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Decision of the Martha's Vineyard Commission Designating the Aquinnah Energy District as a District of Critical Planning Concern

1. General

As authorized by Chapter 831 of the Acts of 1977 ("the Act"), as amended, the Martha's Vineyard Commission ("the Commission") hereby designates as a District of Critical Planning Concern ("a District"), the specific geographical area hereafter described, to be known as the "Aquinnah Energy District of Critical Planning Concern".

The Commission received a nomination from the Aquinnah Board of Selectmen on October 30, 2007 for inclusion of geographic areas into a District. At the November 1, 2007 Meeting, the Commission voted to accept for consideration the nominated area.

Copies of the nomination and documents relating thereto are on file at the Commission offices, Stone Building, 33 New York Avenue, Oak Bluffs, Massachusetts.

The Commission held a Public Hearing at 7:30 P.M. on December 6, 2007, at the offices of the Martha's Vineyard Commission, Stone Building, 33 New York Avenue, Oak Bluffs, Massachusetts, on the proposed Town of Aquinnah District after due public notice to the municipalities, publication and notice required under Massachusetts General Laws, Chapter 30A, Section 2. The Public Hearing was held as required under the Act to permit the Commission to receive testimony relating to whether it should designate the proposed District as a District of Critical Planning Concern.

On Monday, December 17, 2007, the Commission voted to designate the nominated area as a District of Critical Planning Concern. Sections 8 through 10 of the Act provide the process for amending the boundaries, adoption of development guidelines, and regulation of the District to which development must conform.

2 Area Designation

Upon consideration of information submitted, the Commission's familiarity with the lands and waters of the District, and pursuant to the Act and the Commission's Critical Planning District Qualifications (the "Qualifications") adopted under the Act, the Commission makes findings herein and hereby designates the Aquinnah Energy District as follows:

That portion of the air space over all lands and waters within the Town of Aquinnah, except the Indian Common Lands¹ (generally known as the Cranberry Bogs, the Clay Cliffs, and Herring Creek) and Settlement Lands², which exceeds 32 feet in height above mean natural grade (for land areas) and/or mean sea level (for water areas).

The Commission has prepared a descriptive map appended hereto for the general information of the public and the Town. The boundaries of the Aquinnah Energy District, however, are as set forth above in this Decision and shall take precedence over any map.

Note: In Section 5.23 of this Decision, the Town is instructed to, after researching its energy needs, desires and options, re-evaluate the height coverage of the District as originally designated and may, in conjunction with proposal of regulations, request amendment which the Commission would consider in accordance with Section 8 of Chapter 831 of the Acts of 1977 as amended.

3. Why the Area Has Been Designated

When designating a District, Section 8 of the Act requires the Commission to specify why the area is of critical concern to the region, the problems associated with uncontrolled or inappropriate development, and the advantages to be gained by the development of the area in a controlled manner. Information available supports a finding by the Commission that the Aquinnah Energy District is of regional importance, that potential problems of uncontrolled or inappropriate development exist within the District, and that there are advantages to be gained by development of the area in a controlled manner

In designating a District, the Commission must also consider the standards identified in the "Qualifications". The General Qualifications require the Commission to address itself to the need for designation, and to that end, the Commission finds that there exists a regional need for special regulations and planning to protect the District and its people from damage or loss resulting from inappropriate development. The Commission also finds, after its review, that present private and public regulations in the District cannot assure protection and that damage to the District or impediments to proper development will be a substantial loss to the region or to two or more towns on the Island.

¹ Chapter 831 of the Acts of 1977 as amended

² Joint Memorandum of Understanding Concerning Settlement of the Gay Head, Massachusetts Indian Land Claim, September 28, 1983

Regarding regional interest, the Commission finds that the outstanding natural beauty and associated public vistas are of regional significance, as the Commission has previously determined in a number of Critical Planning District designations in Aquinnah based on cultural or historic resources. The Commission further finds that responsibilities regarding consumption and generation of energy are regional in nature, even global, concurring with the nomination in that regard. The Commission notes that the "grid", by its nature, reaches across town boundaries to unite consumers of energy. Having an affordable, environmentally sound, reliable, and safe supply of energy is essential to the general welfare of Martha's Vineyard. Because Martha's Vineyard depends almost entirely on imported energy, increased risks, higher costs and concerns about interruption of supply are inherent. Fuel shipped by ferry or barge exposes the Island to hazards and accidents. The depletion of fossil fuel sources worldwide increases the potential of supply shortages and price fluctuations beyond our control. Transmitting electricity by underwater cables and overhead wires exposes islanders to periodic interruptions. Burning fossil fuels results in air and water pollution that is changing the natural environment and endangering public health. The Cape and Islands already experience among the poorest summer air quality in Massachusetts. The Vineyard is especially vulnerable to the predicted Climate Change impacts of rising sea levels, more severe weather, and increased health risks from insect-borne diseases.

In considering the problems of uncontrolled or inappropriate development within the District, the Commission finds that so important is the visual impact and so important are the associated cultural values for present and future generations, and so important is the need to generate and consume energy wisely, that special development controls within the District must be adopted. The Commission concurs with the nomination: "*....Given the sensitivity of our landscape, we recognize a need to manage our resources. Without a comprehensive plan or policy, we may find that uncontrolled development, although well-intentioned, might create havoc*". The Commission notes that although the Town regulations carefully address protection of the rural character of Aquinnah and particularly its vistas, the present regulations governing development in the Town do not adequately address energy needs and the relationship between development of renewable energy and the protection of rural character and vistas, and in particular do not address the siting or height of wind turbine towers. The Commission also notes that developments which consume fossil fuels inappropriately may have a negative affect on air quality.

Regarding the advantages to be gained by development in a controlled manner, the Commission concurs with the nomination statements "*With carefully considered guidelines, it is possible to encourage efficient responsible building construction. Regulations designed to optimize alternative energy uses in new construction can educate property owners while benefiting the Island community. This DCPC could encompass optimum placement of wind turbines, solar panels and geothermal systems as well as revolutionary design.*" The Commission notes that its geographical and topographical configuration place Aquinnah in a particularly advantageous position to develop wind power. The Commission finds a need to explore and resolve the inherent conflicts between development of wind power and protection of vistas. The Commission finds that development which conforms to regulations to be established pursuant to the guidelines adopted by this Decision will protect the landscape while managing energy resources effectively.

The Aquinnah Energy District boundaries conform to the General Qualifications regarding size and shape of the District. Information available to the Commission supports a finding that the lands and waters therein reasonably belong within the Aquinnah Energy District. The lands and waters within the District form a critical area and the Commission finds that the area needs protection afforded by the Act. Recognizing the small size and distinctive character of the Town of Aquinnah, the Martha's Vineyard Commission already designated the entire town as a District of Critical Planning Concern in 1999. The designation excludes certain tribal lands that may not be regulated, but otherwise includes all lands and waters, including the waters extending to the three-mile limit of the Town's jurisdiction, thereby including all of the geographical extent of the Town that is suitable for the adoption of regulations. Information available to the Commission supports a finding that the area designated is a logical planning area and is suitable for the adoption of coordinated regulations for the District as a whole. However, it will be important for the Town to re-evaluate the height boundary of the District, after thorough evaluation of its options, to be sure that the height boundary (governing only development of a height greater than 32') remains viable for regulating the District. Finally, the Commission finds that the boundaries of the Aquinnah Energy District as established are both convenient and recognizable.

4. Kind of District

Section 8 of the Act permits the Commission to designate a District only for:

- a) an area which possesses unique natural, historical, ecological, scientific or cultural resources of regional or Statewide significance;
- b) an area which possesses marginal soil or topographic conditions which render it unsuitable for intense development; or
- c) an area significantly affected by, or having significant impact on, on existing or proposed major public facility or other area of major public investment.

Specifically, with respect to the first element of Section 8 of the Act, concerning unique natural, historical, ecological, scientific or cultural resources of regional or Statewide significance, the Aquinnah Energy District qualifies.

Further, the District meets the Specific Qualifications of the "Qualifications" for a Wildlife, Natural Scientific Or Ecological Resource District, and for a Cultural or Historic Resource District.

4.1 Compliance with Specific Qualifications

4.1.1 Wildlife, Natural, Scientific or Ecological Resource District

The District clearly qualifies as a Cultural or Historic Resource District under all sections of the Qualifications. The Commission concurs with information presented in the nomination *"Extensive pristine conservation lands contain globally rare flora and fauna; extraordinary geological formations are everywhere from the National Landmark clay cliffs to the monumental*

boulders so significant in Indian traditions". The Commission finds that the District contains an important and unique wildlife, natural, scientific or ecological resource, including special plant and animal life and their habitats, as well as unusual geological features, and is critical because development may disrupt the ecological balance. The Commission finds that the exceptionally clean and clear air in the District is an important part of the ecological balance.

4.1.2 Cultural or Historic Resource District

Information presented in the nomination and other information available to the Commission points out the importance of this area to the cultural diversity of the Island.

The rural character of the Town of Aquinnah is strongly connected with the unique character of the wild oceanfront landscape and its visual dominance of the skyline. The rural Town in the setting of its gently rolling landscape provides a sense of place for residents and visitors alike, drawing large numbers of tourists to enjoy the strangely haunting vistas. In its nomination for the District, the Aquinnah Board of Selectmen described the Town and its history as an ancient Indian settlement as typical of the essence of the Island "*The landscape of Aquinnah is both spectacular and serene, offering views of the Ocean, cliff land and moors from virtually every part of town...Here we can sense what life was like in the times of the early Wampanoags and the unspoiled beauty they saw....*". In the Town's Open Space Plan, the Conservation Commission described the Town in similar terms "A special seclusion, an unparalleled ethnic heritage, and the ethereal dominance of the Town's Clay Cliffs circumscribe a land of wetlands and scrub oak, rolling hills and sand dunes, historical sites and salt air". The Martha's Vineyard Commission has created a number of Districts of Critical Planning Concern in the Town to protect the unique vistas in those areas. For instance, the Moshup Trail District was designated with the goal "to protect the fragile historic, scenic and natural character of the District from undue visual intrusion". The Gay Head Cliff Area District was designated "to protect the fragile historic, scenic and natural character of the Cliff Area from undue visual intrusion and land use impacts that may be harmful to the District and its users". Those district designations include references to the scenic value of the landscape, including one from the Gay Head Cliff Area decision: "The windblown stunted vegetation and hummocky topography lend a further uniqueness to the area and make it an important asset to the valued diversity of the Vineyard landscapes". Finally, in 1999, the Commission designated the entire town as the Town of Aquinnah District, with the goal to protect the scenic character of the District from undue visual intrusion.

The Aquinnah Energy District meets the first part of the standard "*contains a place, landscape, way or view which is in some special way expressive of the character of the Island, traditions of the Island residents*". The second part of the standard says that the area ALSO fits into one or more of three categories: "*is of exceptional symbolic or recreational importance to the residents of more than one town and is either visible or accessible to them or can reasonably be made so; or is rare, unique, or makes an unusual contribution to the diversity of the Island character; or is irreplaceable, or replaceable only with extraordinary effort or expense*". The District clearly qualifies as a Cultural or Historic Resource District under all sections of the Qualifications.

5. Guidelines

The Commission adopts the following guidelines ("the Guidelines") for the development of the Aquinnah Energy District. In adopting the Guidelines, the Commission has evaluated each of the considerations enumerated by Section 8 of the Act and, in addition has considered other relevant matters.

The Town of Aquinnah shall, in the manner required by the Act, adopt Regulations that at a minimum comply with these Guidelines for the development of the Aquinnah Energy District. The Town may adopt such regulations under zoning, general by-law or any combination of such authorities the Town deems best suited for the purpose. The Commission draws the Town's attention to Section 10 of the Act, which in part provides, "In adopting such regulations, each municipality shall have all powers it otherwise had under the General Laws". Regulations adopted under these Guidelines are essential to evaluate and adjust the physical impact of development in the District so that irrevocable damage to the Town and the Island does not result.

5.1 Goals

- 5.1.1 Reduce the overall consumption of fossil fuels by improving efficiencies and reducing wasteful practices, especially by using building construction and renovation practices that optimize energy efficiency.
- 5.1.2 Facilitate local generation of energy from renewable sources such as wind, solar, and geo-thermal, by allowing various technologies to be utilized while minimizing negative impacts on residents and visitors, on rural character, and on natural resources.

5.2 Establishment of Guidelines

As used herein the terms "development", "permit" and "regulations" shall have the same meaning as in the Act.

The Town shall adopt regulations of the types described in the Act, as appropriate to conform to these Guidelines to control development within the Town of Aquinnah District.

In appropriate cases, after notice and a Public Hearing, the Martha's Vineyard Commission may permit a town to adopt regulations that are less restrictive than these guidelines if the Commission finds that such regulations will carry out the purpose of the Act and the intent of these Guidelines for the District.

The Town shall adopt regulations that include or adequately consider the following:

5.2.1 Responsible Use of Energy

- 5.2.1.1. New Construction, Additions, and Major Renovation:** Establish measures to ensure

that any new construction or substantial improvement³, including accessory⁴ – the use or maintenance of which will consume energy from any source – minimizes the use of energy from fossil fuels. This might involve the use of energy target or allotments per unit of measure (e.g. by property, by number of buildings, by building size, by type of use, etc.)

This can be achieved through a combination of measures:

- Energy Efficiency Measures – including building location, siting, construction and design;
- Renewable Energy generation – especially if an adequate reduction cannot be achieved through efficiency measures alone and when the impact on the resources identified in the Town of Aquinnah DCPC (such as public viewsheds) are minimized;
- Offsets – After all feasible on-site energy efficiency techniques have been used, mitigating a portion of the energy use off site through means such as the reduction of energy consumption elsewhere within Aquinnah, either directly or though a financial contribution to a fund or other mechanism used to pay for such offset mitigation.

Ensure that measures with little negative impact (e.g. reducing the size of a building, incorporating energy efficiency measures, using renewable generation techniques with minimal environmental impacts) are used before consideration is given to those techniques that have greater impact on views, noise, or other considerations outlined in section 5.2.2.

Consider tailoring the measures to the size of the building, such as the density threshold in the Aquinnah Zoning By-laws. Consider making certain provisions, particularly for smaller houses, subject to the availability of a low or no-cost loan program for energy efficiency that allows for repayment over the period of energy savings payback.

5.2.1.2 Existing Buildings: Consider implementation of measures dealing with existing buildings leading to improvement of energy efficiency and/or use of renewable energy sources.

5.2.1.3 Other Consumption of Fossil Fuels: Consider implementation of measures to reduce the use of fossil fuels in transportation and in other activities and operations.

5.2.2 Renewable Energy-Generation Facilities

5.2.2.2 Reasonable Development of Facilities: Identify the need for and provide for the

³ Any repair, reconstruction or improvements of a structure, the cost of which equals or exceeds 50% of the market value of the structure either (a) before the improvements or repair is started, or (b) if the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition substantial improvement commences when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not include any project for improvements of the structure to comply with existing state or local health, sanitary or safety code specifications which are solely necessary to assure safe living conditions.

⁴ A building, structure or use which is clearly subordinate to, and the use of which is incidental to, that of the main building, structure or use of the lot.

reasonable development of renewable energy from a broad variety of public and private sources, compatible with the other guidelines.

Given the exceptional wind resources in Aquinnah, consider utility-scale generation facilities to serve not only the needs within the town, but also the possibility of supplying energy to other parts of the Island. Identify potential locations for utility-scale facilities and consider measures to avoid compromising the possibility of their future development..

5.2.2.3 **Health and Safety:** Identify risks and provide for siting and installation of facilities in order to ensure safety of inhabitants, visitors, and property. These shall consider, among other things, ice throw and possible collapse of wind turbines, and shall include the provision of adequate setbacks between wind turbines of various heights and other activities.

5.2.2.4 **Noise and Vibration:** Identify potential impacts and provide for siting and installation of facilities to minimize the impacts of noise and vibration emanating from their operation.

5.2.2.5 **Maintenance, Decommissioning, and Removal:** Include measures to ensure the adequate maintenance of facilities as well as the decommissioning and removal should they no longer be needed. This could include the provision of a bond or other mechanism to ensure that funds are available.

5.2.2.6 **Views and Vistas:** Identify significant public views and vistas, prioritizing those of greatest public importance, public use, and visibility. (For example, these could include: the National Historic Landmark of the Gay Head Cliffs; the Gay Head Lighthouse; views of the water from roads close to the ocean or ponds such as Moshup Trail, parts of State Road, and Lobsterville Road; general views from public roads including Vineyard roads beyond Aquinnah boundaries; views from public beaches, and views of Aquinnah from any public water body.) Provide criteria for reasonable protection of these views and vistas, such as siting to minimize the visual impact on public viewsheds, as well considering use of other renewable energy generation facilities such as solar and geo-thermal instead of wind turbines in public viewsheds.

5.2.2.7 **Public Spaces:** Identify the significant public spaces in Aquinnah and minimize the impact of new renewable energy facilities – including ancillary equipment and related access – on the space and its use (such as the Gay Head Cliffs, the Lookout, and adjacent public spaces; public beaches, public or non-profit conservation land). Consider how energy-generation facilities may help educate the public about renewable energy generation.

5.2.2.8 **Natural Environment:** Consider the impact of facilities on wildlife and habitats, and other natural resources and provide any necessary measures to mitigate the impact.

5.2.2.9 **Cultural or Historic:** Consider the impact of facilities on cultural, economic or historic resources, and provide any necessary measures to mitigate the impact.

5.2.3

Administration

5.2.3.1

Re-evaluation of boundary: The Town shall, after researching its energy needs, desires and options, re-evaluate the height coverage of the District as originally designated and may, in conjunction with proposal of regulations, request amendment which the Commission would consider in accordance with Section 8 of Chapter 831 of the Acts of 1977 as amended.

5.2.3.2

Procedure: Provide clear definitions of different types of renewable energy generation facilities. For wind turbines, this could include scale (e.g. small, medium, and utility), location (off-shore or on land), use (commercial or non-commercial), and ownership (public or private). Prepare a map that indicates what types and scale of facilities would be considered in various locations.

Include an appropriate administration of regulations that includes clear and objective criteria for project review, through a procedure to include Site Plan Review in order to determine the best possible siting of facilities. The Town is encouraged to propose creative solutions in light of the special situation of needing to balance the use of exceptional energy resources with the protection of exceptional natural resources. The Commission recommends – when practical – administration in conjunction with the regulations for the existing Town of Aquinnah DCPC. The Commission suggests that the Town consider providing for regular re-evaluation of facilities in place and available technologies, and to consider proposing updates to the Commission in order to keep the regulations performing as desired at the forefront of new technological advancements.

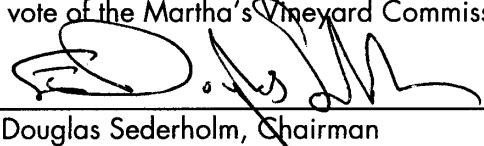
5.2.3.3

Energy Plan: Consider publishing the analysis and resulting policies in an Aquinnah Energy Plan.

5.2.3.4

Relation to the Town of Aquinnah DCPC: Integrate and balance the goals of the Energy DCPC with the goals of the existing Town of Aquinnah DCPC. Consider how to ensure that energy efficiency measures are used as first priority, before consideration is given to the use of energy-generation facilities that may impact the resources identified in the Town of Aquinnah DCPC. The regulations and criteria for project review should ensure that the degree to which the goals of the Town of Aquinnah DCPC are not met is commensurate with the public benefit of the proposed facility, based on criteria such as its visibility, the amount of energy produced, and the type of facility. Consider proposing modifications to the Town of Aquinnah DCPC, for the consideration of the Martha's Vineyard Commission.

By vote of the Martha's Vineyard Commission, December 17, 2007



E. Douglas Sederholm, Chairman

REFERENCES

Chapter 831, Acts of 1977 as amended

Aquinnah Board of Selectmen, October 30, 2007, nomination for proposed Town Aquinnah Energy District (Energy Conservation and Generation)

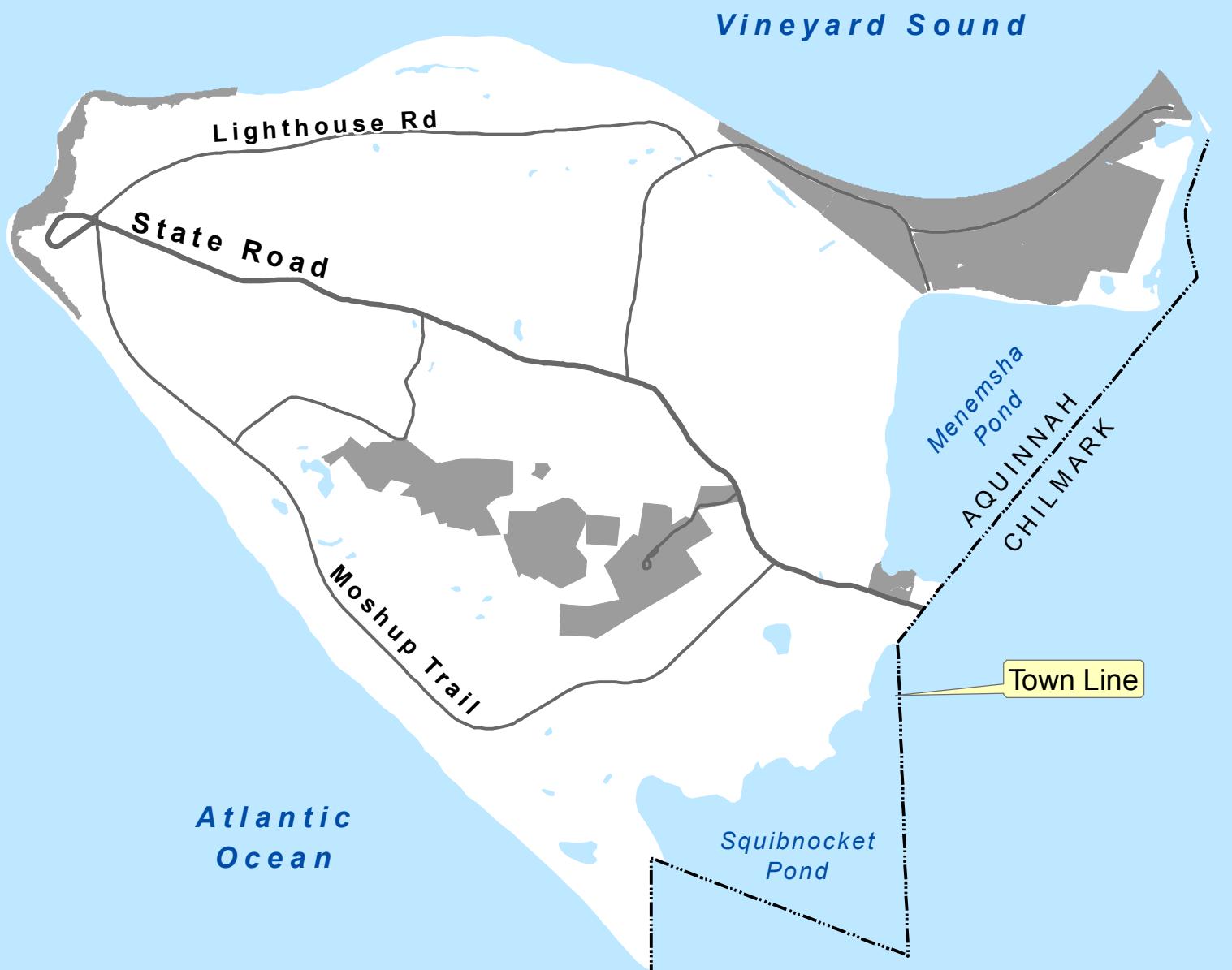
Gay Head Conservation Commission, 1995, *Final Draft Open Space Plan, Town of Gay Head, Massachusetts*

Martha's Vineyard Commission, 1999, *Decision of the Martha's Vineyard Commission Designating the Town of Aquinnah District as a District of Critical Planning Concern*

Martha's Vineyard Commission, 1980, *Decision of the Martha's Vineyard Commission Designating the Moshup Trail District as a District of Critical Planning Concern*

Martha's Vineyard Commission, 1989, *Martha's Vineyard Commission Decision, Gay Head Cliff Area District of Critical Planning Concern*

"Joint Memorandum of Understanding Concerning Settlement of the Gay Head, Massachusetts Indian Land Claim", September 28, 1983



The District is that portion of the air space over all lands and waters within the Town of Aquinnah, except the Indian Common Lands (generally known as the Cranberry Bogs, the Clay Cliffs, and Herring Creek) and the Settlement Lands, which exceeds 32 feet in height above mean natural grade (for land areas) and/or mean sea level (for water areas).



Disclaimer: Data are provided for planning purposes only & the MVC can not be responsible for how these data are used or interpreted by the end user. Property boundaries should be verified in the field by a licensed land surveyor.

Aquinnah Energy District

Area Excluded from District

Indian Common/Settlement Lands

0 0.25 0.5 0.75 1
Miles



MASSGIS

Massachusetts Executive Office of Environmental Affairs

Compiled by: MVC, CL Seidel, 12/2007
 Data: Town - MassGIS 2002; Town Line - MassGIS & MVC 2006; Settlement Lands - MVC 2004 (from TNC parcel boundaries 1999)
 Projection: Stateplane, MassMainland, NAD83, m
 File: requests; aqu_energy_dcpc.mxd