



AVIATION SYSTEMS INC.

Date:

MAR 12 2007

To: Aaron Bouchane

Massachusetts Tech Collaborative

75 North Drive

Westborough, MA 01581

ASI #: 07-N-0448.002

Client Site ID: Septage Treatment Facility

FAA #:

We are sending you herewith the following via:

US Mail Overnight Fax Email 2nd Day

- ASI FAR Part 77 Airspace Obstruction Report
- Search Area Study Report
- Copies of our filing(s) with FAA and/or State
- Responses from FAA and/or State
- ASI Opinion Letter
- Quad Chart
- See attachments for Airport Runway data and/or AM Stations(s)
- Certified Survey

Note Operational Impact

Comments:

* Revised *

Sincerely,

Aviation Systems, Inc.

By:



FAR PART 77 AIRSPACE OBSTRUCTION REPORT

To: Aaron Bouchane Date: March 12, 2007

Massachusetts Tech Collaborative
75 North Drive
Westborough, MA 01581

Location: Yarmouth, MA

Client Case No.: Septage Treatment Facility

ASI Case No.: 07-N-0448.002

SUMMARY OF FINDINGS:

At this location any structure over 136 feet AGL will have to be filed with the FAA. A structure up to 180 feet AGL should receive a routine approval. A structure over 180 feet AGL should not be approved. Refer to Findings and Comment Section for additional information.

SITE DATA:

Structure: Wind Turbine

Note Operational Impact

Coordinates: 41° - 41' - 18.68"/070° - 13' - 04.34" [NAD 27]

41° - 41' - 19.08"/070° - 13' - 02.41" [NAD 83]

Site Ground Elevation: 50' [AMSL]

Studied Structure Height (With Appurtenances): 397' [AGL]

Total Overall Height: 447' [AMSL]

SEARCH RESULTS:

- The nearest public use or military air facility subject to FAR Part 77 is Barnstable Muni-Boardman/Polando Field.
- The studied structure is located 2.42 NM/14,688 feet East (069° True) of the Barnstable Muni-Boardman/Polando Field Runway 24.
- Other Public or Private Airports or Heliports within 3 NM: None Printout attached

FINDINGS

• **FAA Notice (Ref.: FAR 77.13 (a)(1); FAR 77.13 (a)(2) i, ii,iii):**

- Not required at studied height.
- Required at studied height.
- The No Notice Maximum height is 136 feet AGL.

IMPORTANT: Our report is intended as a planning tool. If notice is required, actual site construction activities are not advisable until an FAA Final Determination of No Hazard is issued.

• **Obstruction Standards of FAR Part 77 (Ref.: FAR 77.23 (a)(1),(2),(3),(4),(5)):**

- Not exceeded at studied height.
- Exceeded at studied height and Extended Study may be required.
- Maximum nonexceedance height is 180 feet AGL.

• **Marking and Lighting (Ref.: AC 70/7460-1K, Change 1):**

- Will not be required.
- Will be required at studied height, if structure exceeds:
 - 200 feet AGL
 - Obstruction Standard

(No Obstruction at height)

• **Operational Procedures (Ref.: FAR 77.23 (a)(3), (4); FAA Order 7400.2; FAA Order 8260.3B):**

- Not affected at studied height (FAA should issue a Determination of No Hazard.)
- Affected at studied height and the FAA will consider the studied structure to be a hazard to air navigation.
- Maximum height that would not affect operational procedures is 180 feet AGL/ 230 feet AMSL.

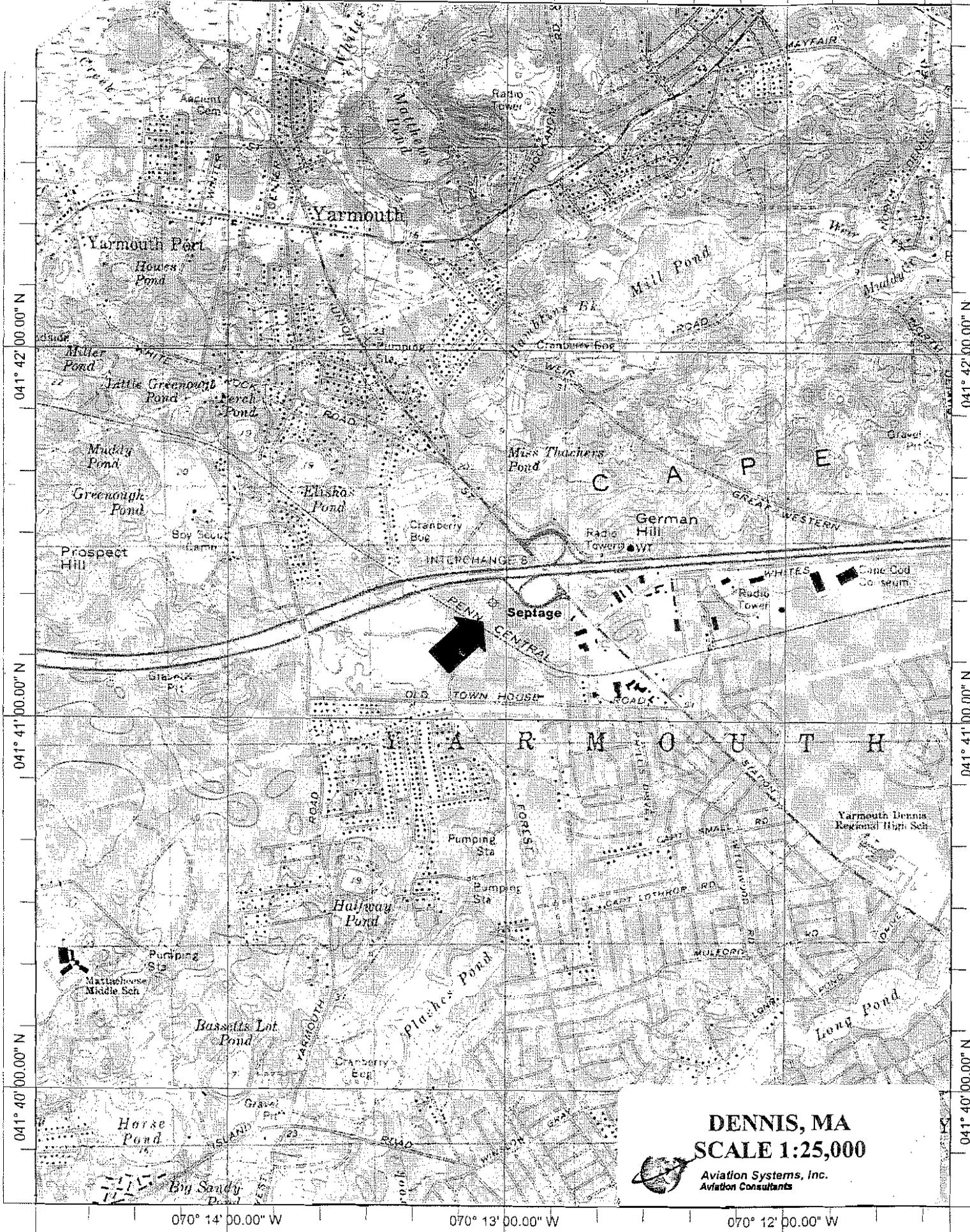
Conclusions/Comments

- The proposed structure at this site would penetrate airspace for IFR Approaches at Barnstable Muni-Boardman/Polando Field, protected by Federal Aviation Regulations.
- The North TRURO Joint Use Long Range Radar site is within 60 NM (21.98 NM North) of the site.
- The Air Force has published a memo establishing the following policy: "the DOD/DHS Long Range Radar Joint Program Office Interim Policy is to contest any establishment of windmill farms within radar line of site of the National Air Defense and Homeland Security Radars." Therefore, the FAA may object to this/any proposal, until an individual assessment is performed.
- The Nantucket Memorial Airport Surveillance Radar (ASR) is 27.35 NM South of the site. The FAA will assess the potential impact (if any) of turbine proposed within this area.

Actions:

ASI will file with FAA Region and State

- Yes
- No



DENNIS, MA
SCALE 1:25,000
 Aviation Systems, Inc.
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