

ENF Environmental Notification Form

For Office Use Only
Executive Office of Environmental Affairs
 EOEA No.: 13352
 MEPA Analyst: Rick Bourée
 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: NSTAR Second Electric Supply to Elm Road		
Street: Surf Drive		
Municipality: Falmouth	Watershed: Nantucket Sound	
Universal Transverse Mercator Coordinates: X 364358.085584 Y 4600083.036606	Latitude: 41° 32' 27.3" N Longitude: 70° 37' 34.2" W	
Estimated commencement date: Fall 2004	Estimated completion date: Fall 2005	
Approximate cost: \$1,500,000	Status of project design:	80 %complete
Proponent: NSTAR Electric and Gas Corporation		
Street: One NSTAR Way, SE250		
Municipality: Westwood	State: MA	Zip Code: 02090
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Stephen B. Wood		
Firm/Agency: ESS Group. Inc.	Street: 401 Wampanoag Trail, Suite 400	
Municipality: East Providence	State: RI	Zip Code: 02915
Phone: 401-330-1206	Fax: 401-434-8158	E-mail: swood@essgroup.com

- 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

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 Conditions - Falmouth Conservation Commission, Programmatic General Permit – US Army Corps of Engineers, Petition for Underground Cables and Conduits - Falmouth

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 checked="" type="checkbox"/> Wetlands, Waterways, & Tidelands |
| <input 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
LAND				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input checked="" 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: Programmatic General Permit – ACE</i>
Total site acreage	0.33*			
New acres of land altered		0.33*		
Acres of impervious area	0	0.33*	0.33*	
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		
STRUCTURES				
Gross square footage	0	14,375*	14,375*	
Number of housing units	N/A	N/A	N/A	
Maximum height (in feet)	N/A	N/A	N/A	
TRANSPORTATION				
Vehicle trips per day	N/A	N/A	N/A	
Parking spaces	N/A	N/A	N/A	
WATER/WASTEWATER				
Gallons/day (GPD) of water use	N/A	N/A	N/A	
GPD water withdrawal	N/A	N/A	N/A	
GPD wastewater generation/ treatment	N/A	N/A	N/A	
Length of water/sewer mains (in miles)	N/A	N/A	N/A	

*Based on 5,096 linear ft x 2.7 ft wide duct bank + 7 vaults at 7'x14', total acreage would be 0.33 acres

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 Coastal Salt Pond) 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 MHC indicated 2 historic markers in general vicinity. Project is in an area previously disturbed by road and waterline installation) 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.)

A. Project Site

NSTAR Electric is proposing to install and operate a new 25 kV underground distribution supply line that will originate at NSTAR's Falmouth Substation off of Jones Rd and terminate at an existing underground vault at Elm Road. The need for the project is dictated by the continuing increase in load growth in the area currently served by the existing No. 97 overhead distribution supply line and will thereby provide a public benefit. Load growth has been experienced in part due to new building and existing facility expansions in the area served by the current distribution supply line. The increased demand for electricity has resulted in the existing supply line operating near normal capacity and is projected to exceed the normal capacity in 2005. The new proposed underground distribution supply line will provide adequate capacity for the future load as well as provide a redundant supply thereby providing additional reliability.

The new underground line will originate at NSTAR's Falmouth Substation off of Jones Road, and run south on Shore Street to Surf Drive and run west along Surf Drive to existing facilities located at Elm Road. The new underground line will utilize an existing duct and manhole system to Shore Street at Surf Drive and a new duct and manhole system along Surf Drive. The new duct and manhole system will start at the intersection of Shore Street and Surf Drive and continue west on the north side of Surf Drive, stopping at Elm Road. The duct bank will be installed just off the edge of the pavement along Surf Drive within the Town Road layout for a distance approximately one mile in length. Other underground utilities such as water supply line are located in the general proximity of the proposed line for a majority of the route.

The proposed distribution supply line will require the crossing of a salt pond inlet and the Fresh River located on Surf Drive. Both crossings will be accomplished through the use of horizontal directional boring techniques. A single 24-inch PVC conduit will be installed beneath each culvert which will contain the duct bank and electric cables. The PVC conduit will be made up into a single piece approximately 200 feet in length. The made up length will be set up parallel to Surf Drive at the receiving end of the bore and pulled back through the borehole toward the sending side of the bore. The HDD will be approximately 200 feet in overall length and will require a 20-foot by 20-foot entry and exit area for the vault, and workspace for the boring operation and pullback layout. The HDD entry and exit points will be setback approximately 80 feet from the edge of the salt pond inlet culvert and Fresh River culvert bank. The HDD conduit will be bored a minimum of 5 feet below the bottom of the structure/waterbody. The HDD and PVC conduit installation process involves drilling a pilot hole by a directionally guided boring rig, followed by reaming to achieve the desired borehole dimension. A bentonite drilling slurry with a biodegradable stabilizer will be used to maintain the bore hole opening. The bentonite and cuttings will be removed from the work area as the operation proceeds and will be disposed of off

site.

Approximately 2,235 linear feet of the installation would be within coastal dune as the dune abuts the edge of pavement. This area has been previously disturbed by the installation of Surf Drive and the water line. NSTAR will prepare a restoration and planting plan for the project and has consulted with the Town Engineer and Conservation Commission regarding requirements for this area. Crossings of a salt pond inlet and the Fresh River will be made using horizontal directional boring techniques and therefore no impacts are anticipated in these areas. Any impact from the project will be temporary in nature.

The top of the duct bank will be approximately 30 inches deep and encompass an area of approximately 30-inches by 32-inches. Approximately 8 manholes will be located along the length of the line. Excavation work is proposed to start at the intersection of Shore Road and Surf Drive. The excavator will utilize a 30 inch wide bucket digging approximately 60 inches in depth. The material will be piled on the paved road area for backfilling, it is anticipated that 250 to 300 feet will be done per day. While excavating all road crossings will be steel plated and driveways will be compacted material and pavement will be done after where necessary.

NSTAR meet with the Town Engineer for Falmouth and the Conservation Commission Administrator to review the project layout. The project proponent has also consulted with the Massachusetts Historic Commission, Natural Heritage & Endangered Species Program, and US Fish and Wildlife Service.

The duct and manhole system will be installed in the fall of 2004 to avoid heavier traffic encountered during summer and the cable and the other associated work will be done in the spring and fall of 2005. Police details will be utilized for traffic control to the extent required during the installation of the ductbank system. The roadway will remain open during construction.

B. Alternatives

NSTAR evaluated alternative approaches to meet the continuing growth in demand for electricity to meet the projected need. After consideration of alternative supply and demand options, NSTAR determined a second supply to Elm Road was the best approach to meet the need. In addition to the proposed underground line, a second parallel overhead line on the existing right of way was considered. This alternative involved considerable amount of construction on the existing No. 97 overhead distribution supply line and would have been less reliable because both lines would be on the same right of way and a single event could cause an outage on both lines. An overhead alternative route along Palmer Avenue was considered but was not feasible due to aesthetics and proximity to coastal areas that cause reliability concerns.

NSTAR has investigated several alternatives to the proposed off pavement installation along Shore Drive. During consultation meetings with the Town Engineer for Falmouth possible overhead installation was reviewed, as was the installation of the electric line within the paved road. The town expressed a strong desire to avoid overhead installation of electric lines in this area for a number of reasons, which include aesthetics as well as reliability concerns. The area along Shore Drive is subject to ocean storm effects in particular storms out of the Northeast, which could damage an overhead facility. The area is also a velocity zone and subject to coastal storm flowage which could impact structures and the reliability of the line. Placing the line within the paved road was considered, however, based on the Town requirement to repave the entire one-mile length from curb to curb, the cost of this alternative greatly outweighed any incremental benefit.

C. Mitigation Methods

The proposed location of the line will minimize impact to resource areas by staying between the edge of pavement and the existing water line. This area was previously disturbed by the installation of both the road and the waterline and is subject to impacts from vehicles pulling off the paved road surface. NSTAR will prepare a restoration and planting plan to present to the Conservation Commission to restore the area to pre-construction conditions.