

GEO/PLAN ASSOCIATES

30 MANN STREET
HINGHAM, MASSACHUSETTS 02043-1316
Voice & Fax: (781) 740-1340
Email: geoplanassoc@gmail.com

November 5, 2012

Mr. John Vasconcellos
Southeast Regional Manager
The Trustees of Reservations
Westport Field Office
1100A Main Road
Westport, Massachusetts 02790

Re: Review and Commentary, Discussion with Schifter Representative
Wasque Shore Erosion

Dear John:

As we discussed last week, Sterling Wall contacted me to discuss issues relating to shore protection on the Schifter property and potentially extending work onto Trustees' property.

We agreed on several points, including that this is an unprecedented situation, but more importantly, that this extreme erosion is a cyclic event, such that if the properties can be held for a period, these extreme natural processes should subside and the beach likely will become stable or accretionary in the foreseeable future. However, at present the erosion is putting the Schifter house and their property access at immediate risk.

Presently, Schifter's contractors are operating under a newly issued Emergency Order which extends their permit an additional 30 days. The new Order specifies the use of coir envelopes, which are larger individual components than the previous coir logs, but still made of degradable material. These envelopes allow the slope of the protected bank to be more gentle, which is in everyone's interest. They have also filed a Notice of Intent, which should extend the construction and maintenance of the coir envelopes for at least three years.

As I noted in my October 23 report, when the project is constructed as presently permitted, if there are end-effects on the western end, the TTOR property will bear the bulk of impacts. If the project is constructed as permitted, Schifter may experience back-cutting around the structure, but will be able to mitigate on his property with natural fill, while there cannot be any action (as presently permitted) in response to potential accelerated erosion on the TTOR property.

The natural timber debris clusters that have formed along the TTOR property have withstood significant tests of durability, including the recent hurricane, where they reportedly fared well. These timber debris clusters are effective at dissipating incoming wave energy, so banks landward of them have undergone far less erosion and adjacent areas, resulting in a somewhat scalloped shoreline.

Mr. Schifter has proposed extending the coir structure to tie into the natural timber debris cluster on Trustees' property. This is a fortuitous situation, since any anticipated wave-induced end-effects will be diminished or possibly eliminated in the lee of the debris clusters. Additionally, the roughly 100 feet of coir envelopes on the TTOR property will dampen erosion along this shoreline segment for a period.

The proposed coir envelopes are readily removable, so that if unforeseen circumstances occur, they can be removed. TTOR can stipulate that they retain control of that option on their property.

I was also informed that Mr. Schifter has access to a significant amount of natural fill, which could be used to mitigate any unforeseen erosion on TTOR property.

The Trustees option of No Action will likely subject their property to accelerated erosion due to the permitted structures, with no mitigation. I believe that the proposal to extend the temporary structure onto TTOR land is fortuitous, since end-effect erosion will be reduced or diminished because of the natural debris clusters, there will be a short-term reduction of sediment loss along the 100 feet of coil envelope, and the TTOR will be working cooperatively with a good neighbor. This option is of further guaranteed to be in the interest of TTOR since you can/will be the beneficiary of natural fill (a soft solution) where needed, and the TTOR can retain authority to remove the entire structure. Significantly, the agreement (as discussed) will allow for Mr. Schifter to replace any TTOR land lost with other property in kind.

If this were an endless conquest against shore erosion, I would not be as firm in my opinion. Based on the best historical evidence, this is a cyclic event, so a short-term action has a good chance of retaining more property over the span of a generation for both neighbors if this erosion is dealt with during this shorter period of extreme impact. The natural timber clusters, the fiber envelopes, the option for compensation for loss of land with other land, and prospect of direct sediment nourishment to the bank provide redundant guarantees that TTOR will benefit from the proposed cooperative project. Since the coir envelopes are both temporary by design and removable, the shoreline will not undergo the impacts of hardening and the TTOR property will be preserved.

I understand that the TTOR decision was based on philosophical issues associated with land conservation as well as specific site conditions. I can only comment on the site conditions and respect the path chosen by TTOR. It is my opinion that the proposed cooperative project will have both short-term and long-term benefits for the Trustees' property and will result in a natural shoreline when the project ends, regardless of the outcome. The only other option is No Action, which will result in accelerated erosion of TTOR property with no mitigation of any kind. This is not necessarily a fair or balanced pair of choices, but this is the reality. This very unusual circumstance prompted me to submit this letter balancing issues as best possible. I believe the proposed project is in the best interest of TTOR and is a sound action of land stewardship.

Mr. Schifter has requested "additional consideration" of the situation and proposed actions. In light of the present situation, I concur that reevaluation is in both landowner's interests.

Please feel free to call me if you would like to discuss the issues further.

Yours truly,

A handwritten signature in cursive script that reads "Peter S. Rosen".

Peter S. Rosen, Ph. D.
Coastal Geologist

Cc: Brian Degasperis, TTOR Coastal Ecologist