

Friends of Squibnocket

December 2, 2014

Dear Jim, Marina, and Squibnocket Committee,

Ref: Comments on Executive Summary by Epsilon

After reviewing the Epsilon report in detail we would like to make several observations about the Epsilon Report. We were pleased to see their comments on delineation and we were happy to see that Epsilon agrees with our views that the barrier beach should not be used for parking. Additionally, Epsilon accepted our Base Map Zero Years for the location of the upper edge of the beach following revetment removal. And, most importantly, we were pleased that they agreed in principle with the proposed location for the access route, further back from the shoreline and closer to the pond. This was all very positive.

There are a few areas where we disagree with their opinions:

- *Hydrologic fragmentation, requirement for culverts, the necessity for raising the elevation of road, and increased wetlands fill to accommodate the culverts:* These conclusions are incorrect because they were likely based upon the fact that Epsilon was not working from our final map (correct map is attached). Our civil engineers had already recommended culverts, which can be added without raising the road. Wetlands fragmentation and an increase in wetlands fill is a non-issue.
- *Our dune interferes with landward migration of coastal dune:* Contrary to the prevailing engineering and technical research, Epsilon maintains that large dunes do not migrate. Artificial dunes do migrate. If Epsilon wants to explain how artificial dunes prevent the migration of a coastal dune, we'd certainly be open to hear the argument. It is insufficient to simply say that dunes that can withstand 75-year storms don't migrate, especially in light of the fact that our dune will degrade between maintenance processes, allowing for more over-wash events. We reduced height of dune by 1.5' to allow for even more over-wash.
- *Chapter 91 and 401 Certification:* Our dune was *never* in the water, i.e. never located below the high water mark – this must be some sort of misunderstanding and we believe that our maps have been very clear on this point. The seaward edge of our dune is located at least 45' from high water.
- *Wetlands replication is problem for Army Corps:* If required by the regulators, wetlands replication can easily happen at Squibnocket Pond. This is also a non-issue.

As for erosion rate projections, we think the rate used by Epsilon is overly conservative (2.0'/year). Our conservative rate of 2.3' per year doesn't even take into account the acceleration in sea level rise over the next 50 years. The projected erosion rate is extremely important because there is so little real estate in this area of Squibnocket.

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Now for the issue that needs some clarification. Epsilon states that we cannot get a permit because an alternative exists that does not require wetlands fill. This is not at all consistent with the advice we have been given:

"If the proposed dune road can be designed to require less than 5,000 square feet of fill, and replacement wetlands will be provided that meets the regulatory performance standards, the Conservation Commission has the **discretion** to issue an Order of Conditions approving that amount of fill under the Wetlands Regulations at 310 CMR 10.55(4)(b).

In exercising its discretion under this provision, the Commission considers (1) the magnitude of the alteration and the significance of the project site to the statutory interests of the Wetlands Protection Act, (2) the extent to which adverse impacts can be avoided, (3) the extent to which adverse impacts are minimized and (4) the extent to which mitigation measures, including replication or restoration are provided to contribute to the interests identified in the Act.

The availability of an alternative that does not require BVW fill, or that requires less BVW fill is relevant to items (2) and (3) above, but is not determinative of whether the Conservation Commission may permit the fill if it finds that consideration to be outweighed by other factors."

If Squibnocket Farm applies for a permit for this project under 310CMR 10.55(4)(b) for the dune/road, the Conservation Commission can grant the permit. There are several caveats:

Magnitude of alteration and significance of the site to the WPA: We think the case can be easily made that this site is NOT of significance to the Wetlands Protection Act:

- This area will transition from wetlands to coastal dune in the near future, whether a road is built or not. 1/2 acre at the east end of the pond has accreted since 1950 and 20% of that area is now 'coastal dune'. This accretion rate will increase as the revetments are removed and a dune is constructed.
- The area we are talking about is 'low value' wetlands -- it consists of sand, gravel, and cobble, not the sort of soils generally considered and protected as wetlands. These sediments have low value to prevent pollution.
- The area is infested with *Phragmites Australis*, which is squeezing-out any chance for native plants, and the Town is prohibited from treating these plants.
- This area has no capability to protect water supplies.
- Flood control and storm damage prevention value from this area is limited.

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Mitigation measures: As mentioned above, If this is a project that is sanctioned by the Town, 100% replication in the Squibnocket Pond area can easily be provided.

Other factors: It is important that the town planners consider the longevity of the solution. We should not be thinking in terms of 'what can be permitted so we can implement it now' but rather what is the best long-term solution for this specific environment.

Regards,

Wendy Jeffers and Tony Orphanos
 Doug Liman
 Charles Parker

