



**US Army Corps
of Engineers**®
New England District

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CULTURAL RESOURCES / VISUAL ASSESSMENTS

To help evaluate potential effects on Cultural Resources (significant historic districts, buildings, sites or objects, local character, culture, tradition and heritage) and to fulfill the requirements of Section 106 of the National Historic Preservation Act, the Proponent has consulted with the Corps and the Massachusetts Historic Commission (MHC), acting as the State Historic Preservation Officer (SHPO), and discussed the following:

Cultural Resources: Existing data on known significant historic properties and archeological resources in the Project Area (both upland and submarine) will be reviewed and known resources within the project area identified. This review will include known shipwrecks and Native American sites identified through consultation with the Wampanoag Tribal Historic Preservation Officer. Included will be review, by a qualified marine archeologist, of an extensive integrated marine geophysical / hydrographic survey and sediment sampling program conducted over Horseshoe Shoal and along two alternative cable routes to Cape Cod. The survey which included magnetometer and high-resolution side scan sonar imaging was completed during the summer of 2001 by Ocean Surveys Inc. and was funded by the Proponent. Supplemental survey work was performed in August of 2002 in the area around the Cape Wind data tower. Additional marine survey work may be required once final siting has been determined.

Visual Assessments: To assess potential visual impacts on historic districts and sites, the Proponent has mapped the locations of designated historic properties in the communities on the Cape and Islands within potential visual range of their proposed location. Included in the mapping are locations of all districts and individual properties that are listed or determined eligible for listing in the National Register of Historic Places, as well as properties that have been locally designated, based on a review of files at MHC. Field reconnaissance of a number of locations was conducted to determine if open views to the wind park were available from the historic resource. Based on the historic properties mapping, field reconnaissance and recommendations from MHC that have been incorporated into the EIS scope, a number of representative viewpoint locations have been proposed for computer simulation. These proposed viewpoints are presently being reviewed by MHC and the Corps.

Following agency concurrence on viewpoint locations, Environmental Design Resources Inc. (EDR) will photograph and survey exact locations at each viewpoint site, including existing foreground reference points. They will then geo-reference the photographs and model visual simulations of the proposed project site from each viewpoint by superimposing computer-generated wind turbines on each viewscape. By using exact location data from the field surveys the computer simulations are able to accurately scale each wind turbine, as well as accurately calculate highlights and shadows from the sun's specific location for each turbine in the scene. This process has been reviewed and accepted as adequate by the MHC and the Corps. Each viewpoint will be modeled for daytime and nighttime conditions, which will incorporate the proposed navigational lighting.