

# ENF Environmental Notification Form

*For Office Use Only*  
*Executive Office of Environmental Affairs*  
EOEA No.: 14166  
MEPA Analyst: Nick ZAVOLAS  
Phone: 617-626-1030

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: <b>Unkety Brook and Shattuck Well Sites</b>		
Street: <b>Off Chicopee Row (Unkety Brook)/ Off Martins Pond Road (Shattuck Well)</b>		
Municipality: <b>Groton, MA</b>	Watershed: <b>Unkety (Nashua) and Shattuck (Merrimack)</b>	
Universal Tranverse Mercator Coordinates:	<b>Unkety Well #1</b>	<b>Unkety Well #2</b>
<b>Unkety Well #1</b>	<b>Unkety Well #2</b>	Latitude: <b>42.632078</b> <b>42.631845</b>
<b>19 291626E</b>	<b>19 290571E</b>	Longitude: <b>71.541294</b> <b>71.541456</b>
<b>4723090N</b>	<b>4723096N</b>	<b>Shattuck Well #1</b>
<b>Shattuck Well #1</b>	<b>Shattuck Well #2</b>	Latitude: <b>42.615781</b> <b>42.616009</b>
<b>19 291709E</b>	<b>19 291623E</b>	Longitude: <b>71.539621</b> <b>71.540678</b>
<b>4721276N</b>	<b>4721304N</b>	
Estimated commencement date: <b>2010</b>	Estimated completion date: <b>2011</b>	
Approximate cost: <b>\$6,880,000</b>	Status of project design: <b>25</b> %complete	
Proponent: <b>Town of Groton</b>		
Street: <b>Town Hall, 173 Main Street</b>		
Municipality: <b>Groton</b>	State: <b>MA</b>	Zip Code: <b>01450</b>
Name of Contact Person From Whom Copies of this ENF May Be Obtained: <b>Michael Zylich</b>		
Firm/Agency: <b>Tighe &amp; Bond, Inc.</b>	Street: <b>4 Barlows Landing Road, Unit #15</b>	
Municipality: <b>Pocasset</b>	State: <b>MA</b>	Zip Code: <b>02559</b>
Phone: <b>508-564-7285</b>	Fax: <b>508-564-4298</b>	E-mail: <b>mjzylich@tighebond.com</b>

- 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))       Yes       No
  - a Special Review Procedure? (see 301CMR 11.09)       Yes       No
  - a Waiver of mandatory EIR? (see 301 CMR 11.11)       Yes       No
  - a Phase I Waiver? (see 301 CMR 11.11)       Yes       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): **None Anticipated**

Are you requesting coordinated review with any other federal, state, regional, or local agency?

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

List Local or Federal Permits and Approvals:

- **Wetlands Order of Conditions for pumping test (completed)**
- **Filing of NOI for Wetlands Order of Conditions for construction of the final production wells, pumping test, water treatment plant and water main**
- **Planning and Zoning Site Plan Review**

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

- |   |                                       |  |
|---|---------------------------------------|--|
| <input type="checkbox"/> Land             | <input type="checkbox"/> Rare Species | <input type="checkbox"/> Wetlands, Waterways, & Tidelands      |
| <input checked="" type="checkbox"/> Water | <input 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 checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input type="checkbox"/> Chapter 91 License <input checked="" type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input checked="" type="checkbox"/> Water Management Act Permit <input checked="" type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input type="checkbox"/> Other Permits <i>(including Legislative Approvals) – Specify:</i>
Total site acreage	30			
New acres of land altered		<1		
Acres of impervious area	0	<0.5	<0.5	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration		<5,000		
Acres of new non-water dependent use of tidelands or waterways		0		
<b>STRUCTURES</b>				
Gross square footage	200	800	1,000	
Number of housing units	0	0	0	
Maximum height (in feet)	10	15	15	
<b>TRANSPORTATION</b>				
Vehicle trips per day	0	1	1	
Parking spaces	0	6	6	
<b>WATER/WASTEWATER</b>				
Gallons/day (GPD) of water use	0.43 MGD	0	0.43 MGD	
GPD water withdrawal	0.517 MGD	0	0.517 MGD	
GPD wastewater generation/ treatment	0	0	0	

Length of water/sewer mains (in miles)	0.47 (Shattuck)**	1.76 (Unkety) 0.47 (Shattuck)	2.23
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\* The current gpd of water use is based on 2005 pumping data. The 2006 permitted and registered gpd water withdrawal is 0.517 MGD from the Water Management Act Permit (9P-2-13-115.01) for the Town of Groton. The new Shattuck wells are for replacement of existing Shattuck Well that is no longer in operation due to poor water quality and the Unkety Brook well will provide for additional system reliability.

\*\*Although the Town currently has water mains within the existing service area, there are no water mains in the new well area for the Unkety Brook site well site area. The new water main for the Shattuck well site will parallel the existing water main easement.

**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

\* The Unkety Brook water main route is located within Priority and Estimated Habitat of State-listed species and within the limits of the Petapawag Area of Critical Environmental Concern (ACEC). It is likely that the water main route will require construction monitoring by a NHESP-authorized biologist.

**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 \*

\*As part of this submittal an inquiry is being made to the Massachusetts Historical Commission requesting comments on potential impacts to historic or archeological resources caused by the projects.

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

\*The Unkety Brook wells and water main route and the Shattuck wells and water main route are both located within the limits of the Petapawag Area of Critical Environmental Concern (ACEC). It is likely that the water main routes and wells will require construction monitoring by a NHESP-authorized biologist.

**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.)

The Town currently operates two public water supplies, one located in the Cow Pond Brook sub-basin and the other in the Baddacook Brook sub-basin. The water supplies are the Whitney Pond Well (PWS ID 211500-036) located northeast of Whitney Pond and south of Route 40 and the Baddacook Well (PWS ID

2115000-02G) located south of Baddacook Pond and north of Route 40. An additional source, Shattuck Well (PWS ID 2115000-01G), is no longer in active operation due to poor water quality. The Shattuck well has been inactive since the 1980's due to high levels of iron, manganese and organic and is currently not in operable condition.

**Shattuck**

Two new 12-inch diameter water supply production wells have been proposed for the Shattuck site. The Shattuck site has been selected based on favorable pump test data obtained following the installation and pump testing of two 8-inch diameter test wells. Pumping activities performed as part of the study included individual and combined step drawdown pumping test, individual 24-hour short duration pumping tests, and a combined extended duration (5 day) pump test. Drawdown information was collected during each test which provided site specific information regarding safe yield of the surrounding aquifer.

The proposed Shattuck water main route starts at the Shattuck Well site and includes a 6-inch diameter pipe that will follow a 2,500 foot route east along the existing piping to the Baddacook Well Water Filtration Plant. The route will cross a regulated resource area as it will parallel the existing pipeline along the narrow and limited available easement route.

The proposed route involves construction through land owned by the Town of Groton and several private properties. The Groton Water Department has an existing easement through these plots of land for the existing water main. The construction of the proposed pipeline will be within the existing easement.

Though the route will parallel the existing pipeline, this new construction will not qualify for a Massachusetts Wetlands Protection Act (MA WPA) exemption since it is not limited to the maintenance, repair or replacement of an existing and lawfully located structure in the service of the public. This alternative will result in direct, though temporary, impacts to Bordering Vegetated Wetlands (BVW) and/or Isolated Vegetated Wetlands (IVW) that will likely be less than a total of 5,000 square feet. Work will also occur within the Town's 50-foot No Disturbance Zone and the 100-foot Buffer Zone to wetland resource areas. The route is also located within Priority and Estimated Habitat of State-listed species and within the limits of the Petapawag Area of Critical Environmental Concern (ACEC).

Pertinent regulatory programs associated with this route include the Town of Groton's Chapter 215, the MA WPA, the Massachusetts Clean Waters Act (401 Water Quality Certification), Section 404 of the Federal Clean Water Act, Massachusetts Endangered Species Act (MESA), and the Massachusetts Environmental Policy Act (MEPA). It is likely this route will require construction monitoring by a NHESP-authorized biologist.

<b>Description</b>	<b>Mitigation</b>	<b>Enforcement</b>
<b>Land Use/Farmland</b>	No Mitigation Required	
<b>Floodplains</b>	No Mitigation Required	
<b>Wetlands</b>	Erosion & Sediment Controls, Restoration of Disturbed Areas	Groton Conservation Commission
<b>Cultural Resources</b>	No Mitigation Required	
<b>Biological Resources</b>	No Mitigation Required	
<b>Water Quality Issues</b>	Shattuck Well Water Treatment, Erosion & Sediment Controls, Restoration of Disturbed Areas	Will be specifically addressed in the Construction Specifications Groton Conservation Commission
<b>Coastal Resources</b>	No Mitigation Required	
<b>Socio-Economic/ Environmental Justice Issues</b>	No Mitigation Required	

<b>Air Quality</b>	Dust Control, water spray	Will be specifically addressed in the Construction Specifications
<b>Transportation</b>	Traffic Control, police and signage	Will be specifically addressed in the Construction Specifications
<b>Noise</b>	Noise Control, limited work hours	Will be specifically addressed in the Construction Specifications

**Unkety**

Two new 12-inch diameter water supply production wells have been proposed for the Unkety site. The Unkety site has been selected based on favorable pump test data obtained following the installation and pump testing of two 12-inch diameter test wells. Pumping activating performed as part of the study included individual and combined step drawdown pumping test, individual 24-hour short duration pumping tests, and a combined extended duration (5 day) pump test. Drawdown information was collected during each test which provided site specific information regarding safe yield of the surrounding aquifer.

The proposed Unkety route starts at the Unkety Brook site and includes a 6-inch diameter pipe that will be installed approximately 1,500 feet northwest cross country along existing paths and driveways through private property to Chicopee Row. A private lot across Chicopee Row will be used for a small treatment building. Then an 8-inch pipe will be installed southwesterly 7,800 feet along Chicopee Row to connect with the existing water distribution system at the intersection with Blossom Lane and Longley Road.

This route will require an agreement for construction of the water main through lands of the Town of Groton. This land is under the jurisdiction of the Conservation Commission as conservation land and requires a Conservation Commission agreement and easement and a construction Order of Conditions permit. Additional easements will be required for activities on private land.

The proposed route does not have any challenging terrain and the existing path/driveway leading out to Chicopee Row has sufficient horizontal clearance for trenching and equipment, therefore trenching is feasible along this route. There are some construction constraints due to the two stream crossings, as well as dewatering due to shallow groundwater along this route. The eastern stream crossing is a culvert under the street, so it should be easy to install piping below, however dewatering shallow groundwater due to the proximity of the wetland will pose a challenge. The western stream crossing is more difficult and would require special construction considerations to install below an active stream. These two stream crossings increase the construction difficulty and environmental permitting requirements of installation for this route. Additionally disturbance next to the wetland area would need to be minimized.

The proposed location of the treatment building is adjacent to a wetland and therefore the high groundwater will pose a constraint during construction. The western border of the site has an intermittent stream, therefore the treatment building would be placed toward the eastern portion of the lot, if possible. The pipeline route along the existing Chicopee Row does not have any unusual construction constraints. Work activities along the public roadways will require traffic details.

The construction of this route does not appear likely to directly impact Bordering (or Isolated) Vegetated Wetlands (BVW/IVW) or Land Under Water Bodies and Waterways (LUWW). However, work will occur within the 200-foot Riverfront Area of Unkety Brook and require crossing at least two culverted streams (one perennial, one intermittent), as well as the Town's 50-foot No Disturbance Zone and the 100-foot Buffer Zone to wetland resource areas. Design will be prepared so construction activities will not disrupt normal stream flows through existing culverts. The majority of the route is also located within Priority and Estimated Habitat of State-listed species and within the limits of the Petapawag Area of Critical Environmental Concern (ACEC).

Pertinent regulatory programs associated with this route include the Town of Groton Wetlands Protection Bylaw and Regulations, the Massachusetts Wetlands Protection Act, the Massachusetts Endangered Species Act, and the Massachusetts Environmental Policy Act. It is likely that this route

will require construction monitoring by a NHESP-authorized biologist.

Description	Mitigation	Enforcement
<b>Land Use/Farmland</b>	No Mitigation Required	
<b>Floodplains</b>	No Mitigation Required	
<b>Wetlands</b>	Erosion & Sediment Controls, Restoration of Disturbed Areas	Groton Conservation Commission
<b>Cultural Resources</b>	No Mitigation Required	
<b>Biological Resources</b>	No Mitigation Required	
<b>Water Quality Issues</b>	No Mitigation Required	
<b>Coastal Resources</b>	No Mitigation Required	
<b>Socio-Economic/ Environmental Justice Issues</b>	No Mitigation Required	
<b>Air Quality</b>	Dust Control, water spray	Will be specifically addressed in the Construction Specifications
<b>Transportation</b>	Traffic Control, police and signage	Will be specifically addressed in the Construction Specifications
<b>Noise</b>	Noise Control, limited work hours	Will be specifically addressed in the Construction Specifications