will have no adverse impacts to the Interests of the Wetlands Protection Act and the Purposes of the Bylaw.

Calculations pertaining to pre and post development runoff are enclosed and show that by utilizing localized stormwater collection and recharge devices that the rate and volume of runoff from rainfall events including the 100 year, 24 hour storm event will not be increased.

If the Commission or its staff should have any questions or receive information from other parties prior to the continued public hearing please contact us.

Very truly yours,
Mark T. Donohoe, PE


For:
Acton Survey & Engineering, Inc.

cc: Jeanson Homes, Inc.
Deanne Angel

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JOB JEANSON - SPRING HILL - 6562

SHEET NO. 1 OF 2

CALCULATED BY MTO DATE 4/11/17

CHECKED BY _____ DATE _____

SCALE _____

USE TR-55 EQUATION 2-3 TO DETERMINE
RUNOFF VOLUMES & RECHARGE RATES
PROVIDED BY DEP'S TB 00-01

EXISTING RUNOFF

24HR RAINFALL
2YR 3.1" 10YR 4.5" 100YR 6.4"

HOUSES 4700 SF (BOTH)

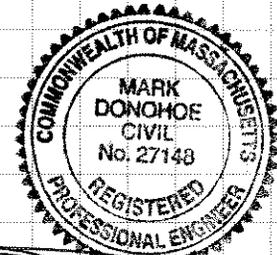
EXISTING CN = 70
RUNOFF DEPTH

WOODS AND PATTING

2YR 0.8"
10 1.7"
100 3.2"

PROPOSED CN = 98

R D
2 2.9
10 4.3
100 6.3



[Signature]
4/11/17

INCREASE IN RUNOFF DEPTH		—	RUNOFF VOLUME
2YR	2.1	$\times 4700/12$ (342)	820 CF
10	2.6		1120
100	3.1		1220

DRIVEWAY

TRIBUTARY TO RECHARGE 5500 SF ±

NOT TRIBUTARY TO RECHARGE 5400 SF ±

INCREASE IN RUNOFF			
2.1	$\times 9900/12$ (825)		1730 CF
2.6			2150
3.1			2560



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SHEET NO. 2 OF 2

CALCULATED BY MJD DATE 4/17/17

CHECKED BY _____ DATE _____

SCALE _____

RECHARGE

SOIL LOAMY SAND
2.4"/HR → 4.8'/DAY

HOUSES 280 SF × 4.8 = 1344 CF

1344 > 1220

NO INCREASE IN RUNOFF DUE TO HOUSES

DRIVEWAY 890 SF × 4.8 = 4270 CF

4270 > 2560

NO INCREASE IN RUNOFF DUE TO DRIVEWAY

NOTE

LOCALIZED INCREASES IN RATE AND VOLUME OF RUNOFF WILL OCCUR AS RUNOFF IS NOT CONTAINED/CHANNELED/COLLECTED

BUT AS RECHARGE > INCREASE IN RUNOFF NET RESULT WILL BE NO INCREASE

WOOD TO GRASS/LANDSCAPE BARS