

TOWN CLERK

Duxbury Seawall Committee Minutes – May 14, 2019

Present: DSWC Members: Alicia Babcock, Paul Brogna, Steve Callahan, Arthur Haley, Candace Martin, Don Norris, Mary Shiebler, Tim Spellman, Dimitri Theodossiou

2019 JUN 10 AM 9:47
DUXBURY, MASS

Also present: Ted Flynn-Selectman

1. The meeting was called to order at 7:10PM in Kitchen Meeting Room at Town Hall.
2. The minutes of 3/27/2019 meeting were approved as presented.
3. **OLD BUSINESS**

3.1 Town Manager Report: Written update from Rene Read 5/06/19 as follows:

“Since the time of the Board’s last meeting, we hosted a meeting – inclusive of a larger representation of all of the permitting agencies (NOAA Fisheries, Dept. of Marine Fisheries, US Army Corps, FEMA, Mass DEP, Mass CZM – which included a site walk to view the sea walls and to discuss the importance of as quick a response as possible, the damage already impacting the walls, and preventative ideas to protect the wall from potential additional damage while we go through the permitting process to undertake repairs. We have been extremely fortunate to have had a mild winter as we navigate this incredibly complicated undertaking. As each agency has been responding individually, and as our options with FEMA funding relative to the Presidential Disaster Assistance have been rather fluid, bringing all of the moving parts together has been a challenge with so many different people involved in this complex process.

At this meeting, and at a recent meeting with FEMA only, we were able to ascertain that the permitting process will engage some additional agencies, not only as a result of the MEPA process we are currently undertaking, but also through some of the public processes at the Federal level relative to the Disaster Assistance. As noted in the Clipper, we have also learned that there is a possibility of approaching the mitigation repairs in a more holistic manner, a win-win for longevity of potential repairs, but also adding some complexity to the permitting process.

We determined that at best, we are at least 18 months from receiving permits from all of the various agencies involved, as the complexity of the proposed repairs requires that all aspects of the beach interface with the wall itself need to be addressed in the design, and that we need to take into account comment from some of the additional agencies added to this mix in the past few months.

Duxbury had hoped to accomplish some of the work more expeditiously and sooner, but given the public funding involved and the more recent comments from the different permitting agencies, the outcome is that we must add some additional information and analysis to the design in order to proceed with permitting and funding.

We are expeditiously examining the best way to accomplish these tasks as best as we can, in the most feasible and fiscally responsible manner possible. “

- **Discussion** regarding handout included beach nourishment in form of adding sand to beach would require funding by the Town; Army Corps of Engineers was the controlling agency and now they are awaiting CZM input. It was noted that the CZM is *advisory* to Army Corps. The drawings used by Amory were official stamped by P.E. with information approved by FEMA and other agencies. Army Corps staff member made a site visit during a full moon high tide to verify information on the plans and saw the water touch the wall. As a result, CZM is requiring beach nourishment as part of permitting process for

new wall. Members questioned our engineer rebutting denial of stamped plan documents regarding high tide mark. With so many homes and the area itself in danger should the wall completely fail, it would seem prudent to build the wall then nourish the beach or run both permitting processes parallel. Funding that had been approved for construction would have to be placed on hold and additional new ongoing funding needs to be sought.

3.2 Amory Engineering Report: Written update from Pat Brennan 5/14/19 as follows:

“Based on feedback received at the Army Corps of Engineers (ACOE) meeting on April 25 and subsequent conversations with various agencies and Town officials, our understanding of the project status is the following:

The ACOE is taking the position that the high tide line (HTL) is the seawall. The HTL is the limit of ACOE's jurisdiction. As I noted in the Mural Room after the regulatory agency representatives left, when we contacted the ACOE in December we were advised that it appeared that the proposed work could be authorized under a General Permit. Therefore, that is what we applied for, but the reviewer for the ACOE has determined that an individual permit is required due to the HTL being coincident with the seawall.

Mass Coastal Zone Management (CZM) is requesting beach nourishment as a condition of any permit issued for the wall project, whether it be just the seawall or seawall and revetment. The ACOE has advised that any authorization issued by them will require CZM consistency, which means beach nourishment will be required for ACOE authorization. Beach nourishment triggers Chapter 91 permitting, which will need to be secured prior to the ACOE issuing its permit.

Valerie is working with the Woods Hole Group to secure a grant to study the beach, design a beach nourishment program and file with MEPA for the nourishment project. This will take approximately a year, ending around this time next year. The second phase of this would be to secure the Chapter 91 and other permits necessary for the beach nourishment. This would likely take 8-12 months, which puts any construction off for about two years from now.

At this time, my portion of design/permitting is stalled until the beach nourishment design is in place and can be incorporated into our plans for the wall/revetment design.

We have discussed your concerns with the wall height. While I understand that the proposed height of the wall has become a safety concern to area residents, my recommendation to the Town is to have the wall at El. 24.5. This is the elevation that we have shown on our plans for each of the permits we have applied for as well as the application for the Dam and Seawall grant, which the Town was awarded. CZM has questioned the proposed height of the wall and has referenced the El. 26.5 that was recommended in the Bourne Consulting Engineering (BCE) 2012 study of the seawalls. Last week I sent you the summary analysis that we used to determine our recommended height of the wall (attached here also). Our analysis was based on the wall overtopping limits that BCE recommended in the 2012 study - these limits are based on the damage that wave overtopping would have on the properties behind the wall. The BCE 2012 study evaluated the properties behind the wall and determined the proposed height of the wall on that basis (see BCE Excerpt attached). Our analysis simply compared BCE's maximum wave height calculation to the current FEMA Flood Insurance Study (FIS) maximum wave height, which was based on a study by the Woods Hole Group. The FIS maximum wave height is about two feet lower than BCE's, therefore our recommended wall height is two feet lower at El. 24.5.

As discussed, I will look into alternative beach access stairs.”

- **Discussion** of Amory update included questions regarding CZM and Army Corps perceptions about tide levels and the beach/wall. And whether our engineer challenged CZM and Army Corps at the agency meeting regarding the fact that we have stamped plans and homes and property that are in imminent danger. The engineers on the committee expressed that it is standard procedure for any engineer to push back when necessary to get an agency to understand the impacts of something urgent in nature. This is an Emergency situation as declared by FEMA. Question as to why Army Corps is allowing CZM to dictate the timing of the project since they are an advisory agency and not a regulatory agency. Beach nourishment using sand replacement would have to be an ongoing project. See Action Items below.

3.3 TOWN PLANNER WRITTEN REPORT

Update for Seawall Committee meeting of May 14, 2019

Valerie Massard, Planning Director, Town of Duxbury

“As discussed at last meeting:

The Town has **applied for a Municipal Vulnerability Preparedness Grant** and will learn whether the application is funded on or about June 1. We have learned that 68 communities applied for \$26,000,000 in funds this round, and that the state only has \$12,000,000 to distribute. This study proposes to do a town-wide risk assessment of all town owned coastal and inland structures such as roads, culverts, parking lots/buildings, and utilities relative to the risks and projected impacts of sea level rise and stormwater inundation – so that detailed information and recommendations for things like resizing culverts, road and bridge elevation considerations, and the like can be prioritized in terms of public impacts if flooded. This in turn will allow the Town to project capital needs and prioritize infrastructure decision-making relative to climate change. Local match for this grant is provided by significant in-kind staff time for data collection, public outreach and GIS mapping, minor budget spending for mailings, and primarily the MAPC Mini-Grant we received as described below.

The Town has received an **MAPC Mini-Grant to do public outreach to the environs of Snug Harbor** regarding the impacts of climate change and sea level rise, as well as frequent flooding, where three private buildings were lost to the March 2018 storms, and extensive flooding and road closures occurred. This will consist of outreach by a professional consultant contracted through MAPC, MAPC staff and the town along with extensive public outreach. It is hoped that the MVP proposal above will be funded to compliment the public discourse on next steps in the Harbor. No local match was required for this one-time grant option.

The Town will be applying jointly with Marshfield for a CZM Resiliency Grant in early June. The proposed project will document the existing physical and biological conditions along the beaches where the sea walls are located and throughout Marshfield, who will be the primary contact on this grant. Average annual and storm-driven wave and sediment transport conditions will be determined and used to assess beach and dune nourishment designs tailored to candidate sites along the Marshfield and northern Duxbury coastlines. An alternatives assessment will be conducted to assess the design life and level of storm damage protection provided by the various designs, to include costs and benefits of a nourishment program, as well as a review of other measures the Towns could take towards management of the shoreline (i.e., repair/enlargement of existing structures, breakwaters). The project includes a public education and outreach component. Local match is significant cash from Marshfield, along with limited mailings and staff time from both towns. No cash match from Duxbury was needed as it has a lesser amount of LF of wall and thus is a lesser participant in the research

needed. *As noted in recent meetings, the permitting agencies are seeking the information detailed for the CZM Resiliency grant with the current sea wall repair permitting process.*

Update: The Town participated in a **Climate Resiliency Symposium** on May 9th, which I participated in arranging. The event was well-attended and focused on the latest science, issues relative to drought, flooding, temperature changes, impacts on assessed values in the South Shore and activities being undertaken by local communities to prepare for and manage changing conditions.”

- Discussion Town has applied for Municipal Vulnerability Preparedness Grant and will learn if funded on or about June 1. There is also a funded grant to do public outreach to the environs of Snug Harbor regarding sea level rise and climate change. The Town will be applying with Marshfield for a CZM Resiliency Grant in early June. There is no cash match necessary from Duxbury since there is a lesser amount of linear feet of seawall so less research needed. This information will be part of seawall permitting process.

4. Action Items

- Need to understand why high-water elevation of 12.6’ is being challenged. This is shown on the certified drawings provided with the permit. What is the basis for changing this?
- Need to evaluate options of hiring experienced consultant to help with the permit process.
- Need letter campaign to request expedited approval of the permit. Need to understand who this should be addressed to for support.
- Has the Town hired Woods Hole Group? If so, can the scope of services/proposal be provided to the Committee? What is the cost? How many beach nourishment programs have they worked on?
- Can we use available (approved) funds to begin beach nourishment study now? What is estimated cost of study? Can we use resources/leverage experience from Duxbury Beach Reservation Grants and permits? Capital Reserve Funds are available as of July 1st, can we use this money to authorize the study to develop the beach nourishment program? Can copies of the Duxbury Beach Reservation design plans for beach nourishment be provided to the Committee?
- We remain in emergency disaster conditions. What work can be done now? What additional temporary repairs are needed? What are the estimated costs? Do we need CZM approval to do any temporary repairs? Has CZM’s role changed from being an Advisory branch to the Army Corp of Engineers? Does the DPW budget include funds for annual maintenance for the wall?
- Confirm that Coastal Resiliency Grant covers Marshfield and the Duxbury Beach from the Marshfield line to the property owned by DBR. Or is DBR inclusive? If so, will DBR contribute also?
- Ted Flynn offered to schedule a meeting with Rene’/Alicia to discuss government outreach to accelerate approval process.
- Beach nourishment- will this require to use off-shore sand or can this be procured?
- CZM Resiliency letter - comments proposed during the meeting to be forwarded out to the Committee for final review.
- Need Town Representatives present at the meeting to provide updates and to answer questions to make meeting effective. Also, will need to include State Representative and Senator to attend.
- Can additional representatives be present for the Agency meetings?

5.EASEMENT LETTER

There is a short list of outstanding Easement letters. List to be sent to Committee to work with neighbors to obtain signatures.

6.ADJOURNMENT The meeting was adjourned at 8:45pm.

