Marblehead Conservation Commission Minutes August 11, 2011

Meeting was held in the lower conference room at the Mary A. Alley Building, 7 Widger Road

Meeting was called to order at 7:00 PM

Present were: Commission Members Don Tritschler, Walt Haug, Fred Sullivan, Ken Fisher and Deb Payson. Also present was Willy Lanphear, Conservation Administrator and Jan Smith.

The hearings were conducted under the Massachusetts Wetlands Protection Act and the Marblehead Wetlands Protection Bylaw.

Note: The commission currently has seven members. Per the MACC Handbook, section 4.1.2, most lawyers agree that a quorum is "...a majority of commissioners currently serving". The quorum for this meeting is therefore four members.

Discussion Item:

40-1007 12 Liberty Road Andoloro: After reviewing the revised site plan dated 04/27/2011 and the minutes of August 12, 2010, the commission required the following revision to the site plan. The revised plan (1) will show more detail at the top of the stairs on the coastal bank as to how surface runoff will be directed away from the two concrete swales running down the bank on both sides of the stairs and (2) will state that there will be only one row of rip rap boulders at the base of the wall. Once the revised site plan has been approved by the Conservation Administrator, the project can be completed without further hearings.

40-1029 15 SPRAY AVENUE GROOM

Resource Area: Coastal Bank

Interests of the WPA and Bylaw: Flood Control, Storm Damage Prevention and Prevention of Pollution

Appeared: Paul Lynch, atty., Peter Ogren of Hayes Engineering, Richard Fitzgerald of Childs Engineering and David Groom of Groom Construction

Reference: Letter from Childs Engineering Corporation, dated June 30, 2011 to D. Groom from Fred Radcliffe

Control Drawing: Plan for NOI, Showing Proposed Additions & Grading, 15 Spray Avenue, dated December 15, 2010, latest revision dated August 4, 2011

This was a continuance from 03/10/2011, 04/14/2011, 05/12/2011, 06/09/201 and 07/14/2011. For 40-1029, the major topic of discussion is the design of the added seawall height at the south end of the property. This design remains a two step wall but has been relocated further back from the top of coastal bank and the length of the "buttress" wall (wall section D-D on the control drawing) has been increased. Per the referenced Childs' letter, second page, paragraphs 2 and 3, they refer to this "buttress" wall (they call it a "dogleg and refer to the west end of the

property) and, in very general terms, say "It is our opinion that ... will reduce the chances of wave damage to the abutters due to a severe storm." Childs continues in this letter "... there is always the risk that a larger storm will result in damage to the abutters ..." (Note, upon questioning by the commission, Mr. Fitzgerald said their opinion is based on a 100 year storm.) After further discussion, the commission informed the applicant they require a more definitive statement from him via Childs Engineering that the seawall design per the August 4, 2011 control drawing is able to accomplish the end result for which it is intended, viz., that it will not cause any additional wave run-up or wave deflection against the abutter's property over and above that which currently occurs from the existing seawall at the southern/western end of the applicant's property. The commission also asked Mr. Fitzgerald to critique the final report of CLE Engineering dated 07/21/2011, recognizing this report is based on the "buttress" wall design per the July 8, 2011 revision of the control drawing. Carl King, attorney representing the abutters, was assured by Mr. Groom that Childs Engineering will contact Bourne Engineering (consultant to the abutters) to review the concerns of Bourne as delineated and documented in the July 14, 2011 hearing.

The discussion then turned to 40-1025 and the ongoing request of the commission to receive a substantive report on the stability of the existing granite block seawall. D. Groom informed the commission test borings had been conducted on August 11, 2011 and another seawall has been discovered behind the existing granite block wall. Based on this discovery, a new revision to the site plan will be submitted for the proposed concrete re-enforced wall. The commission continued to question how the site plan is able to specify the "bottom of granite block footing". Ogren said this is their best estimate. He said they have not made any test borings at the base of the seawall and do not intend to do so. The commission thereupon reiterated its demand that a report from a registered professional engineer with expertise in coastal engineering structures (Childs Engineering, for example) submit a report verifying the structural integrity of the granite block wall and its ability to support the proposed weight to be placed on top of it. All members voted to continue this hearing to September 8, 2011.

40-1047 LITTLE HARBOR ISLAND (AKA: GERRY ISLAND) – NOYES

Resource Area: Coastal Bank, Land Under the Ocean, Rocky Intertidal Shore

Interests of the WPA and Bylaw: Flood Control, Storm Damage Prevention and Prevention of Pollution

Appeared: Peter Ogren of Hayes Engineering

Control Drawing: Plan to Accompany NOI in Marblehead, Showing Gravel Ramp, Little Harbor Island, dated May 25, 2011, prepared by Hayes Engineering, Inc.

Reference: Letter from Wetlands Preservation Inc. (WPI), dated August 11, 2011

This is a continuance from 06/09/2011 and 07/14/2011. The commission read the minutes of June 9, 2011 for this application to include them for this hearing. Ogren briefly reviewed the proposed ramp design. The area of the ramp is the same as first proposed but now rip rap has been added to the south side of the ramp. Per Ogren, this rip rap is meant to allow the ramp elevations to match and/or blend into those of the existing coastal bank on this side of the ramp.

The coastal bank in this area consists of: upper bank – unconsolidated material, lower bank – unconsolidated material, large boulders and ledge. The commission raised the following questions/concerns.

- 1. The plan is to excavate up to eight inches (8") of existing coastal bank for the ramp and replace this same quantity of material with 3 inch minus gravel (note: the site plan also refers to this material as 3 inch minus stone). Since this area provides sediment for beach nourishment, what effect will the 3 inch minus stone have on the ability of the bank to provide sediment? Take into account the grain size of the unconsolidated material compared to 3 inch minus gravel/stone.
- 2. Ogren stated they will use some of the existing boulders on the coastal bank to build the rip rap. The commission believes this will alter the slope and condition of the existing bank.
- 3. Ogren stated they will use a backhoe to excavate the bank and trucks to haul away the excavate. The commission said this work will most likely extend beyond the exact outline of the ramp. Ogren said it would not. They also question the impact of multiple trips of heavy trucks on the causeway. Ogren did not address this.
- 4. The commission asked what protections will be established to protect the existing lobster nursery during this work. Ogren said the work will not affect the nursery.
- 5. The commission asked what plans have been made to maintain the ramp since it will be composed of 3 inch minus gravel/stone and will be susceptible to erosion. He did not offer any plans.
- Mr. Young of WPI then addressed his letter and explained in detail the issues he considered in opposition to this application. The commission then voted to close this hearing. The commission then voted to deny the application based on the following reasons.

CMR 10.30 Coastal Banks:

(1) Preamble:

Coastal banks composed of unconsolidated sediment and exposed to vigorous wave action serve as a major continuous source of sediment for beaches, dunes, and barrier beaches (as well as other land forms caused by coastal processes). The supply of sediment is removed from banks by wave action, and this removal takes place in response to beach and sea conditions. It is a naturally occurring process necessary to the continued existence of coastal beaches, coastal dunes and barrier beaches which, in turn, dissipate storm wave energy, thus protecting structures of coastal wetlands landward of them from storm damage and flooding.

When a proposed project involves dredging, removing, filling, or altering a coastal bank, the issuing authority shall presume that the area is significant to storm damage prevention and flood control.

When issuing authority determines that a coastal bank is significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes or barrier

beaches, the ability of the coastal bank to erode in response to wave action is critical to the protection of the interest.

WHEN A COASTAL BANK IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION OR FLOOD CONTROL BECAUSE IT SUPPLIES SEDIMENT TO COASTAL BEACHES, COASTAL DUNES OR BARRIER BEACHES, 310 CMR 10.30(3) THROUGH (5) SHALL APPLY.

(3) No new bulkhead, revetment, seawall groin or other coastal engineering structure shall be permitted ... except ... to prevent storm damage to buildings constructed prior to ... August 10, 1978 ...

The ramp is a coastal engineering structure. The commission regards the proposed ramp to be in violation of this regulation since it inhibits beach nourishment via natural wave erosion. The replacement of fine grain sand with 3 inch stone will not support beach nourishment. See photos A, B and C for evidence of coastal bank erosion. There have been no structures on the island since 1974.

310 CMR 10.31, Rocky Intertidal Shores:

Rocky shore environments are habitats for macroalgae and marine invertebrates and provide protection to and food for larger marine organisms such as crabs, lobsters ... which are uniquely adapted to survive there and cannot survive elsewhere.

The Lobster Conservancy has documented that a uniquely productive lobster nursery exists in this resource area adjacent to the island. The applicant has not submitted any information as to how the original construction work and ongoing maintenance will not impact this nursery.

310 CMR 10.25, Land Under the Ocean:

Land under the ocean provides feeding areas, spawning and nursery grounds and shelter for many coastal organisms related to marine fisheries. Per 310 CMR10.23, Additional Definitions: Marine Fisheries means any animal life inhabiting the ocean or its adjacent tidal waters or the land thereunder that is utilized by man in a recreational and/or commercial manner or that is part of the food chain for such animal life.

No information has been supplied by the applicant stating how he/she will protect this resource area, Land Under the Ocean, as represented by the causeway during the original construction work or ongoing maintenance.

As a result of this meeting wherein no further information was offered by the applicant, said information being necessary for the commission to make a full evaluation of the application, a lack of information is also cause for denial.

40-1048 1 PARKER LANE NUTT

Resource Area: Coastal Bank

Interests of the WPA and Bylaw: Flood Control, Storm Damage Prevention and Prevention of

Pollution

Appeared: Peter Ogren of Hayes Engineering

Control Drawing: Plan to Accompany NOI, 1 Parker Lane, dated July 14, 2011, prepared by Hayes Engineering

Ogren reviewed the plan. The commission voted to close this hearing. All members voted to issue an OOC with the following special conditions.

During construction:

- 32. This project shall not cause an increase in run-off onto adjacent properties or streets, either during construction or after completion. Appropriate measures shall be taken to prevent the movement of silt or debris onto adjacent properties or streets.
- 33. There shall be no cleaning or rinsing of cement concrete ready-mix trucks, or cement concrete mixing equipment, such that the byproduct of the cleaning or rinsing operation finds its way to any resource area by any means, especially, but not limited to, by means of a storm drainage system (catch basins, pipes, drainage ditches, etc.).
- 34. All demolition debris will be removed from the site as soon as possible and not stored within a resource area or a buffer zone. If a dumpster is used to contain debris, the dumpster shall be covered after each work day. The debris shall be properly disposed of in accordance with applicable federal, state and local regulations.
- 35. All construction material will be stored outside the resource area and its buffer zone or as far back from the resource areas as possible.

Post-construction/in perpetuity:

- 36. By voluntary agreement with the applicant, only organic fertilizers are to be used on the property landward of the resource areas. Fertilizers should not contain pesticides or herbicides; should contain slow release nitrogen and should not contain more than 3% phosphorous. To mitigate chemical runoff, do not fertilize directly before a rainstorm and do not over fertilize. Apply fertilizer in late April and in September (refer to: A Homeowner's Guide to Environmentally Sound Lawn care published by the Massachusetts Department of Food and Agriculture and the booklet, Don't Trash Grass, published by the Massachusetts Department of Environmental Protection). This condition shall survive this order.
- 37. Maintenance pointing of existing stone masonry walls including the replacement of occasional, missing stones in the wall is allowed as a surviving condition to the Order of Conditions. All dislodged and removed mortar/cement will be immediately contained and removed from the work site to prevent any such material from entering the resource waters. The future razing, any rebuilding of entire wall sections or enlarging of the subject wall(s) will require the filing of a new Notice of Intent. This condition shall survive this order.
- 38. Invasive plants shall not be used nor maintained in the landscape of the project site. This applies to the existing landscape as well as to any proposed landscape. A list of invasive plants in Massachusetts can be found in the latest update of The Evaluation of Non-Native Plant Species

for Invasiveness in Massachusetts (with annotated list) produced by the Massachusetts Invasive Plant Advisory Group. For most recent update, visit www.mnla.com or www.newfs.org.

- 39. If the control drawings for this project were prepared and stamped by a licensed Professional Engineer, licensed Professional Land Surveyor, licensed Professional Architect or licensed Professional Landscape Architect, the construction of this project shall be regularly inspected by said licensed professional to insure that the project complies with the control drawings. Upon completion of the work authorized by this OOC, said licensed professional shall submit a written statement to the Conservation Commission certifying that the completed work is in substantial compliance with the control drawings and setting forth any deviations that may exist between the completed work and the plans approved the Conservation Commission.
- 40. Upon completion of the work allowed under this Order of Conditions the applicant shall apply for a Certificate of Compliance (COC) (a) within 30 days after completion of the work or (b) thirty (30) days prior to the expiration date of the original or extended OOC, whichever time comes sooner. If no work was started under the OOC or if some of the work will not be performed, the applicant must still apply for a Certificate of Compliance at least 30 days prior to the expiration of the OOC. The Conservation Commission may require the submission of an "as built" drawing (signed and stamped by a licensed Professional Engineer or licensed Professional Land Surveyor) with the application for the COC. Failure to submit an application for a COC shall result in a fine issued against the applicant in accordance with Marblehead Bylaws Chapter 194, Section 11E. See Attachment "C" for "Schedule of Fines".

40-1049 40 TICEHURST LANE REILLY

Resource Area: Coastal Bank

Interests of the WPA and Bylaw: Flood Control, Storm Damage Prevention and Prevention of Pollution

Appeared: David Smith of Vine Associates and Kathleen Reilly (property owner)

Control Drawing: Reilly Residence, 40 Ticehurst Lane, Proposed Work Plan, dated July 2011, by Vine Associates.

Smith explained the project and the issues with the coastal bank. All members voted to close this hearing. All members voted to <u>issue an OOC</u> with the following special conditions.

During construction:

- 32. This project shall not cause an increase in run-off onto adjacent properties or streets, either during construction or after completion. Appropriate measures shall be taken to prevent the movement of silt or debris onto adjacent properties or streets.
- 33. There shall be no cleaning or rinsing of cement concrete ready-mix trucks, or cement concrete mixing equipment, such that the byproduct of the cleaning or rinsing operation finds its

way to any resource area by any means, especially, but not limited to, by means of a storm drainage system (catch basins, pipes, drainage ditches, etc.).

- 34. All demolition debris will be removed from the site as soon as possible and not stored within a resource area or a buffer zone. If a dumpster is used to contain debris, the dumpster shall be covered after each work day. The debris shall be properly disposed of in accordance with applicable federal, state and local regulations.
- 35. All construction material will be stored outside the resource area and its buffer zone or as far back from the resource areas as possible.

Post-construction/in perpetuity:

- 36. By voluntary agreement with the applicant, only organic fertilizers are to be used on the property landward of the resource areas. Fertilizers should not contain pesticides or herbicides; should contain slow release nitrogen and should not contain more than 3% phosphorous. To mitigate chemical runoff, do not fertilize directly before a rainstorm and do not over fertilize. Apply fertilizer in late April and in September (refer to: A Homeowner's Guide to Environmentally Sound Lawn care published by the Massachusetts Department of Food and Agriculture and the booklet, Don't Trash Grass, published by the Massachusetts Department of Environmental Protection). This condition shall survive this order.
- 37. Invasive plants shall not be used nor maintained in the landscape of the project site. This applies to the existing landscape as well as to any proposed landscape. A list of invasive plants in Massachusetts can be found in the latest update of The Evaluation of Non-Native Plant Species for Invasiveness in Massachusetts (with annotated list) produced by the Massachusetts Invasive Plant Advisory Group. For most recent update, visit www.mnla.com or www.newfs.org.
- 38. If the control drawings for this project were prepared and stamped by a licensed Professional Engineer, licensed Professional Land Surveyor, licensed Professional Architect or licensed Professional Landscape Architect, the construction of this project shall be regularly inspected by said licensed professional to insure that the project complies with the control drawings. Upon completion of the work authorized by this OOC, said licensed professional shall submit a written statement to the Conservation Commission certifying that the completed work is in substantial compliance with the control drawings and setting forth any deviations that may exist between the completed work and the plans approved the Conservation Commission.
- 39. Upon completion of the work allowed under this Order of Conditions the applicant shall apply for a Certificate of Compliance (COC) (a) within 30 days after completion of the work or (b) thirty (30) days prior to the expiration date of the original or extended OOC, whichever time comes sooner. If no work was started under the OOC or if some of the work will not be performed, the applicant must still apply for a Certificate of Compliance at least 30 days prior to the expiration of the OOC. The Conservation Commission may require the submission of an "as built" drawing (signed and stamped by a licensed Professional Engineer or licensed Professional Land Surveyor) with the application for the COC. Failure to submit an application for a COC shall result in a fine issued against the applicant in accordance with Marblehead Bylaws Chapter 194, Section 11E. See Attachment "C" for "Schedule of Fines".

40-???? 19 NEPTUNE ROAD WHEELER

Resource Area: Coastal Bank

Interests of the WPA and Bylaw: Flood Control, Storm Damage Prevention and Prevention of Pollution

Control Drawing: Sketches and photos supplied with the NOI

Appeared: Scott Patrowicz of Patrowicz Land Development Engineering and Herbert Wheeler

This work was started without a permit and fines will be levied accordingly. The footprint of the proposed seawall will be 3-6 inches further seaward than the existing seawall. The height will not change. The footprint of the proposed ramp will be the same as the existing ramp. There will be no change in wave reflection. Since no DEP file number had been received, this hearing was <u>voted to continue</u> to September 8, 2011. In the event an OOC is issued it will contain the following special conditions.

Pre-construction:

- 28. Any land disturbance of an area less than 40,000 square feet requires that Section II.C of the regulations pertaining to the Stormwater Management and Erosion Control Bylaw, Chapter 195 of the Marblehead Code must be followed and implemented.
- 29. All special conditions are to be included in the construction contracts between the applicant and his/her contractor.
- 30. A drawing of the erosion control techniques to be used on site shall be included in the construction contracts between the applicant and his/her contractor.
- 31. Prior to commencement of construction activities, the Applicant shall obtain all federal, state and local permits (in addition to this OOC) that may be required for the proposed project.

During construction:

- 32. This project shall not cause an increase in run-off onto adjacent properties or streets, either during construction or after completion. Appropriate measures shall be taken to prevent the movement of silt or debris onto adjacent properties or streets.
- 33. There shall be no cleaning or rinsing of cement concrete ready-mix trucks, or cement concrete mixing equipment, such that the byproduct of the cleaning or rinsing operation finds its way to any resource area by any means, especially, but not limited to, by means of a storm drainage system (catch basins, pipes, drainage ditches, etc.).
- 35. All demolition debris will be removed from the site as soon as possible and not stored within a resource area or a buffer zone. If a dumpster is used to contain debris, the dumpster shall be covered after each work day. The debris shall be properly disposed of in accordance with applicable federal, state and local regulations.
- 36. All construction material will be stored outside the resource area and its buffer zone or as far back from the resource areas as possible.

Post-construction/in perpetuity:

- 40. By voluntary agreement with the applicant, only organic fertilizers are to be used on the property landward of the resource areas. Fertilizers should not contain pesticides or herbicides; should contain slow release nitrogen and should not contain more than 3% phosphorous. To mitigate chemical runoff, do not fertilize directly before a rainstorm and do not over fertilize. Apply fertilizer in late April and in September (refer to: A Homeowner's Guide to Environmentally Sound Lawn care published by the Massachusetts Department of Food and Agriculture and the booklet, Don't Trash Grass, published by the Massachusetts Department of Environmental Protection). This condition shall survive this order.
- 41. Maintenance pointing of existing stone masonry walls including the replacement of occasional, missing stones in the wall is allowed as a surviving condition to the Order of Conditions. All dislodged and removed mortar/cement will be immediately contained and removed from the work site to prevent any such material from entering the resource waters. The future razing, any rebuilding of entire wall sections or enlarging of the subject wall(s) will require the filing of a new Notice of Intent. This condition shall survive this order.
- 47. Invasive plants shall not be used nor maintained in the landscape of the project site. This applies to the existing landscape as well as to any proposed landscape. A list of invasive plants in Massachusetts can be found in the latest update of The Evaluation of Non-Native Plant Species for Invasiveness in Massachusetts (with annotated list) produced by the Massachusetts Invasive Plant Advisory Group. For most recent update, visit www.mnla.com or www.newfs.org.
- 50. If the control drawings for this project were prepared and stamped by a licensed Professional Engineer, licensed Professional Land Surveyor, licensed Professional Architect or licensed Professional Landscape Architect, the construction of this project shall be regularly inspected by said licensed professional to insure that the project complies with the control drawings. Upon completion of the work authorized by this OOC, said licensed professional shall submit a written statement to the Conservation Commission certifying that the completed work is in substantial compliance with the control drawings and setting forth any deviations that may exist between the completed work and the plans approved the Conservation Commission.
- 51. Upon completion of the work allowed under this Order of Conditions the applicant shall apply for a Certificate of Compliance (COC) (a) within 30 days after completion of the work or (b) thirty (30) days prior to the expiration date of the original or extended OOC, whichever time comes sooner. If no work was started under the OOC or if some of the work will not be performed, the applicant must still apply for a Certificate of Compliance at least 30 days prior to the expiration of the OOC. The Conservation Commission may require the submission of an "as built" drawing (signed and stamped by a licensed Professional Engineer or licensed Professional Land Surveyor) with the application for the COC. Failure to submit an application for a COC shall result in a fine issued against the applicant in accordance with Marblehead Bylaws Chapter 194, Section 11E. See Attachment "C" for "Schedule of Fines".

RFA 2 NONANTUM ROAD LAUGHLIN HOMES

Resource Area: Coastal Bank

Interests of the WPA and Bylaw: Flood Control, Storm Damage Prevention and Prevention of

Pollution

Control Drawing: Sketches and photos supplied with the NOI

Appeared: S. Patrowicz of Patrowicz Land Development Engineering

Reference: Letter from Bessom Associates, Inc. dated July 28, 2011

The walls of this house form a part of the coastal bank. The instructions for filing a Request for Determination of Applicability (RFA) indicate that work in a resource area can be reviewed under an RFA. Bessom Associates approved this work. After discussion and review, the commission decided to issue a negative RFA with the following special conditions.

- 1. A drawing showing the detail of the steps to be built on the side of the house must be submitted to the commission for approval before any work is started.
- 2. Tarps will be placed within work areas to catch construction debris and this debris shall be removed daily off site or stored in a covered trash bin. No debris, under any circumstances, is allowed to enter the resource waters.
- 3. All construction material will be stored outside the resource area and its buffer zone or as far back from the resource areas as possible.

Old/New Business:

Enforcement Orders: 3 Kenneth Road Trautman: P. Lynch and M/M Trautman appeared. Work (construction of a retaining wall) was started without a permit. A fine will be levied accordingly. The old wall collapsed in 2009 and re-construction has just been started. The applicant has a valid outstanding OOC, 40-938 but the commission decided this new retaining wall was of such a magnitude that this OOC could not be amended. The commission agreed to allow the work to continue under an Emergency Order with an NOI to be filed accordingly.

Request for COC:

40-1011 137R Front Street Moore: No action was taken on this COC request at this meeting. It will be added to the September Agenda.

Sign Documents: All documents per the agenda were signed.

Approval of Minutes: The minutes of 07/14/2011 were approved.

The meeting was adjourned at 10:50 PM.