# Commonwealth of Massachusetts Executive Office of Environmental Affairs ■ MEPA Office

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Executive Office of Environmental Affairs

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EOEA #: 13509

Phone: 617-626-/038

Watershed: Chicopee

# **NPC**

# **Notice of Project Change**

Project Name: Bear Hill Estates

Street: Off Vista Circle

Municipality: Rutland

The information requested on this form must be completed to begin MEPA Review of a NPC in accordance with the provisions of the Massachusetts Environmental Policy Act and its implementing regulations (see 301 CMR 11.10(1)).

Universal Tranverse Mercator Coordinates:			
Status of project construction: 80 %com			
Municipality: Rutland		Zip Code: 01543_	
Copies	of this NPC May	Be Obtained:	
Corp	Street: 87 Main Street		
,	State: MA	Zip Code: 01543	
Fax: 508	3-886-2462	E-mail:	
		dan.hazen@blairhomes.com	
		nange involves Protection Act variance.	
inning o	on page 3.		
<u>onmenta</u>	<u>ll Monitor</u> : April 9, 2	2005	
es, e: e:	) ⊠No ) ⊠No ) ⊠No		
e(s):	) ⊠No		
If this is a NPC solely for <u>lapse of time</u> (see 301 CMR 11.10(2)) proceed directly to "ATTACHMENTS & SIGNATURES" on page 4.			
	Copies Corp Change d Recre ginning of the commental ses, second s	State: MA Copies of this NPC May Corp Street: 87 Main State: MA Fax: 508-886-2462  Change? The project of d Recreation Watershed ginning on page 3.  Commental Monitor: April 9, 20, 20, 20, 20, 20, 20, 20, 20, 20, 20	

# PERMITS / FINANCIAL ASSISTANCE / LAND TRANSFER

List or describe all <u>new or modified</u> state permits, financial assistance, or land transfers <u>not</u> previously reviewed: A new Watershed Protection Act variance, MassDEP 401 Water Quality Certificate, Order of Conditions from local Conservation Commission Are you requesting a finding that this project change is insignificant? (see 301 CMR 11.10(6))   Yes  \[ \textsim No; if yes, attach justification.	
Are you requesting that a Scope in a previously issued Certificate be rescinded?  ☐Yes ☐No; if yes, attach the Certificate	

Are you requesting a change to a Scope in a previously issued Certificate? 

Yes 
No; if yes, attach Certificate and describe the change you are requesting:

Summary of Project Size & Environmental Impacts	Previously reviewed	Net Change	Currently Proposed
	LAND		-
Total site acreage	71.0	0	71.0
Acres of land altered	28.3	0	28.3
Acres of impervious area	6.5	0	6.5
Square feet of bordering vegetated	4,937*	-3,185*	1,752*
wetlands alteration	0**	29**	4,966**
Square feet of other wetland alteration	0	0	0
Acres of non-water dependent use of tidelands or waterways	0	0	0
STR	RUCTURES		
Gross square footage	116,600	0	116,600
Number of housing units	53	0	53
Maximum height (in feet)	35	0	35
TRANS	SPORTATION		<u> </u>
Vehicle trips per day	530	0	530
Parking spaces	N/A	0	N/A
WATER/	WASTEWATER	<u> </u>	
Gallons/day (GPD) of water use	15,900	0	15,900
GPD water withdrawal	15,900	0	15,900
GPD wastewater generation/ treatment	23,320	0	23,320
Length of water/sewer mains (in miles)	1.1/1.3	0/0	1.1/1.3

<sup>\*</sup> Permanent \*\*Temporary

Does the project change involve any new or modified:

<sup>1.</sup> conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97? ☐Yes ☒No

2. release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction? ☐Yes ☒No	
3. impacts on Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities? ☐Yes ☒No	
4. impact on any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?	
☐Yes ☒No; if yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? ☐Yes ☐No	
5. impact upon an Area of Critical Environmental Concern? ☐Yes ☒No If you answered 'Yes' to any of these 5 questions, explain below:	
<u>PROJECT CHANGE DESCRIPTION</u> (attach additional pages as necessary). The project change description should include:	e
<ul><li>(a) a brief description of the project as most recently reviewed</li><li>(b) a description of material changes to the project as previously reviewed,</li></ul>	
(c) the significance of the proposed changes, with specific reference to the factors listed 301 CMR 11.10(6), and	
(d) measures that the project is taking to avoid damage to the environment or to minimize and mitigate unavoidable environmental impacts. If the change will involve modification of any	
previously issued Section 61 Finding, include a proposed modification of the Section 61 Finding it will be required in a Supplemental EIR).	(0

See Attached

### **ATTACHMENTS & SIGNATURES**

### Attachments:

- 1. Secretary's most recent Certificate on this project
- 2. Plan showing most recent previously-reviewed proposed build condition
- 3. Plan showing currently proposed build condition
- 4. Original U.S.G.S. map or good quality color copy (8-1/2 x 11 inches or larger) indicating the project location and boundaries
- 5. List of all agencies and persons to whom the proponent circulated the NPC, in accordance with 301 CMR 11.10(7)

S	gn	atu	reg	•

Date Signature of Re or Proponent

Date

Signature of person preparing NPC (if different from above)

Clealand B. Blair Jr.	Daniel Hazen
Name (print or type)	Name (print or type)
Blair Enterprises Inc	C.B. Blair Development Corp.
Firm/Agency	Firm/Agency
87 Main Street	87 Main Street
Street	Street
Rutland	Rutland
Municipality/State/Zip	Municipality/State/Zip
508-886-4832	508-886-4832
Phone	Phone

## 1.0 Description of Previously Reviewed Project

On March 31, 2005, the proponent submitted an Environmental Notification Form (ENF) to the Massachusetts Executive Office of Environmental Affairs (EOEA) for the development of a 53 lot single family residential subdivision on a 71 acre site off Vista Circle and Bear Farm Drive in Rutland, Massachusetts. The project includes the construction of approximately 5,675 linear feet of roadway and associated utilities as well as a stormwater management system including a new and an existing stormwater detention basin. The project was subject to MEPA review because it altered more than 25 acres of land, constructed a sewer more than ½ miles in length and required a variance from the Watershed Protection Act (WsPA) for a wetland crossing. On May 9, 2005 a Certificate was issued by the Secretary not requiring the preparation of an Environmental Impact Report (EIR). During the process of acquiring the variance from the WsPA, the Department of Conservation and Recreation (DCR) required the proponent to reassess the newly proposed detention pond. Engineers at Haley and Aldrich redesigned the stormwater management system and designed a dissipater/infiltrator trench system to replace the detention pond and spread out the stormwater flow over a large area.

Currently, the project is approximately 80% complete with the drainage, sewer and water all installed and inspected and the road paved up to the wetland crossing. Disturbed areas have been vegetated, 10 homes have been completed and sold and 2 are under construction. The area within the wetland crossing has been stripped and excavated per the current variance with crushed stone installed for approximately 60% of the crossing.

# 2.0 Description of Material Changes to the Project

# 2.1 Wetland Crossing

As previously reviewed and approved, the wetland crossing spans approximately 155 feet of Bordering Vegetated Wetland (BVW) that are classified as an Outstanding Resource Water (ORW) of the Commonwealth. The crossing previously consisted of five 10-foot tall by 20-foot wide aluminum plate arch spans on concrete footings with reinforced concrete retaining walls. This resulted in approximately 4,937 square feet of permanent wetland alteration. To minimize disturbance to the BVW, the proponent has proposed to construct the crossing with four reinforced concrete pier walls and abutments below concrete deck sections. The new footing locations are identical to the previous variance for the arch spans. This allows for the footings to be below the organic layer therefore minimizing the permanent alteration of the wetland. This design will result in 1,752 square feet of permanent wetland fill, reducing the impact by 3,185 square feet. Following the construction of the crossing, sequential re-vegetation shall be completed with grasses planted first followed by shrubs and trees. A planting plan and wetland restoration plan is currently being prepared. A new variance to the WsPA has been required by the DCR for a revision to the wetland crossing which will result in a reduction in permanent wetland alteration.

### 2.2 Stormwater Management

As previously reviewed and approved, the stormwater was directed to an existing detention pond and a newly proposed detention pond to be built. During the process of obtaining the DCR WsPA variance, the DCR had concerns over the point source

discharge from the new detention pond. To remedy this, engineers at Haley and Aldrich redesigned the stormwater management system and designed an approximately 700-foot long dissipater/infiltrator trench system to distribute the stormwater flow over a large area. The reason for the length of the trench is to simulate pre-construction hydrologic conditions. Runoff from the site is directed to Stormceptors and a sediment pond prior to discharging to the trench. This design allows for ground water recharge as well as the excess runoff that is not infiltrated is released to overland flow where it shall be filtered through the vegetation.

Subsequent to the granting of the first WsPA variance, the area in the vicinity of the dissipater/infiltrator trench system has been unexpectedly altered and degraded due to the construction of sedimentation controls. Several measures have been incorporated to remedy this. Disturbed soils on and along both sides of the gallery alignment will need to be removed. These soils will be replaced using a fine to medium grained sand with 18-20% sub 200-mesh grain sized material covered with a mix of topsoil, leaf matter and chips protected by an erosion control mat. A wide track D-4 bulldozer or equivalent will be used to place the sand. This work shall not extend beyond the current area of disturbed soils. The gallery may be constructed after the site has been completely stabilized, but must remain plugged until all residential construction is complete.

# 3.0 Significance of the Proposed Changes

# 3.1 Wetland Crossing

The significance of changing the wetland crossing from arch culverts to concrete pier walls is the overall reduction in permanent wetland fill of the BVW. Wetland soil elevations will remain the same as pre-construction conditions resulting in only 1,752 square feet of permanent alterations.

### 3.2 Stormwater Management

The significance of replacing the detention pond with the dissipator system is that the stormwater shall be distributed over a large area simulating pre-development conditions as well as treatment over a long reach before the wetlands and eliminating a point source discharge to the wetlands.

#### 4.0 Measures to Protect the Environment

#### 4.1 Wetland Crossing

By lowering the footing and using the vertical pier walls, the permanent wetland fill is reduced by approximately 3,185 square feet. An erosion control specialist has been employed by the proponent. Since then, single and double rows of hay bales and silt fence have been installed and treated with polyacrylamide erosion control powder to prevent siltation. Also, swales with check dams and sediment plunge pools have been constructed. Disturbed areas on the site have been stabilized by the use of hydroseed with bonded fiber matrix and polyacrylamide erosion control powder.

### 4.2 Stormwater Management

The dissipater system shall make the post-development hydrology of the site similar to the pre-development conditions, thereby subjecting the wetlands to similar flows. This also allows for pollutants to be removed from stormwater over a greater area than the detention pond. An erosion control specialist has been employed by the proponent. Since then, single and double rows of hay bales and silt fence have been installed and treated with polyacrylamide erosion control powder to prevent siltation. Also, swales with check dams and sediment plunge pools have been constructed. Disturbed areas on the site have been stabilized by the use of hydroseed with bonded fiber matrix and polyacrylamide erosion control powder.