

# ENF Environmental Notification Form

*For Office Use Only*  
*Executive Office of Environmental Affairs*

EOEA No.: 13395  
 MEPA Analyst: Rick Bourne  
 Phone: 617-626-1130

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Fountain Knoll Estates		
Street: Elm Street		
Municipality: Kingston	Watershed: South Coastal	
Universal Transverse Mercator Coordinates: N 2817485 E 858411 (NAD88)	Latitude: N 41°- 58'	Longitude: W 70°- 45'
Estimated commencement date: Spring 2005	Estimated completion date: 2011	
Approximate cost: \$38 Million	Status of project design:	50 %complete
Proponent: Fountain Knoll Estates, LLC		
Street: 5 Evergreen Lane		
Municipality: Hingham	State: MA	Zip Code: 02043
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Bradley C. McKenzie, P.E.		
Firm/Agency: McKenzie Engineering Group, Inc.	Street: 150 Longwater Drive, Suite 101	
Municipality: Norwell	State: MA	Zip Code: 02061
Phone: 781-792-3900	Fax: 781-792-0333	E-mail: <u>bmckenzie@mckeng.com</u>

- Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?  
 Yes  No
- Has this project been filed with MEPA before?  
 Yes (EOEA No. \_\_\_\_\_)  No
- Has any project on this site been filed with MEPA before?  
 Yes (EOEA No. \_\_\_\_\_)  No
- Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:
- |  |   |                             |
|--|---|-----------------------------|
| a Single EIR? (see 301 CMR 11.06(8))           | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| a Special Review Procedure? (see 301CMR 11.09) | <input type="checkbox"/> Yes            | <input type="checkbox"/> No |
| a Waiver of mandatory EIR? (see 301 CMR 11.11) | <input type="checkbox"/> Yes            | <input type="checkbox"/> No |
| a Phase I Waiver? (see 301 CMR 11.11)          | <input type="checkbox"/> Yes            | <input type="checkbox"/> No |

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres): Not applicable.

Are you requesting coordinated review with any other federal, state, regional, or local agency?  
 Yes (Specify \_\_\_\_\_)  No

List Local or Federal Permits and Approvals: Order of Resource Area Delineation (ORAD) from Kingston Conservation Commission (DEP File # SE 37-589)

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- |  |  |  |
|--|--|--|
| <input checked="" type="checkbox"/> Land | <input type="checkbox"/> Rare Species          | <input type="checkbox"/> Wetlands, Waterways, & Tidelands      |
| <input type="checkbox"/> Water           | <input checked="" type="checkbox"/> Wastewater | <input type="checkbox"/> Transportation                        |
| <input type="checkbox"/> Energy          | <input type="checkbox"/> Air                   | <input type="checkbox"/> Solid & Hazardous Waste               |
| <input type="checkbox"/> ACEC            | <input type="checkbox"/> Regulations           | <input type="checkbox"/> Historical & Archaeological Resources |

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
<b>LAND</b>				<input type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input checked="" type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i>  <u>Order of Resource Area Delineation (ORAD)</u>
Total site acreage	167			
New acres of land altered		30		
Acres of impervious area	1.5	14.7	16.2	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		0		
Acres of new non-water dependent use of tidelands or waterways		0		
<b>STRUCTURES</b>				
Gross square footage	20,000	292,000	312,000	
Number of housing units	0	156	156	
Maximum height (in feet)	35	0	35	
<b>TRANSPORTATION</b>				
Vehicle trips per day	200	1266	1466	
Parking spaces	0	0	0	
<b>WATER/WASTEWATER</b>				
Gallons/day (GPD) of water use	10,000	36,000	46,000	
GPD water withdrawal	0	0	0	
GPD wastewater generation/treatment	500	45,500	46,000	
Length of water/sewer mains (in miles)	Water: 0 Sewer: 0	Water: 14,300 Sewer: 0	Water: 14,300 Sewer: 0	

**CONSERVATION LAND:** Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

- Yes (Specify \_\_\_\_\_ )  No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

Yes (Specify \_\_\_\_\_ )  No

**RARE SPECIES:** Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

Yes (Specify \_\_\_\_\_ )  No

**HISTORICAL /ARCHAEOLOGICAL RESOURCES:** Does the project site include 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 (Specify \_\_\_\_\_ )  No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

Yes (Specify \_\_\_\_\_ )  No

**AREAS OF CRITICAL ENVIRONMENTAL CONCERN:** Is the project in or adjacent to an Area of Critical Environmental Concern?

Yes (Specify \_\_\_\_\_ )  No

**PROJECT DESCRIPTION:** The project description should include (a) a description of the project site, (b) a description of both on-site and off-site alternatives and the impacts associated with each alternative, and (c) potential on-site and off-site mitigation measures for each alternative (You may attach one additional page, if necessary.)

#### EXISTING SITE CONDITIONS

The project site has frontage on Elm Street (Route 80) and consists of approximately 167 acres. The property is located within the Residential R-80 Zoning District and is bounded by Elm Street and developed residential property to the southeast, developed residential property to the southwest and undeveloped residential zoned property to the west, north and northeast. The property was rezoned in 1995 from 40,000 square foot lots to 80,000 square foot lots. The residential development to the southeast, Tall Timber Estates, consists of approximately 75 single family homes with lots sizes of approximately 40,000 square feet and is bounded on the west by undeveloped industrial zoned property.

An approximate 60 acre southern portion of the subject property has been used as a sand and gravel and concrete batch operation for approximately 40 years and the remaining northern portion of the site is heavily wooded. The site is interlaced with a series of trails with an overhead power line easement encroaching into the western portion of the property. Fountainhead Brook flows in a northerly direction in the northwestern portion of the property with a bordering vegetated wetland extending from its banks. A series of man-made ponds and associated bordering vegetated wetlands are located in the southeastern portion of the site. The topography ranges from approximate elevation 142 ft. (NGVD) at the northeasterly portion of the site to approximate elevation 70 ft. (NGVD) at the northwesterly portion of the site. The majority of the northern portion of the site slopes to wetland resource areas that are tributary to Fountainhead Brook, whereas the majority of the southern portion of the site slopes towards a wetland system located offsite to the west. The site is comprised of approximately 36 acres of wetlands.

The segment of Elm Street (Route 80) along the property frontage) is owned and maintained by the Town of Kingston and runs from its intersection with Main Street (Route 106) in a southerly direction to the Plympton town line. The roadway is approximately 24 ft. wide in the vicinity of the project with bituminous curbing and no sidewalks. The posted speed limit is 45 miles per hour. There appears to be in excess of 500 feet of sight distance available in both directions at the proposed intersection at Elm Street.

#### PROPOSED DEVELOPMENT

Fountain Knoll Estates is proposed as a 156 unit development to be permitted in accordance with Massachusetts General Laws 40B § 20-23. Twenty-five (25) percent of the units will be designated as affordable units that will be dispersed throughout the development and sold to buyers whose income does not exceed 80 percent of the

median income as defined by the U.S. Dept. of Housing and Urban Development. The proponent is proposing that the project be developed in 5 phases over a 4 to 6 year period. The project consists of the construction of 10 roadways totaling approximately 12,400 linear feet to provide access to approximately 105 single-family home lots and approximately 51 lots restricted to occupants who are 55 years of age and over. The age-restricted units will be located within a 50 acre enclave in the northern portion of the property. The lots proposed in the non-age restricted portion of the development are compatible with the surrounding area in that they range in size from approximately 30,000 s.f. to approximately 156,122 s.f. with the average lot size approximately 42,115 s.f. The lot frontages range from approximately 125 feet to 528 feet with an average of approximately 175 feet.

The approximate 60-70 acre southern portion of the subject property has been significantly altered in that it has been used as a sand and gravel and concrete batch operation for approximately 40 years. The remaining northern portion of the site is heavily wooded. The site is interlaced with a series of trails with an overhead power line easement encroaching into the western portion of the property.

The design of the development was accomplished to minimize the disturbance to the site by retaining natural site features and avoiding wetland resource areas and steep slopes. The roadways and associated infrastructure have been designed to be a balanced site to minimize the material to be imported and/or exported to and from the site. Earthwork will be limited to the amount required to properly construct the project infrastructure and single family homes.

The development has been designed to minimize impacts to wetland resource areas. The proposed roadways have been designed to not require any alteration of wetlands and to maximize the buffer between the limit of work and the wetland resource areas. An erosion control barrier consisting of double-staked haybales and/or siltation fencing is proposed to be installed between work areas and wetland resources in order to prevent sedimentation due to erosion within cleared work areas. The boundaries of the wetland resource areas were approved by the Kingston Conservation Commission under an Order of Resource Area Delineation (ORAD). Refer to Attachment C for a description of wetland resource areas and mitigation measures.

The project will be designed to fully comply with the Department of Environmental Protection Stormwater Management Policy (SMP). Stormwater runoff from new impervious surfaces will be managed to be in full compliance with all standards of the SMP. There will be no increase in peak rates of runoff at downgradient wetlands and properties as a result of project development. In addition, a minimum of 80% of total suspended solids will be removed from stormwater runoff prior to discharge into wetland resources as required under the SMP. Construction phase and post-construction phase BMP Operation and Maintenance Plans will be provided to comply with the requirements of the SMP. Erosion control measures are proposed at the limit of work to minimize the potential for adverse impacts to wetland resources. A Preliminary Drainage Analysis was prepared by MEG and is available upon request.

A Traffic Impact Assessment was prepared by Abend Associates, Inc. to evaluate the traffic impacts of the proposed development. The results of the study indicate that the project will have a minimal impact on existing traffic conditions. The report states that Elm Street currently operates well below its capacity so that the new trips can be accommodated without any significant effect on local traffic condition. The project will not affect the level of service at the adjacent intersections. Therefore, it is concluded that this project will not result in a significant impact on traffic operations in the vicinity of the site. In fact, in some ways traffic conditions will improve since an estimated 200 truck trips per day at the existing sand, gravel and cement operation will be eliminated. This operation has been present for approximately 40 years.

Available sight distances exceed those required by AASHTO for safe operations (Stopping Sight Distances) and to allow for driver convenience (Intersection Sight Distance) along Elm Street. A review of the local roadways and intersections reveal that there are no existing deficiencies that the project will exacerbate. Further, the project's minimal impact will not result in any new safety hazards.

There will be a single primary access location for the development with an emergency access provided at the southwesterly end of the site connecting to Pine Hill Road. This emergency access would be gated or otherwise restricted to emergency use only. This connection will provide a reciprocal emergency access to the end of this residential development, which is at the "back end" of a residential neighborhood known as Tall Timber Estates. Being aware safety concerns, the principal access to the development has been designed so that the street serving the easterly end of the development is being designed as a "boulevard" so that it will allow for two independent means of access if one side of the boulevard or the other were to be blocked for some reason. Such a design is not uncommon in a situation where the topography and geometry of a site make a second

access or looping roadway system impractical. In the case of the proposed development, the presence of a power line easement and wetlands and the configuration of the site make a looping road system unfeasible.

Wastewater generated from the lots within the development will be directed to individual subsurface sewage disposal systems. The systems will be designed to fully comply with the requirements of Title 5 (310 CMR 15.00). Soils information obtained from the Soils Conservation Service (SCS) Survey of Plymouth County, Massachusetts indicated the presence of extremely permeable, well-drained soils that will be suitable to accommodate the proposed subsurface sewage disposal systems. The soils on the site are classified as the following SCS Hydrologic Soil Groups: Merrimac Sandy Loam (MtB - SCS Hydrologic Soil Group A), Carver Course Sand (CaB, CaC, and CaE -SCS Hydrologic Soil Group A), Plymouth (Carver/Gloucester soils) (CcD - SCS Hydrologic Soil Group A), Hinckley Gravelly Loamy Sand (HaC and HaE - SCS Hydrologic Soil Group A), Haven Very Fine Sandy Loam (EnA - SCS Hydrologic Soil Group B), Poquonock Very Stony Fine Sandy Loam (GcB - SCS Hydrologic Soil Group C), Swansea Muck Shallow (Mu - SCS Hydrologic Soil Group D), Scarboro Sandy Loam (ScA - Hydrologic Soil Group D) and Freetown Sanded Muck(Sb - SCS Hydrologic Soil Group D). Preliminary soils analysis and percolation testing performed in the vicinity of the proposed stormwater detention facilities confirmed the presence of these soils and corroborate the results of the SCS Survey.

Water service for the development will be provided by a connection to the municipal water supply. The system will be looped within the project and connected to the existing system on Elm Street and to the Tall Timber Estates development on Pine Tree Drive. Preliminary research indicates that adequate pressures and flows are available for domestic use and fire protection.

The project is located on the western edge of the Zone II of the South Street, Millgate Road and Soules Pond wells located northeast of the site. The development is located approximately 2,000 feet from the closest well (South Street). A hydrogeologic study prepared by Geoscience indicates that based on the distance from the project to any downgradient sensitive receptor and the relatively low nitrogen load from the site that there will be no impacts from the project on the Kingston water supply. The study concluded that based on groundwater flow directions and the underlying geologic deposits that groundwater leaving the site will not reach the South Street well for between 3.4 and 13 years if all the wells were pumping continuously. In addition, the nitrogen loading calculations presented in the report indicate that the nitrogen loading for the project will not exceed the 10 mg/L standard required by Title 5.