

TOWN CLERK

2018 AUG -9 AM 9:32

**Duxbury Seawall Committee Minutes July 10, 2018**

Present: DSWC Members: Alicia Babcock, Paul Brogna, Steve Callahan, Candace Martin, Don Norris, Mary Shiebler, Tim Spellman, Timothy Tedeschi, Dimitri Theodossiou  
DUXBURY, MASS.

1. The meeting was called to order at 7:08PM in Ellison Room at Senior Center.
2. The minutes of 06/28/18 meeting were approved as presented.
3. OLD BUSINESS – AMORY ENGINEERING UPDATE

Pat Brennan explained that the preliminary design drawings were required to be submitted with the Dam and Seawall Grant application to the State. He emphasized that these plans are a “work in progress”. The permitting process will dictate some changes. The permit for Phase I will include temporary revetment for the entire seawall to protect the toe of the wall, ultimately the wall itself. Pat agreed to provide DSWC with cross section diagrams of the planned revetment this week. The area would be excavated and stones placed to stabilize toe. The stones would taper down and the excavated material would be replaced over the stones.

Mr. Brennan explained new footing elevation would be different at different wall sections. He will look at additional protection for Ocean Road South and Bay Ave areas. The damaged sections of wall are currently and temporarily secured with stone and/or metal plates and are included in the revetment permitting.

There was a question from the Committee regarding the flooding issues in the Webster Island area and whether this would be included in the engineering scope. Mr. Buttkus explained that there is nothing the Town can do about the poor drainage because the road is a private way and not the responsibility of the Town. Also, the pipe freezing issues are caused from property owners removing land cover which doesn't allow the pipes to sit below the frost line. He noted the Town has no plans to provide additional fill to raise the grade. The Fire Department will provide flood water pumping as necessary.

Dimitri summarized his meeting with Mr. Brennan. Issues identified included the known issue of peat on the beach-how much and how deep remains an unknown. Pat acknowledged that according to original seawall plans, some existing sections of wall are built on peat. Dimitri emphasized the importance of using actual boring samples to identify these areas. This should be completed before design decisions are made and before requesting construction bids on the project to avoid issues or costly change orders during construction. Dimitri also noted, especially after the Committee site visit today, that home owners need to be apprised of the impact construction will have on their property. Seaside yards will essentially be destroyed during construction. If the job requires deep excavation, metal sheeting would have to be placed to protect home foundations and pilings so the houses don't slide into the hole. Concern is that all residents directly impacted are made fully aware of scope and effect of construction. Scheduling a site visit to include residents was suggested to assure owners are aware of plans and impact. Establishing each access for excavating and construction equipment is critical. Defining this and all beach access points, concrete delivery and methods (pumping across private yards if necessary), lay down areas, yard access etc. must all be defined soon as permitting will require it.

There was discussion of proposed preliminary plan wall height increase of 6 feet. Pat noted that from bottom to top would be the same as Marshfield with metal sheeting 10 feet deeper. He used the height recommended on the 2012 Bourne report to determine proposed increase. Original wall elevation is 21.5 feet and has had a 0.3 foot drop over 60 years. The 2016 still water elevation is 23.5 feet. Pat is proposing 1.5 foot higher than Marshfield. The 2012 wave analysis is being used. There were various questions on girth and height and data used to create design. Pat agreed to speak with Marshfield

engineers (Bourne/GEI-same firm that did Duxbury 2012 study we are using), regarding the basis of his design, the criteria used for determining our wall vs. Marshfield model to assist us in understanding the width, height, support plates that are proposed. Candy will create matrix with local area seawalls as bench marks to assist in this process. Pat noted design, construction logistic plans will be close to finished by end of July. Permitting will require changes from most of the involved departments.

Community concern was relayed regarding the impact of a six foot increase in wall height. There has to be a balance approach including beach nourishment, diffusing wave energy, WAD use and the wall construction. Pat indicated his 6 foot increase is a recommendation only, not the final decision. The final design would be determined by the Town Officials.

Discussion regarding boring samples included suggestion to utilize an actual boring machine which would be better suited than an excavator and less disruptive. Also noted was that using an engineering approach, borings should be done on both sides of the wall. Locations would identify peat cross sections denoting how thick, elevations vs. bottom of the wall.

It was noted from the field visit earlier in the day that Marshfield design integrates non ADA compliant stairs. They will be placing stairs every 300 feet. They are protected by using catapult turns to prevent wave flow up and over. Also noted that Army Corps of Engineers is providing Marshfield with grant for beach nourishment. Pat will look into this for possible Duxbury eligibility. Also Pat will provide DSWC with list of grants that Duxbury is/will be eligible to apply. Question was raised about overlay of current non damaged wall vs. building new one. This had been part of original Marshfield plan but with damages sustained in March it was canceled. Pat will discuss how decision was made with Marshfield.

A question from the community asked Amory to share their experience building seawalls-what have they built and change order percentages. Mr. Brennan noted that Amory has designed a number of groins/ revetments and one steel bulkhead at Duxbury Bay Maritime. He did not note any seawall design experience.

#### OLD BUSINESS- TOWN MANAGER REPORT

3.1.1 The Town Manager has copy of the requested committee charge changes and will review with Department heads that are cited in it before our next meeting. It will then be forwarded to Selectmen for approval.

3.1.2 Betterments have not been previously assessed in Duxbury for seawalls. Voter approval is necessary to issue a betterment.

Mr. Read reported that the Town Finance Manager and he will be exploring other alternatives to fund the wall. Possibility for betterment only for revetment, since this impacts all beach area resident and have all Duxbury taxpayers assume wall replacement costs. Mr. Read will present when completed. Mr. Read also reported that the September Special Town Meeting warrants will NOT include seawall funding. It would be better to have knowledge of Dam & Seawall Grants funding (Sept 2018) and actual bid numbers for construction (Jan/Feb). The funding issue will be moved to the Spring.

3.1.3 State has accepted ownership of the wall. A letter was sent by the Town to DCAM then forwarded to DCR. Town awaiting response. Town will proceed with design and funding. Documentation from 1992 indicates Town responsible to assess damage/maintenance of wall and apply to State for Grant funding to subsidize repairs. Town Manager is meeting Monday July 16 with FEMA regarding Town reimbursement and the process to obtain, including time frames for filing and receipt of funding.

3.1.4 Request for peer review was made by the Committee to the Town Manager and there was discussion around timing and available Town funding. The Committee recommended that CLE be used as they have already met with the Town and have extensive experience with seawall design and projects of this scope. Mr. Read requested a proposal from CLE for the cost of peer review. Mr. Brennan felt it was early at this point and would be more beneficial as the design advances. Pat will provide DSWC with a time line for the project. Alicia will work with CLE to set up peer review framework.

3.1.5 Lawn signs for Seawall campaign were approved at last Selectmen meeting for posting from now until Labor Day to capture summer traffic on Gurnet Rd. Logo designs and dimensions to be provided to Rene to discuss with Scott and Selectmen for approval.

#### OLD BUSINESS- DPW UPDATE

3.3.1 Emergency preparedness plan for residents would be coordinated through Fire Chief. Mr. Read assured all that the Town would be there to assist in any emergency to keep them safe-multiple emergency vehicles and methods are available and would be used. He encouraged any and all to call 911 if wall damage occurs or rescue is needed.

Suggestion that support for funding of temporary wall repairs be submitted to Selectmen. To be included in letter regarding DSWC letter regarding betterments. DSWC agreed.

3.3.2 Mr. Buttkus not sure if counters were placed first week of July. He will check with Valerie Massard Town Planner who coordinates counters with outside company.

#### OLD BUSINESS-DSWC FEEDBACK FROM MARSHFIELD SITE VISIT

Paul Brogna coordinated site visit to Brant Rock with Jack Graves of Northern Construction Manager and Marshfield DWP. Mr. Read and Mr. Buttkus also attended. Thank you Paul. Group found it very informational, educational and impressive. Northern Construction has wall replacement 'down to a science' - completing 120 feet per week with a 15 foot wide footing. See minutes from visit 7/10/18 for specifics.

#### 4. OPEN FORUM

Jim Ryan of Bay Road submitted a letter regarding betterments. He researched the towns of Quincy, Marshfield, Scituate, Hull, Weymouth-they do not do betterments for infrastructure projects. State or Federal grants and/or general fund money is used. He also noted State funding and grants that are in progress (Dam& Seawall \$3M, Rep. Culter's \$1M and Senator O'Connor working for additional \$2M).

Larry Dullea, beach resident, verified that there would be double revetment - entire length buried with additional stones place in damaged wall areas. The grant application included funding for revetment for the new wall areas.

Jeffrey Deady, Ocean Rd North, indicated he was 'new' to the situation and asked what the process was for choosing Amory Engineering for this project since they were new to seawall design and noted the scope of this project is large. It is difficult for residents to understand how a less experienced firm was chosen by the Town. Mr. Read explained the Town did meet with CLE and their proposal was very similar in cost and content to Amory. The Town has a 40 year relationship with Amory and they were more comfortable with them. The Board of Selectmen approved also.

5. NEXT MEETING-Wednesday July 25 at 6PM. Location to be determined.

6. ACTION ITEMS

- 6.1 Temporary Revetment Design to be forwarded to Committee (P. Brennan)
- 6.2 Construction Access and Laydown space to be defined for permit (P. Brennan)
- 6.3 Location of test bores to be defined; Committee to assist with coordinating access (P. Brennan with T. Spellman & D. Theodossiou)
- 6.4 List of easements provided by Town to be forwarded to Committee and distributed out to residents without recorded deeds (A. Babcock to C. Martin)
- 6.5 List of Grants available to be summarized (P. Brennan)
- 6.6 Site walk of Phase I locations to be performed to determine required foundation protection (P. Brennan to contact D. Theodossiou (and notice to D. Norris, T. Spellman, P. Brogna)
- 6.7 Design Criteria Summary to be developed to show comparison of proposed design to Marshfield, Scituate, and Hull seawalls (C. Martin)
- 6.8 Overlay of seawalls was performed by Marshfield. Marshfield will be contacted to understand how decisions were made to overlay vs replace (P. Brennan)
- 6.9 Timeline to be updated (P. Brennan)
- 6.10 Committee Charge - comments from department heads to be forwarded before next meeting (R. Read)
- 6.11 FEMA Reimbursement - need summary of what will be submitted for reimbursement, timing for reimbursement of expenses already incurred (R. Read).
- 6.12 Storm Related expenses incurred by Town and funded by 2018 STM to be summarized to confirm what portion was covered by Free Cash (R. Read)
- 6.13 Peer Review Proposal to be requested from CLE (A. Babcock)
- 6.14 Signs for public awareness campaign to be confirmed (R. Read with A. Babcock)
- 6.15 Scheduling set up of Car Counters (P. Buttkus)
- 6.16 Emergency Preparedness to be discuss with Chief Nord (C. Martin)
- 6.17 Letter to Selectmen to be finalized and forwarded with additional point to request support for funding for temporary repairs (A. Babcock)

7. ADJOURNMENT- Meeting was adjourned at 9:15 PM.