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Minutes of the Commission Meeting Held on March 24, 2016 In the Stone Building 33 New York Avenue, Oak Bluffs, MA

IN ATTENDANCE

Commissioners: (P= Present; A= Appointed; E= Elected)

P Tripp Barnes (E-Tisbury)
- Yvonne Boyle (A-Governor)
P John Breckenridge (A-Oak Bluffs)
P Christina Brown (E-Edgartown)
- Peter Connell (A-Governor; non-voting)
P Robert Doyle (E-Chilmark)
- Josh Goldstein (E-Tisbury)
P Fred Hancock (E-Oak Bluffs)
P Leonard Jason (A-County)
P James Joyce (A-Edgartown)
P Joan Malkin (A-Chilmark)
P Katherine Newman (A-Aquinnah)
P Doug Sederholm (E-West Tisbury)
- Abe Seiman (E-Oak Bluffs)
P Linda Sibley (E-West Tisbury)
P Ernie Thomas (A-West Tisbury)
P James Vercruysse (E-Aquinnah)

Staff: Adam Turner (Executive Director), Bill Veno (Senior Planner), Paul Foley (DRI Planner), Sheri Caseau (Water Resources Planner), Christine Flynn (Economic Development and Affordable Housing Planner), Priscilla Leclerc (Transportation Planner), Jo-Ann Taylor (Coastal Planner, DCPC Coordinator).

Chairman James Vercruysse called the meeting to order at 6:00 p.m.

1. SQUIBNOCKET PARKING LOT-CHILMARK DRI 661 PUBLIC HEARING and SQUIBNOCKET FARM CAUSEWAY-CHILMARK DRI 338-M2 PUBLIC HEARING

Commissioners Present: T. Barnes, J. Breckenridge, C. Brown, R. Doyle, F. Hancock, L. Jason, J. Joyce, J. Malkin, K. Newman, D. Sederholm, L. Sibley, E. Thomas, J. Vercruysse.

For the Applicant: Town of Chilmark for Squibnocket Parking Lot, Daniel Padien (Vanesse Hangen Brustlin, Inc.) for Squibnocket Farm Causeway

Fred Hancock, Public Hearing Officer, opened the public hearing at 6:00 p.m. and read the public hearing notice. The public hearing is for two adjacent and related but separate projects with different applicants, DRI 338-M2 Squibnocket Causeway and DRI 661 Squibnocket Parking Lot. The applicant for the Squibnocket Farm Access Causeway is Squibnocket Farm, Inc. and the applicant for the Squibnocket Parking Lot is the Town of Chilmark. The project location is Squibnocket Road, Chilmark, MA Map 35 Lots 1.30 (Beach lot owned by V.O.L.F.), 17.3, 17.4, 20, 21, 22 & 23. Lots 17.3 & 17.4 were acquired recently by the Town for Parking Lot. Lots 20, 21 and 23 are owned by Squibnocket Farm and leased to the Town. The Town owns Lot 22. The Squibnocket Causeway proposal is to relocate the access road to the Squibnocket Farm Subdivision from the current beach to a new 300 foot long causeway/bridge. The Squibnocket Parking Lot proposal is to relocate the Squibnocket Beach parking lot inland from the existing revetment which will become the subject of a beach restoration project. The project also includes the relocation of the skiff launch area. The public hearing process was reviewed and it was noted that this is an unusual public hearing as it is combining two projects simultaneously.

1.1 Staff Report

Paul Foley presented the following:

- The plans for the project were reviewed with an aerial view of the site and the extended beach lot plan was reviewed.
- The Town appointed a committee that met for about a year to review possibilities. The plan has gone through several iterations and a number of alternatives were looked at.
- Historical photos of the site were reviewed.
- The project is in the Squibnocket DCPC.
- The project consists of construction of a 300 foot long, 12 foot wide causeway/bridge (10 foot wide roadway) with a finished roadway surface at elevation 13' to access Squibnocket Farm Subdivision.
- There will be three car turnouts; one where the new road to the causeway leaves Squibnocket Road and one at each end of the causeway.
- The causeway is modeled after the Menemsha drive-on dock. It will be constructed of 12 inch diameter epoxy coated steel poles, a pre-cast concrete deck and timber railing. Utilities will run through a conduit under the deck and access.
- Entrance roads to and from the causeway will consist of fill covered by paving.
- Photos of the proposed causeway and parking lot were shown and a view from the existing gate of Squibnocket Farm. Photos from the site visit were reviewed.
- Two mock-up sections of the bridge have temporarily been set up to show the location and height of the causeway.
- The parking lot will be relocated up the hill perpendicular to the ocean ending with a cul-de-sac approximately 120 feet inland from the Mean High Water.
- The northeast side of the parking lot (25 spaces) will be on the existing pavement of Squibnocket Road. The other 20 spaces will be gravel. The cul-de-sac will be paved.
- There will be removal of rock revetment on both (ocean and pond) sides of the existing Squibnocket beach and parking lot. The rock revetment beyond the existing access to Squibnocket Farm along the beach is proposed to remain.
- There will be beach restoration including a new dune and vegetation and the restored beach is proposed to be left to natural processes after installation.
- Relocation of the skiff launch to the subdivision side and roadway and utility relocation is proposed.
- Key Issues include:
  - Neighbors have suggested they would like the causeway/bridge to be lower with less visible railings for aesthetic reasons. The applicant has indicated that a lower causeway could have adverse impacts on the wetlands through shadowing and would probably be over-washed more often. Is the current proposed elevation of the causeway the optimal level to protect views, wetlands and long term stability of the structure?
  - Neighbors have suggested separating the skiff launch from the kayak put-in to reduce traffic over the bridge. They suggest leaving the kayak spot at its existing location. Can the kayak put-in be separated from the boat launch and would this reduce traffic over the causeway?
  - What are the logistics for launching a boat from the proposed skiff launch? Where will boaters put trailers?
  - Part of the existing revetment on the subdivision property is being retained. If the plan is to revert to natural processes, why not remove the entire revetment?
  - How are backups entering the parking lot and access road handled?

  - The Agent for the Town replied that when the beach (Mean High Water) migrates to within 40 feet of the cul-de-sac retaining wall (currently 120 feet) the Town would consider another managed retreat. The Agent for Squibnocket Farm replied that the process for relocation or replacement should begin when the beach (Mean High Water) migrates to within 10 feet of the causeway. Are these future action benchmarks compatible and/or sufficient?
  - The proposal is that once the revetment on either side of the existing parking lot is removed and the replication of a natural beach and dune is done, that the beach will then be left to natural processes. What are the options if the proposed beach restoration is washed away in the near future due to storms?
- Vegetation.
  - Approximately 220 sf of wetland will be displaced for the proposed skiff access and approximately 970 sf of wetland will be displaced for the proposed new parking area.
  - The displaced wetland will be replicated nearby.
  - Approximately 25 sf of wetland will be displaced by the pilings for the causeway which the applicant suggests is de minimus.
- The applicants have filed with NHESP. NHESP has made a preliminary finding that as long as the construction is coordinated to not occur during the Northern Harrier nesting period it does not anticipate that this will result in a "take" of state listed species.
- The habitat is not subject to Chapter 91.
- Shadow study of the causeway determines impact on wetland species below.
- Archaeology; PAL Management Abstract.
  - PAL completed an intensive (locational) archaeological survey, archaeological site examination and archaeological monitoring at the proposed Squibnocket Restoration and Access project area in Chilmark, Massachusetts.
  - Three previously identified Native American archaeological sites (19-DK-61, 19-DK-93 and 19-DK-262) are located within and/or adjacent to the Squibnocket Restoration and Access project area and unmarked human burials have been identified in areas adjacent to the project area.
  - Eighteen 50 x 50 centimeter test pits were excavated within the proposed area during the intensive (locational) archaeological survey followed by machine assisted topsoil stripping across all proposed impact areas located within the project area.
  - A low density of chipping debris, a single biface and shell fragments were collected in addition to the identification and mapping of 20 cultural features.
  - No feature excavation was conducted.
  - The Native American deposits are all likely associated with the previously identified Hornblower I and/or Hornblower Shellheap sites.
  - PAL recommends that to the extent possible, proposed project construction be designed to build up on the existing ground surface and to avoid excavation and/or soil removal at or below the depth of the identified features.
  - A Site Examination evaluates whether an archaeological site is eligible for listing in the National Register. PAL recommended to MHC that it is eligible for listing. The Town is seeking a construction technique that will not disturb the resources and leave them in situ. PAL and MHC have not reviewed the construction technique plans.
  - The PAL reports have been submitted to Massachusetts Historical Commission for review and recommendations but they have not received those back from MHC yet.
- No lighting is proposed.

- Two handicapped parking spots have been located at the end of the parking lot closest to the beach. No indication is given for how people with mobility problems would transition from the end of the cul-de-sac to the beach. The seasonal port-o-potty will be A.D.A. accessible.
- The soil type is East Chop loamy sand on 3-8% slopes with rapid permeability. This type of soil is prone to be very deep, gently sloping and excessively drained.
- The site is split between the Squibnocket Pond watershed and the ocean. The status of Squibnocket Pond is currently under study as part of the Massachusetts Estuaries Project. The watershed is currently listed as compromised. The project is not expected to affect the total nitrogen load.
- The roadways accessing the causeway will have a vegetated swale for stormwater collection. The parking lot will have an 18 inch deep by 18 inch wide gravel drainage trench along the top of the retaining wall for stormwater collection.
- The grassed swale plan was reviewed.
- The existing parking lot is unmarked and accommodates 30-35 cars not including informal parking and parking along Squibnocket Road. On busy days an ad hoc third row can be created that pushes the capacity up to 45 or so but without standard sized lanes.
- The proposed site plan shows 45 marked standard parking spots.
- No special provisions exist for vehicles with boat trailers that might use the launch.
- Vehicles visiting the Squibnocket Farm subdivision will no longer have to pass through the middle of the beach parking lot.
- The access road cross sections were reviewed.
- Separating the subdivision traffic from the beach traffic should reduce vehicular pedestrian conflicts.
- The relocation of the parking lot up the hill will also shift any queuing for the lot during the busy season up the hill which may lead to cars waiting for entry in front of private residences.
- The increase in the number of parking spaces (10-15) and the introduction of the public skiff landing may add traffic but as there is no adjacent parking and no designated parking lot for boat trailers at the parking lot, it is unlikely that trip generation will increase substantially.
- Cross sections of the existing and the proposed beach were reviewed as were sections for the proposed parking lot retaining wall and swale.
- The proposed private causeway project does not trigger the MVC's Affordable Housing Policy because the project is not a new commercial development of 2,000 square feet or greater.
- The following is a breakdown of funding sources.
  - $750,000 from Chilmark Community Preservation Act funds; $350,000 funded the town purchase of two lots and $400,000 funded a beach lease agreement with the V.O.L.F.
  - $280,000 funded from the State Office of Coastal Zone Management (CZM).
- The new causeway and the parking lot will both be visible to residences on the hill above the site.
- The abutters have expressed concerns mainly about the aesthetic impact of the height of the causeway and railings and screening of the relocated parking lot. They have also expressed some concern with the potential for increased traffic over the causeway due to relocation of the boat launch which could result in both visual and noise impacts.
- Correspondence was received from the abutters and it has been posted on the MVC web site. The correspondence was summarized as noted in the MVC Staff Report.

Jo-Ann Taylor presented the following:

- A proposal to review what to do in case sea water enters the causeway was needed as the causeway is designed so the barrier beach will roll back and will affect the ends of the causeway. The proposed causeway has been designed so the seawater will go underneath.

- Other documents are posted on the MVC web site such as the Environmental Notification Form, site visits and staff comments as part of the MEPA review.
- Minutes of the Chilmark Conservation Commission are also on the web site.

Paul Foley added that the MEPA notes are also included in the MVC Staff Report.

1.2 Applicants' Presentation

Fred Hancock, Public Hearing Officer, noted that there will be two applicant presentations; the Town of Chilmark and the Squibnocket Farm Association.

Town of Chilmark

Warren Doty, Chilmark Board of Selectmen, presented the following:

- We are here regarding the DRI but he wanted to stress that this is an unusual application. It is not like a chef proposing to open a new restaurant or a bank requesting to open a new branch. It is our proposal to fix something that is broken. It is a proposal to fix a broken parking lot.
- We have been through three years of discussion. We met after Hurricane Sandy and decided that we are not going to defend this parking lot. It has to move. We are not going to fight this anymore with Mother Nature, but we have to provide an access road to the subdivision for ambulance, fire, police and utility service for the homes.
- Geography of the subdivision was shown. The Town permitted the subdivision with houses and they all feed onto the access road.
- The Town discussed other possibilities even going out over Aquinnah and it is not a viable option. The only choice to access the subdivision is in the proposed direction. Other options were shown and it was noted that they are not viable. The more it was looked at the only access is through the parking lot.
- Good access is needed for the subdivision and a way for the residents of Chilmark to get to the beach. We are dedicated to the idea that there will be a parking lot and residences and the rest of the Island will have access.

Jim Malkin Chairman of the Squibnocket Advisory Committee, reviewed the committee's process:

- Residents of the subdivision had a proposal to build the causeway with their money but after reviewing, the Town decided to appoint an independent committee and we met for seven months.
- Interested parties, abutters and Town officials were invited to meetings and there were 21 open meetings and 13 presentations.
- The committee explored all of the options and suggestions.
- Input was received from four Chilmark Town boards.
- The Squibnocket Advisory Committee made multiple site visits to the abutters and we listened to our experts.
- All input was reviewed and documents and presentations were questioned. The data was used and counsel reviewed the information. It was evaluated against the mandate from the Town regarding parking, beach access and access to the subdivision.
- The committee came up with eight access and six parking alternatives.
- The height of the causeway was discussed and the height needed to prevent several wash overs per year.
- Permitting issues and impacts on the beach were also reviewed.
- The parking committee was adamant about the number of parking spaces.
- We proposed the Managed Retreat option and took that to Town vote in February 2016 and the Town unanimously accepted the recommendations of the committee.
- We are happy that we have received the support of the Town with our recommendations.

Chuck Hodgkinson, Chilmark Zoning Board of Appeals presented the following:

- He has worked on the project since April 12, 2013.
- He was given charge of how to pay for the project.
- The Town appropriated $350,000 to purchase two additional lots and the purchase has closed and includes $25,000 for additional screening.
- $410,000 is for a 99 year ground lease for the current leased land; one fifth mile of ocean front beach and Squibnocket Pond frontage for the skiff launch.
- The Town received a $280,000 grant from Massachusetts CZM in 2015 and again in 2016. We do not know if the program will be offered in 2017.
- CZM is hosting a regional seminar in Edgartown and the Town has been asked to present on Managed Retreat from rising sea level.

Linda Sibley joined the meeting.

Reid Silva presented the Town engineering design, permitting and construction.

- In the early 1990's there was no revetment.
- Revetments extend from the natural cliff to the Squibnocket subdivision. There is little beach.
- The beach shoreline migration over time from 1888 to today was shown. The retreat is 1.35 feet per year and is not as aggressive as the eastern part of the Island but it is existing and ongoing.
- This project is the beginning phase of a planned retreat. The plan is:
  - Relocation of the existing 45-50 cars parking lot.
  - The skiff launch and the area were reviewed.
  - Restore the entire area that has been taken up with revetments and parking surface back to its natural state.
- The new parking lot is designed for 45 spaces with trash receptacles, a beach attendant stand and a port-o-potty.
- The cul-de-sac at the end of the parking lot is important to get vehicles in and out and allow for a bus turn around.
- A critical element is there is a wetland that extends into the cul-de-sac. It was felt that it is important to have a safe turn around so the wetland will be replicated.
- The existing asphalt road was shown. The cul-de-sac will be asphalt to be a smooth surface and also for A.D.A. accessibility.
- When you come off the parking lot there will be a level transition to the beach. With time there may be a point that a ramp will be needed.
- Extra parking at the upper end will meet grade and two feet above grade and then six feet tapered down to grade.
- Drainage; gravel will be permeable and a fusion trench will be around the entire perimeter.
- Stones from the revetment will be reused and the excess will be removed.
- The existing access to Squibnocket Pond will be relocated and it was shown on the plan. It is not about creating a new access or ramp to the pond, it is about relocating and the proposed is really the only access possible. It is a lower and gentler slope to the pond.
- The kayak launch has promoted a lot of discussion; is it feasible to walk that far down to launch a kayak. It has been decided that an alternative location may be possible in the future.
- 470 linear feet of revetment and 14,000 sf of parking surface are to be removed.
- The barrier beach and the glacier headland deposit were shown. Core samples were done and is essentially an overwash of the pond.
- An elevation was chosen for restoration of the dune and compatible beach sediment will be placed and beach grass planted. We did not try to create an unnatural dune but rather to put material that is compatible to what is there. There is no plan for future management and

nourishment because there is very little sediment in the area. It will be washed over and that happens approximately a dozen times a winter and will move west and towards the pond and to its more natural condition and to let nature takes its course.

- Managed Retreat; this is the first major change in moving back. There will be a benchmark for the Town to make its next plan and have suggested 40 feet. Currently Mean High Water is less than 40 feet at the revetment.

There was a discussion about Managed Retreat.

- **Doug Sederholm** asked what the expected timeline is before you get to a point to have to manage the retreat. **Reid Silva** said that is a good question but no one knows exactly. If a Hurricane Sandy occurred it could be a year and in calmer years it could take ten years. If you use 1.5 feet of shoreline retreat per year, today it would be at 20 feet of Mean High Water.
- **Doug Sederholm** said that when the change is made you will eventually lose 40 feet. **Reid Silva** said that is correct. Down the beach to the east is geological material and will change more slowly and in the other area it is beach sand and will change more rapidly. It is dependent on what nature will throw at you but he does not see an alternative. He reviewed the plan.

<u>Squibnocket Farm Association</u>

Mark Haley (Haley and Aldrich) presented the following.

- He is here representing the homeowner association and was asked by them to create a plan.
- Access to Squibnocket Farm is in peril and the solution is a causeway.
- A low causeway was designed and also an at-grade roadway design was done.
- There are two core parameters; to be sustainable and to be permittable while minimizing the impact to the wetlands and the coastal resources.
- The storm damage was shown after storm Sandy in 2012 which also took out the utilities for the residents for some time.
- The damage to the parking lot from the 2016 storms was shown as well as the damage to the revetment at the north end.
- One solution was to raise and lengthen the existing revetment but that is not a possibility with the current environmental regulations.
- The homeowners had implemented a soft solution which was done in 2010 and Super Storm Sandy destroyed it.
- The only viable solution was to move inland and elevate the access and the utilities.
- The plan was shown of the alignment of the low causeway and at-grade roadway design. This plan has previously worked in a number of locations.
- Views were shown looking at the causeway from various locations.
- It is needed to provide sustainable access to last 50 years and permittable for utilities.
- Elevation refers to the height above Mean Low Water which for this project is 13 feet above Mean Low Water.
- Height refers to the height above the existing ground surface.
- Height versus elevation was reviewed.
- The pond is just about Mean Low Water, elevation 0 and the ocean is elevation 2.1.
- FEMA Flood Maps: The area is VE zone on the ocean side and is based on the 2010 maps and the Pond is AE zone. The pond is elevation 8 and goes to 24 along the coast. The 2016 maps raise those elevations. The new map shows elevation 16 at the ocean and the pond goes to VE zone and elevation 15. The VE zone is the wave zone above 3 feet.
- Ideally if one would choose an elevation for the causeway it would be 16 feet, which is above the predicted flood level but we realized we can't do that. We submitted an ENF and the MVC suggested the deck should be set at 2 feet above and that would set the deck at elevation 17.

- The Committee on Squibnocket recommended locating the causeway far enough inland, following the contours of the land, to minimize wetland approval issues. The height of the one-lane causeway to be at an elevation that limits projected wash over and an at-grade one-lane roadway with turnouts at the at-grade sections.
- The elevations and the deck design were reviewed. The causeway deck will be at elevation 13 and the height above the ground surface ranges from zero feet where the causeway meets the at-grade roadway to approximately 11 feet above ground surface for most of the span. The causeway will be 12 feet wide with a 10 foot wide drive lane. The deck is only 2 feet above what the current parking lot is.
- Structural design considerations include topography and subsurface conditions. Subsurface explorations were done.
- The deck will be concrete slabs each approximately 4 feet by 16 feet. The piles will be 12 inch in diameter. The timber railing will be 3 feet tall with posts 4 feet on center and in two sections; the lower railing will be 12 inches wide and the upper railing will be 6 inches wide. The road will be gravel as it is today. The at-grade roadway will be pavement on the north side near the beach parking lot and gravel on the south side at Money Hill.
- A model of the causeway was shown.
- To meet and conform to what the committee recommends, the low end of the deck is to be at elevation 13 and it is 3 feet below the predicted VE Zone elevation 16. The utilities on the side of the causeway will be located at approximately elevation 12. The current parking lot is at elevation 10-11.

Doug Sederholm asked what is going to happen to the railing when there is wash over several times a year. **Mark Haley** said it will get damaged and it will get rebuilt and the homeowners understand that.

James Vercruysse noted that the lower causeway is more robust and it has to be due to the probability of wash over. **Mark Haley** said that is correct.

John Breckenridge noted that the causeway is going to be Association funded and with the new FEMA maps it will be self-insured. **Mark Haley** said the Association will be responsible for up-keep and maintenance.

Daniel Padien (Vanesse Hangen Brustlin, Inc.) presented the permitting aspects of the project.

- It took two pieces of the puzzle to make this work and the bigger challenge is can it be permitted. There are several layers of jurisdiction; state, local and regional.
- With due respect to all the Boards, the strictest determinant to follow is the Massachusetts Wetlands Protection Act. It prohibits new coastal engineering structures, which is defined as any structure that is designed to alter wave, tidal or sediment transport processes in order to protect inland or upland structures from the effects of such processes. The project also must avoid and minimize loss of bordering vegetated wetlands.
- He reviewed the wetland delineation as approved by the Chilmark Conservation Commission.
- The low causeway is not a coastal engineering structure, it is designed to allow waves to crash under it and sand and water can freely move beneath it.
- The low causeway will relocate access 100-260 feet landward from the shoreline.
- Key permits are MEPA (which is completed), the MVC (a mandatory referral of a DRI), Board of Selectmen approval for design (which is completed) and the Conservation Commission (the Notice of Intent is pending MVC approval of the DRI).
- MEPA (Massachusetts Environmental Policy Act) provides a vetting of alternatives and provides comments on a project. A certificate was issued on November 18, 2015 ruling no further information is needed.

- The DEP said the project restores portions of Squibnocket beach, removes artificial features that have been impediments to the natural migration of the coastline, and creates public access that will be more resilient to coastal storm events.
- CZM said the project represents significant improvement to resources on this barrier beach system.
- NHESP said the proposed project appears to represent a net improvement over current conditions.
- At the Selectmen's meeting on December 15, 2015, the design plans were unanimously approved.
- The homeowners will buy a portion of a lot from VOLF and they have entered into a lease with the Town.
- The expanded lease area plan was reviewed.
- The homeowners filed a Notice of Intent on December 24, 2015 with the Chilmark Conservation Commission.
- Pending Permits.
  - Notice of Intent, Wetland Resources and Impacts; permanent shading impacts are immaterial.
  - Notice of Intent, Stormwater Management; the swale is designed in compliance with stormwater management regulations and collects, conveys and treats runoff. The at-grade roadway will have a bio-retention swale running parallel to the roadway.
  - Projects in the DCPC require MCV approval.
- The grading plan for the at-grade roadway was reviewed, a 3 to 1 slope is proposed down to the pond.
- Minimizing Impacts.
  - The fewer "cuts" the less impact to cultural resources in the project site.
  - Benefits to the Town include; improved parking for beach access, improved skiff launch and expanded beach area.
  - Impact mitigation; 50 feet of BVW replication, surface of the low causeway and an at-grade roadway to reduce potential noise and dust impacts and vegetative screening.
- The current view and the proposed view were shown from the Vytlacil lot with screening.

1.3 Commissioners' Discussion

Fred Hancock noted that at the LUPC meeting, the land fall of the causeways was discussed and asked for that information to be presented. **Mark Haley** said as approached there will be a tipping slab and a pile vent about 10 feet from where the causeway sits on the ground.

Trip Barnes said LUPC asked how the bridge will be built and the load capacity. He is concerned about truck traffic. **Mark Haley** said it is designed for 40 tons which is 80,000 pounds. The max load in Massachusetts is 99,000 pounds.

Trip Barnes asked if there is another access for homeowners if something happens to the bridge and is concerned about this with regards to emergency purposes. **Mark Haley** said there is no other way but the access road and the residents were left impassable after Hurricane Sandy.

John Breckenridge asked is there is a maintenance component for the vegetated swale regarding the sediments that will be accumulating. **Daniel Padien** said there is but the swale is designed to be virtually maintenance free. There will not be a lot of sediment. Long term there shouldn't be much due to the slope.

1.4 Testimony from Town Officials

Sandy Brogard is the Chairman of the Chilmark Conservation Commission. We have not come to a vote and we will do so after the MVC deliberation. We have had three meetings and have taken quite a bit of time to fully understand all details of both projects and have come up with 19 questions for the Squibnocket homeowners and 9 questions for the Town committee. It is critical for us to understand all of the details and the impact from the State agencies. Comments from MEPA said the project will result in the net reduction of four acres of parking are that drains into conservation areas. Under the stormwater regulations we have Managed Retreat. She has been impressed with both applicants being sensitive to permitting and conservation issues and hopes the project moves forward in a timely way.

1.5 Public Testimony

Charlie Parker gave a presentation for the abutters. Key takeaways from the Town Committee include a low causeway is to be built, it is to follow the contour of the land and wash overs are okay if limited to several per year. The objectives that we would like to make are to lower the road deck by as much as three feet and lower the guard rail from 4 feet to 2.5 feet. This will reduce the mass of the structure and improve the aesthetic as well as the height will be consistent with DOT. The benefits of these objectives is it will be more consistent with the rural character of the area and feel more consistent with the town as well as be less obtrusive with less impact on abutters and beach goers. The height of the causeway was reviewed using the photo of the model; the top of the deck is at 13 feet above sea level. There is 10.5 feet between ground level and the road deck. The area under the structure is critical to how much water will pass through for storms and the shading impacts and effects on the vegetated area. The first recommendation of the committee was 5 feet above grade. The next elevation [recommendation] was 8 feet above grade, which is equivalent to Everett Poole with his hands in the air. The proposed bridge is 2.5 feet higher than that.

The entire area under the bridge is 1.5 feet above sea level and it has a bearing on the shading; 70% of the causeway width from grade to bottom of the road deck will mitigate shading effects based on the following study: Effects on Shading from Bridges on Estuarine Wetlands, June 2005, page iii “Bridges with height/width ratio greater than 0.7 did not have a measurable effect on primary and secondary productivity”. Making the bridge 70% higher doesn’t make the effect on vegetation any better. A key measurement is from grade to the bottom of the road deck. Using the 70% ratio, 8.4 feet from grade to the bottom of the road deck is needed to mitigate the shading effect. This allows for a reduction of at least 2 feet in height. This is conservative because the bridge is oriented from north to south. The shading effects at elevation 11 feet were reviewed with a graphic presentation; can the road deck be lowered by 2 feet as the shading ratio of 70 % equals 8.4 feet of height and 8. 4 feet of height is 10 feet in elevation.

Flood water in the pond in a 100 year storm is at elevation 8 feet per FEMA. There is a gap of 2 feet from the top of flood level to the bottom of the road deck. An over wash event does not kick in until flood level reaches 10 feet. Over wash events are very unlikely and would require water to exceed the 100 year storm level by 2 feet and several hurricanes a year are not anticipated. The water level in the pond has not exceeded 1.5 feet above current level since 1950 (using records from the Regen home) which includes Hurricane Carol. Common sense needs to be used. The center point of the causeway is 180 feet from observed Mean High Water and is not like today’s causeway that is sitting in the water every day. The western end point is behind 19 feet of glacial bank (Money Hill). We are interested in seeing this bridge survive and do well. Do we want to use the 100 year storm for roadway design? Usually the 10 year storm is used for a country road.

The Town suggested the design standard for Menemsha. The railing on the Menemsha causeway is lighter and more see-thru and less obtrusive. We would like to see the mass of the structure reduced. The guard rail recommendation is one that is suitable for vehicular traffic on a country road based on DOT and is 2.5 feet high, made of wood, posts 8 feet apart and 2x6 rails. DOT specs for guard rails were

shown for a Steel Beam Highway Guard with Wood Post. At peak times cars queue up waiting to cross the existing causeway. We want to avoid queues for Squibnocket Pond which would be on costal banks on each side. Queues can be minimized by providing a good and smooth flow of traffic. Mitigation to restrict nonessential traffic from the causeway include restriction on the Vytlacil side of the causeway with signage and instituting policies, have a separate kayak launch from the new skiff launch area and limit the boat launch to commercial fishing and town use. Protection of the coastal dune and the barrier beach is needed and this is a 50 year plan that has been presented and the question is what this strategy will do. Do we want to put new fencing to protect the coastal bank next to the skiff launch?

- **John Breckenridge** said the 100 year flood is currently at elevation 8 from the 2010 maps and do we know what it is with the 2013 maps. **Charlie Parker** said the 2013 data says 15 feet above sea level in VE zone in the pond. Common sense is needed. We haven't seen water in the Pond in excess of 1. 5 feet in 65 years.
- **Ernie Thomas** said reference was made to the guard rail and it showed the DOT spec next to a highway but he believes there is a regulation with foot traffic. **Charlie Parker** said there may be some people walking but not sure it has to be structured that way. The guard rail at Quitsa Pond was looked at and that is a highly used place with foot traffic and there is no hand rail there. I think you want to minimize walkers and it should only be kayakers and residents of Squibnocket Farm. The kayak area and the water on the other side of the pond are deeper.

Thomas Bena is a member of the Vineyard Conservation Society and thanked everyone who worked on this project. The term Manage Retreat was used by every presenter. The project replaces artificial hard coastal with soft coastal solutions. He wishes the MVC would use their power to enforce the soft solutions. If you use an engineer you will get an engineered solution. It is a quick solution and you have 10 to 12 homeowners driving this solution. This current proposal is leaving revetments in and he hopes a better solution is found.

Doug Liman is an abutter. There is a lot of talk about how the bridge will be screened from the abutters but his concern is how the beach will be used. He is a filmmaker and he gave his set designers the plans from two years ago and asked them to create a visual of how it will look and showed his rendering. The Town voted for a low causeway. He knows several people who feel hoodwinked that what was voted for is not what is being proposed. He is not trying to reinvent the wheel but matching what the Committee did after seven months of work. It was recommended to have a causeway 4 to 5 feet high and there were no more meetings or engineers reporting. Now the wording has been struck and the causeway is now 4 to 6 feet higher. Why have we not tried to do a low causeway? We have talked about shading. Why can't the effects of storms be dealt with by a lower and stronger structure? Why can't a low causeway intersect Money Hill lower? Was the only reason a soft solution was ruled out was because it was difficult? The proposal doesn't conform to the Squibnocket Committee and what the Town voted on. Does armoring one end of the bridge defeat the entire concept of Managed Retreat? I-95 is the image that most resembles what is being talked about tonight. A rendering was shown of what the beach will look like when the end of life of what is being proposed is met. He is concerned about the beach. I live in the Squibnocket Pond overlay district and it says new structures should not be obtrusive. This structure will be visible from the beach on day one and forever. The bridge will eventually tower over the beach. It will be a visual blight and sound will be quite intrusive. He asks that the current plan be rejected outright and any plan that does not conform to the recommendations of the committee and the Town vote. He called for rejection of a plan that does not place equal or greater value on the hundreds of people who enjoy the rural beauty of Squibnocket Beach. A speed limit should also be enforced.

Jack Taylor is representing the Taylor family that owns the property that is referred to as the Vytlacil lot and we are abutters. The abutters are very much affected by the proposal visually and aurally. He is very supportive of the process and the project and humbled by the work done over the last three years. He

asks the MVC to look at ways to mitigate and negate the impact on their property. The visual aspect can be taken care with proper screening but the aural impact of sound and noise as well as the smell impact of cars waiting to get into the parking lot or causeway if the turnout is full is another issue. Perhaps the solution is to turn into the parking lot and wait there. He does not have all of the solutions but wants a solution and buffer for those challenges to our property.

Eric Peters is the Chairman of the Vineyard Open Land Foundation. This is one of the longest studied and approved subdivisions on Martha's Vineyard. It took almost ten years. The Town of Chilmark has an obligation to help the landowners solve the problems and there are limited solutions. The homeowners provide a large tax base to the Town. The Town has spent a significant amount of money in buying land to retain the beach as well as provide a solution. There is an important municipal interest in maintaining this beach. The proposals are reasonable and the MVC should approve.

Janet Weidner was a member of the Squibnocket Committee and stated that a height of 4 to 6 feet was discussed by the committee but that a conscious decision was made to take it out since we are not engineers. She believes the current solution represents what we are looking for. Once the Town voted the committee was dissolved but we still tried to keep an eye on things and that progressed in what we had recommended.

Tony Orphanos is an abutter and is supportive of this project. We were also offered these lots. His biggest concern is the height. Beauty is in the eye of the beholder. These environmental and engineering designs are being paid for by Squibnocket Farm. There has been reference to shading; 10% of the parking lot is 11 feet above sea level and the other part is 9 feet. We are only asking the causeway to be lowered 2 feet from 13 feet to 11 feet.

Constance Messmer questioned the length of the causeway and asked if it was similar to the length of a football field. She will miss the old parking lot. She would love to see the fumes from the cars resolved and thinks it is important that we take care of our neighbors.

Richard Toole is the President of the Board of Directors of the Vineyard Conservation Society. The MVC is a wonderful resource and it is a regional planning organization. We are going to have a lot more issues with sea level rise. These are complicated issues and the last thing we want is a fight among neighbors. We need to make a plan on how to prioritize these issues and who will pay for them. This is a unique project being private and public. He thanked the MVC and noted that they have a lot of work ahead of them.

Chris Murphy said when looking at the maps, no two are the same. The ocean breaks over the dunes and brings sand and coble towards the pond. This has been going on since the Ice Age and will continue. To locate that beach from long ago you have to go way back. The issue with Squibnocket Beach is not new. You have heard of regulators and political processes but what is the MVC's role here. Perhaps the MVC role here is to bring a little more common sense. The plan is a good one. It really is Managed Retreat and makes sense and we should help them along the way. This plan firmly places an immovable object in front of an unstoppable force. During the 19th century there was a cod industry right here and they had the ability to move with the beach. In the 1950's the Town removed the beach and built a bulk head and still the unstoppable force of the ocean goes above, around and over it. The revetment was built to solve the issue of the hole in the dune. If we keep the Squibnocket Farm solution to keep the revetment we are only moving the problem farther down. We can continue our mistakes of the past or build more structures or move forward with the proposal. Managed Retreat is an Island wide problem. A simple low grade road close to the pond will have the least impact. He thanked the MVC for listening.

1.6 Commissioners' Questions

Doug Sederholm asked the engineers that if the causeway was lowered by 2 feet do you have to engineer it to be stronger. **Mark Haley** said it has to be reengineered for greater lateral loads.

Doug Sederholm asked what the appropriate rail height is for pedestrians. **Mark Haley** said it is not designed for a pedestrian bridge and the redesign was lowered to 3 feet. **Doug Sederholm** said that there will be pedestrian use. **Mark Haley** said he thought 3 feet was a sufficient height.

Doug Sederholm asked why keep the revetment on Money Hill. **Mark Haley** said it is a Town project and it will erode at a faster rate if it is not armored. **Reid Silva** said there is access and human interaction with the area. There is always some impact with humans. Revetments have been talked about. The Town asked how much could be removed and we talked with them and came to a solution. It fixes 90% of the impact. The erosion is high in this area. If you take out stone you will end up with a shoreline with 75% of the protection taken out for Money Hill. What is the purpose of removing all of them? It would just undermine the project we are trying to achieve. There has been a road here as a barrier beach for 100 years but usage has changed dramatically over the 100 years. This is reiterating a discussion that has been had many times. We chose this location as it is more defensible than the parking lot.

Doug Sederholm asked what was meant by a "soft solution" for first responders that would assure access to the houses. **Mark Haley** said soft solutions are typically coir logs; coconut fiber is wrapped in material such as jute and staked in the ground and a revetment is built with them. It was used in Nantucket in Scionset and it was a failure because the wave action was too strong. They have gone to a geo tube that is filled with sand and that may be a solution but it is not a soft solution. Mr. Murphy wants to keep the roadway on the beach, but then there would be no access in storms until the road is repaired.

There was discussion on the causeway height.

- **Doug Sederholm** asked what the lowest elevation the causeway could be. The abutters all want it lower. **Mark Haley** said we have had that discussion and the best height as an engineer to keep it from being damaged is 16 feet and he would have to go back to his clients for any changes.
- **Joan Malkin** asked if there is agreement with Charlie Parker's calculations with regards to shading and reducing the bridge height by 2.5 feet. **Daniel Padien** said he liked the study but perhaps the conclusion is not as stated. He believes the conclusion of the study set a limit below which definitely has impacts and above with no impacts which was approximately 30 meters. He cannot agree with it.
- **Katherine Newman** said she is hearing what the optimal level of the bridge is but is it possible to build a lower bridge. **Mark Haley** said everything is possible with enough money but he would not recommend it. The original bridge was 15 feet and now it is 13 feet. When the bridge is able to be moved back we could lower it. Perhaps we need to relook at it and if it is possible to lower to 11 feet and redesign it. It would have a steeper grade and we would need to look at the road impacts.
- **John Breckenridge** asked from a design characteristic as well as from an engineering and design standpoint we are hearing an elevation change of 2 to 4 feet over the next 100 years and asked what the difference is between the 2010 and 2013 maps and how that affects the height of the bridge. **Mark Haley** said they picked the middle range of 3 feet. With the new maps the new zone is VE which could be elevation 19. We can't tell you definitely as it is unpredictable. The 2010 map is AE zone, elevation 8 and the 2013 map changes to VE zone, elevation 15. FEMA maps are done on history and they do not take into consideration sea level rise. Based on the data this bridge will wash over.

- **John Breckenridge** asked why the bridge then can't be lowered. **Mark Haley** said you will have greater lateral load the lower you go down to the wave action. It is the connection between the pile cap and the deck.

There was a discussion about the revetment.

- **Leonard Jason** asked if all of the stone is going to be ripped out. **Mark Haley** said yes and showed the plan. **Leonard Jason** said if we remove all that stone the water will keep coming onto the beach. The stone that is now always in the ocean was where the parking lot was when he was a kid.
- **Mark Haley** showed how it would work on a photo.
- **James Joyce** asked if both sides/parties think the revetment should come out. **Reid Silva** said yes and it should be re-naturalized.
- **John Breckenridge** said if we take out the revetment at Money Hill, will sand be coming from the far end of the Island eastward and where do you think the sand will fall. **Reid Silva** said there is no source for the sediment. Essentially when Money Hill is gone you will have a low barrier beach. You will have to have something there to protect your access. **John Breckenridge** asked for background information to support this. **Reid Silva** said it is based on experience and showed aerial photographs of the area. Only in summer you get a very thin veneer of beach. This area where the parking lot used to be is a pond.
- **Mark Haley** and **Reid Silva** said you don't have that long expanse of beach between these two nobs of glacier hill so you have a greater wash. There is always over wash and it will continue to do so.

There was a discussion about the guard rail.

- **Joan Malkin** asked if there is a rendering of the guard rail. **Mark Haley** showed a rendering of a similar guard rail.
- **Joan Malkin** asked if there are any engineering and safety consideration versus the Menemsha example. **Mark Haley** said the Menemsha railing is 4 feet high with a center rail and top board. For this project it was opened up for more light and air and lowered to 3 feet.
- **Joan Malkin** requested a true rendering of the guard rail for this project to be submitted.

1.7 Applicants' Closing Statement

Warren Doty said he thinks this is the eighth meeting he has been to on this project. The issues expressed tonight are the same as those that were expressed years ago and why Town Meeting asked to amend the first plan and the committee was formed. After review, the committee decided this is the best solution to a hard problem and Town Meeting said okay. You cannot remove the revetment or the parking lot unless you move the roadway. You have heard this many times and it is why it is still on the table.

Meg Rehrauer, counsel for Squibnocket Farm, has been through the public process and has spent a lot of time talking with our clients and feels the presentation speaks for itself.

Jane Slater said that Dan Greenbaum is not with us any longer and we owe him a great debt and a lot of what was done was guided by his knowledge and she is sure he was here tonight with us.

Fred Hancock, Public Hearing Officer, closed the public hearing and left the written record open until 5:00 p.m., April 1, 2016.

James Vercruysse, Chairman recessed the meeting at 9:50 p.m. and reconvened at 9:55 p.m.

2. PHILBIN ELEVATED WALKWAY-AQUINNAH C.R. 5-2016 CONCURENCE REVIEW

Commissioners Present: T. Barnes, J. Breckenridge, C. Brown, R. Doyle, F. Hancock, L. Jason, J. Joyce, J. Malkin, K. Newman, D. Sederholm, L. Sibley, E. Thomas, J. Vercruysse.

For the Applicant: Peter Temple and Sarah Thulin for the Town of Aquinnah

2.1 Staff Report

Paul Foley presented the following.

- The proposal is for the construction of a wooden walkway to Philbin Beach, a Town beach, from the Philbin Beach Parking Lot.
- Zoning is residential, Moshup Trail DCPC and Coastal DCPC.
- Permits: Building Permit, Order of Conditions from the Conservation Commission, Planning Board for Activity in the Moshup Trail and Coastal DCPC.
- The proposal is for the construction of a wooden walkway to provide an alternative access to Philbin Beach from the Philbin Beach Parking Lot that is shorter and bypasses a high sand dune.
- The walkway is in the viewshed of Moshup Trail from the cliffs and a portion of the walkway may be visible to the naked eye from the cliffs.
- The DRI was referred by the Aquinnah Planning Board.
- The DRI Trigger is 8.6 (Development in Critical Open Space) a Concurrence Review.
- LUPC recommended that the project does not rise to the level requiring a public hearing.
- Key Issues include;
  - The walkway is intended to ease access to the beach from the parking lot for those who have difficulty climbing the sand dune and walking this distance in the sand. However, the sand is migrating and the beach is moving. How long will this manmade structure in the rough environment by the ocean be viable?
  - Can it be moved if the dunes move?
  - Should manmade structures be built in a dynamic natural environment?
- The site is sand dunes and beach grass and other beach vegetation. The site is designated NHESP as habitat and the applicant has contacted NHESP.
- The Massachusetts Historical Commission has determined that no archaeological survey is recommended.
- The project should not impact wastewater or stormwater.
- The proposal should have no impact on traffic.
- The project will be somewhat visible from parts of Moshup Trail. The boardwalk will change the feel and viewscape of Philbin Beach by introducing a manmade structure into an otherwise natural environment.

2.2 Applicants' Presentation

Peter Temple presented the following.

- He is a member of the Committee that is responsible for completing the plan for the Town of Aquinnah and Sarah Thulin is also with him to present tonight.
- The site plan was reviewed.
- The existing parking lot is not visible from the cliffs.
- The walkway will be 30 inches off the ground to hide most of it from the lookout.

Fred Hancock moved and it was duly seconded to extend the meeting 15 minutes. Voice vote. In favor: 13. Opposed: 0. Abstentions: 0. The motion passed.

- To get to the beach you have to go over high dunes of soft sand and it was brought to the attention of the Town by elders and adults with children that it was hard to access the beach.
- The solution was to build a boardwalk that is 360 feet in length and only 30 inches above grade.

- There are no railings but it does have a toe rail. Much of the boardwalk will be screened by vegetation.
    - **Joan Malkin** asked if the height is a consistent 30 inches. **Peter Temple** said it is no higher than 30 inches and in some places it is lower.
- The walkway rises up through the grass to connect to the beach.
- Photos of where the path is located were reviewed and it was noted that the existing walkway cannot be seen from the cliffs. Photos were shown of where the proposed walkway most likely may be visible but it may not be due to the vegetation.
- The walkway will be going through 280 feet of wetlands. To minimize the impact to the wetlands a pin system is being used. The posts of the walkway do not go into the ground -- the pipes go in four feet diagonally to hold the posts in place.
- Rollout walkways such as what is used at Lambert's Cove Beach were reviewed as an alternative but they get buried and they don't address the steepness issue.

Sarah Thulin presented the following.

- She is the Chairman of the Aquinnah Conservation Commission.
- The people of the Town complained about the difficulty of getting onto Philbin Beach due to the growing dune.
- Other solutions were tried such as a moveable walkway but the surface is slippery and gets buried.
- There is a movement and constant migration of sand due to the wind and constant erosion.
- We were asked if the Town could use heavy equipment to move the dune but the Conservation Commission would not allow that.
- The site was reviewed and all the work will be in the Inland Resource Area.
- If the walkway is more than 30 inches in height railings are required, which will increase visibility from the overlook.
- The toe rail makes the walkway five feet wide and will allow for wheelchair access and for two people passing each other while carrying beach chairs, etc.
- A fiberglass grid surface would let light filter underneath to vegetation but would be very hard on the feet and difficult to walk on in bare feet, which is typical when going to the beach.
- The wood walkway made of mahogany would gray up as it ages and blend in.
- The Conservation Commission approved the plan in February 2016 and wrote an Order of Conditions.
- We have spoken with DEP and they had no problem with what is being recommended.
- NHESP's concern is that the walkway not be built between April 1 and August 31 due to shorebird nesting.

2.3 Commissioners' Discussion

John Breckenridge said when LUPC met he was concerned with the proposal. Every bit of vegetation under the walkway will die and he recommended a gray system so the vegetation survives. The proposed will be killing 300 feet of vegetation.

Doug Sederholm moved and it was duly seconded to not concur as the proposal does not rise to the level requiring a public hearing. Roll call vote. In favor: T. Barnes, C. Brown, R. Doyle, F. Hancock, L. Jason, J. Joyce, J. Malkin, K. Newman, D. Sederholm, L. Sibley, E. Thomas, J. Vercruysse. Opposed: none. Abstentions: J. Breckenridge. The motion passed.

The meeting was adjourned at 10:15 p.m.

DOCUMENTS REFERRED TO DURING THE MEETING

- Martha's Vineyard Commission DRI # 338-M2 & 661 Squibnocket Causeway & Parking Lot MVC Staff Report – 2016-03-24
- Correspondence to Matthew Beaton, Secretary EOEA, from J-Ann Taylor, MEPA Review Coordinator for the Martha's Vineyard Commission, Dated November 9, 2015, Re: 15428 Squibnocket Beach Restoration and Access Project, Town of Chilmark
- Plans DRI 338-M2 Squibnocket Farm, Inc. Access & Causeway
- Plans DRI 661 Squibnocket Parking Lot , Dated December 17, 2015
- Presentation to the MVC, Dated March 24, 2016 by Charlie Parker/Abutters, Squibnocket Farm Causeway
- Letter to Commissioners from Vineyard Conservation Society, Dated March 24, 2016, RE: Squibnocket Beach Projects (DRI 661 & DRI 338-M2)
- Squibnocket Causeway DRI 338 Power Point Presentation, Dated March 24, 2016
- Squibnocket Farm Access Causeway (DRI 338-M2) and Squibnocket Beach Town Parking Lot (DRI 661) Correspondence
- Martha's Vineyard Commission C.R.5-2016 Philbin Elevated Walkway MVC Staff Report – 2016-03-18 Concurrence Review
- Notes Aquinnah Conservation Commission, Dated February 16, 2016
- Philbin Beach Walkway, Aquinnah, MA Plan, Dated January 19, 2016
- Martha's Vineyard Commission Land Use Planning Committee Notes of the Meeting March 21, 2016

Chairman — Date 6/3/16

Clerk-Treasurer — Date 6/3/16