

Staff Report

Date: April 23, 2021

To: Conservation Commission

From: Whitney McClees, Conservation Agent

Subject: **37 Balsam Street – Request for Determination of Applicability – No DEP#, Fairhaven CON 023-214**

DOCUMENTS REVIEWED

- Request for Determination of Applicability and associated documents
- 310 CMR 10.00
- Fairhaven Wetlands Bylaw (Chapter 192)
- Fairhaven Stormwater Bylaw (Chapter 194)

RESOURCE AREAS ON/NEAR SITE

- Land Subject to Coastal Storm Flowage (LSCSF) Zone VE

PERFORMANCE STANDARDS

- **LSCSF General Provisions:** 10.24(1) “If the issuing authority determines that a resource area is significant to an interest identified in [the Act]...,the issuing authority shall impose such conditions as are necessary to contribute to the protection of such interests.”

PROJECT SUMMARY

- The applicant is proposing to increase the size of the existing porch by adding an additional 64 square feet.

COMMENTS

- The proposed work does not appear to have a negative impact on storm damage prevention or flood control.

RECOMMENDATION

- I recommend closing the public hearing for 37 Balsam Street, CON 023-214, and issuing a Negative 3 and Negative 6 Determination with the following conditions:
 - CAP-3
 - The work shall comply with all local, state, and federal flood zone regulations.

Staff Report

Date: April 23, 2021

To: Conservation Commission

From: Whitney McClees, Conservation Agent

Subject: **29 James Street – Request for Determination of Applicability – No DEP#, Fairhaven CON 023-216**

DOCUMENTS REVIEWED

- Request for Determination of Applicability and associated documents
- 310 CMR 10.00
- Fairhaven Wetlands Bylaw (Chapter 192)
- Fairhaven Stormwater Bylaw (Chapter 194)

RESOURCE AREAS ON/NEAR SITE

- Land Subject to Coastal Storm Flowage (LSCSF) Zones AE and VE
- Buffer Zone

PERFORMANCE STANDARDS

- **Buffer Zone General Provisions:** 10.53(1) “For work in the Buffer Zone subject to review under 310 CMR 10.02(2)(b)3., the Issuing Authority shall impose conditions to protect the interests of the Act identified for the adjacent Resource Area. ... where prior development is extensive, may consider measures such as the restoration of natural vegetation adjacent to a Resource Area to protect the interest of [the Act]. ... The purpose of preconstruction review of work in the Buffer Zone is to ensure that adjacent Resource Areas are not adversely affected during or after completion of the work.”
- **LSCSF General Provisions:** 10.24(1) “If the issuing authority determines that a resource area is significant to an interest identified in [the Act]...,the issuing authority shall impose such conditions as are necessary to contribute to the protection of such interests.”

PROJECT SUMMARY

- The applicant is proposing to install a fence, remove trees and briars, loam and seed, and plant native vegetation.

COMMENTS

- The work was started without permits and this filing is the result of a cease and desist order.
- During the site visit on April 22, 2021, several items were discussed and a revised site plan with more detail was submitted.

- The applicants are proposing to plant both street trees and trees on the property, native shrubs and grasses/wildflowers. They are also proposing to seed with a grass alternative rather than standard lawn grass.
- The proposed work will stabilize the site and address the significant presence of bittersweet that was removed from the site.
- It appears the revised plans addresses the concerns the Commission expressed on site.

RECOMMENDATION

- I recommend closing the public hearing for 29 James Street, CON 023-216, and issuing a Negative 3 and Negative 6 Determination with the following conditions:
 - CAP-3
 - All work must comply with all local, state, and federal flood zone regulations.
 - Only screened loam shall be used to prevent further invasive species from being introduced to the site.

Staff Report

Date: April 23, 2021

To: Conservation Commission

From: Whitney McClees, Conservation Agent

Subject: **7 Mill Road – Request for Determination of Applicability – No DEP#, Fairhaven CON 023-217**

DOCUMENTS REVIEWED

- Request for Determination of Applicability and associated documents
- 310 CMR 10.00
- Fairhaven Wetlands Bylaw (Chapter 192)
- Fairhaven Stormwater Bylaw (Chapter 194)

RESOURCE AREAS ON/NEAR SITE

- Bordering Vegetated Wetland
- Buffer Zone
- Land Subject to Coastal Storm Flowage (LSCSF)
- Riverfront Area

PERFORMANCE STANDARDS

- **Bordering Vegetated Wetland:** 10.55(4)
 - (a) work in a Bordering Vegetated Wetland shall not destroy or otherwise impair any portion of the BVW
 - (b) The ConCom may permit the loss of up to 5000 square feet of BVW when said area is replaced IF:
 1. The area is equal;
 2. The ground water and surface elevation are approximately equal;
 3. The overall horizontal configuration and location are similar;
 4. There is an unrestricted hydraulic connection to the same water body or waterway;
 5. It is in the same general area of the water body;
 6. At least 75% of the surface of the replacement area shall be reestablished with indigenous wetland plant species within two growing seasons; and
 7. The replacement area is provided in a manner which is consistent with all other regs in 310 CMR 10.00.
 - (c) The ConCom may permit the loss of a portion of BVW when;
 1. Said portion has a surface area less than 500 square feet;
 2. Said portion extends in a distinct linear configuration ("finger-like") into adjacent uplands; and
 3. In the judgment of the issuing authority it is not reasonable to scale down, redesign or otherwise change the proposal.

- (d) No project may be permitted which will have any adverse effect on specified habitat sites of rare species
- (e) No work shall destroy or otherwise impair any Area of Critical Environmental Concern
- **Buffer Zone General Provisions:** 10.53(1) “For work in the Buffer Zone subject to review under 310 CMR 10.02(2)(b)3., the Issuing Authority shall impose conditions to protect the interests of the Act identified for the adjacent Resource Area. ... where prior development is extensive, may consider measures such as the restoration of natural vegetation adjacent to a Resource Area to protect the interest of [the Act]. ... The purpose of preconstruction review of work in the Buffer Zone is to ensure that adjacent Resource Areas are not adversely affected during or after completion of the work.”
- **LSCSF General Provisions:** 10.24(1) “If the issuing authority determines that a resource area is significant to an interest identified in [the Act]...,the issuing authority shall impose such conditions as are necessary to contribute to the protection of such interests.”
- **Riverfront Area:** 10.58(4)
 - (c) Practicable and Substantially Equivalent Economic Alternatives
 - (d) No Significant Adverse Impact
 - 2. Within 200 foot riverfront areas, the issuing authority may allow the alteration of up to 5000 square feet or 10% of the riverfront area within the lot, whichever is greater ..., provided that:
 - a. At a minimum, a 100’ wide area of undisturbed vegetation is provided... preserved or extended to the max. extent feasible....
 - b. Stormwater is managed ...
 - c. Proposed work does not impair the capacity of the riverfront area to provide important wildlife habitat functions. ...
 - d. ... incorporating erosion and sedimentation controls and other measures to attenuate nonpoint source pollution.

PROJECT SUMMARY

- The applicant is proposing to construct a deck, roughly 18 feet by 10 feet in size.

COMMENTS

- The proposed work is more than 50 feet from the Nasketucket River and approximately 40 feet from the edge of the wetland.
- The Commission issued an Order of Conditions in 2006 for an addition to the house and the deck was part of that plan. The deck was never installed and the applicant is now asking to construct the deck. Since the Order of Conditions has lapsed, a new permit was needed.
- The area where the deck is proposed is existing lawn.
- A deck in existing lawn is considered an exempt minor project if it is more than 50 feet from the river and wetland.
- The proposed project does not appear as if it will have a negative impact on the resource areas.

RECOMMENDATION

- I recommend closing the public hearing for 7 Mill Road, CON 023-217, and issuing a Negative 3 and Negative 6 Determination with the following conditions:
 - CAP-3
 - All work shall comply with all local, state, and federal flood zone regulations.

Staff Report

Date: April 23, 2021

To: Conservation Commission

From: Whitney McClees, Conservation Agent

Subject: **10 Littleneck Road – Request for Determination of Applicability – No DEP#, Fairhaven CON 023-219**

DOCUMENTS REVIEWED

- Request for Determination of Applicability and associated documents
- 310 CMR 10.00
- Fairhaven Wetlands Bylaw (Chapter 192)
- Fairhaven Stormwater Bylaw (Chapter 194)

RESOURCE AREAS ON/NEAR SITE

- Land Subject to Coastal Storm Flowage (LSCSF) Zone AE

PERFORMANCE STANDARDS

- **LSCSF General Provisions:** 10.24(1) “If the issuing authority determines that a resource area is significant to an interest identified in [the Act]...,the issuing authority shall impose such conditions as are necessary to contribute to the protection of such interests.”

PROJECT SUMMARY

- The applicant is proposing to add a 128 square foot addition, a 10-foot by 16-foot deck, and a 3-foot by 9-foot utility accessory (lean-to) to the existing house.

COMMENTS

- The proposed work does not appear to have a negative impact on storm damage prevention or flood control.

RECOMMENDATION

- I recommend closing the public hearing for 10 Littleneck Road, CON 023-219, and issuing a Negative 3 and Negative 6 Determination with the following conditions:
 - CAP-3
 - The work shall comply with all local, state, and federal flood zone regulations.

Staff Report

Date: April 23, 2021

To: Conservation Commission

From: Whitney McClees, Conservation Agent

Subject: **12 Huttleston Ave (Fairhaven High School) – Request for Determination of Applicability under the Bylaw only – Fairhaven CON 023-212**

DOCUMENTS REVIEWED

- Request for Determination of Applicability and associated documents
- Fairhaven Wetlands Bylaw (Chapter 192)
- Fairhaven Stormwater Bylaw (Chapter 194)
- Supplemental Information dated April 20, 2021

RESOURCE AREAS ON/NEAR SITE

- Land Subject to Coastal Storm Flowage (LSCSF) Zone AE

PERFORMANCE STANDARDS

- The Fairhaven Wetlands Bylaw does not have performance standards specific to the 100-foot buffer zone to flood zone but the Commission should consider the project in the context of flood control, storm damage prevention, and prevention of pollution.
- The Fairhaven Stormwater Bylaw requires that the project include the following:
 - Erosion and sedimentation control plan
 - Stormwater management plan, which meets Massachusetts Stormwater Standards
 - Operation and maintenance plan

PROJECT SUMMARY

- The applicant is proposing to replace an existing natural turf field with a synthetic turf athletic field and construct an associated building.

COMMENTS

- The project falls under the jurisdiction of the bylaw because a portion of it falls within the 100-foot buffer zone to the flood zone.
- Because the project is in front of the Commission, the Conservation Commission is charged with ensuring compliance with Chapter 194 (Stormwater) per §194-4 A. (3).
- The change from natural turf to synthetic turf will increase the potential for contaminants.
- In installing the drainage associated with the construction of the field, best management practices should be adhered to in order to prevent pollution or contamination of stormwater,

the storm drain system, or any waters of the US, especially since the area is being converted to synthetic turf instead of upgrading and improving the drainage for the existing natural turf field.

- The project will require a NPDES permit and an associated Stormwater Pollution Prevention Plan (SWPPP)
- The Public Works Superintendent stated he did not have concerns with regard to flooding because the project is tying into a 60-inch pipe.
- The Planning Director submitted the following comments:
 - I understand that the Conservation Commission has continued its review of the High School Synthetic Turf project until hearing from the Planning Board. I thank you and the Commission for taking the opinion of the Planning Board into consideration. There is a formal requirement for a project such as this to come before the Planning Board. This should have taken place before Town Meeting. While the Planning Board opinion in this case appears to be non-binding, it is required to be on the warrant and voted on at Town Meeting. It may not be required for the Conservation Commission to make its decision. I have placed the Chapter 65 Review of the High School Synthetic Turf project on the draft agenda for the Planning Board meeting next Tuesday. I will let you know when I have an approved agenda.
 - When I met with Dr. Baldwin and Ms. Potter and their consultants last week one of the consultants questioned where Chapter 65 says the project needs to come to the Planning Board. Chapter 65, the Powers and Duties of the Planning Board, in paragraph 3 states: "...It (the Planning Board) shall examine the plans for the exterior of any public building, monument or similar feature and for the development and treatment of the grounds about the same before the adoption thereof, and may make such recommendations thereon as it may deem needful."
 - Chapter 316, Procedural Rules for the Town of Fairhaven, in 316-6, Mandatory Referrals, states that: "All plans for parks, monuments or public works buildings must be submitted to the Planning Board for review at least two weeks prior to action by the Selectmen in inserting an article regarding them in the Town Warrant (§§ 65-3 and 65-4)." The citation of §65-3 and 4 indicates to me that 316-6 includes those items spelled out in those two sections.
 - While the project has already been voted on at Town Meeting I am trying to re-establish the procedures that I was not fully aware of and which appear to have been dropped in the last few years. To reiterate, the Planning Board opinion is mandatory for Town Meeting but is non-binding.
- The supplemental information submitted by the consultant includes the following items:
 - A letter summarizing responses to questions raised in the April 12 meeting
 - NOAA Atlas-14 rainfall data
 - Existing versus proposed hydrology plans
 - Hydrological calculations for existing and proposed conditions
 - Hydraulic pipe-sizing calculations
 - Groundwater recharge calculations
 - Fairhaven MVP Program's Summary of Findings for reference
- The cover letter notes the following:
 - The existing field has very little infiltration and the drywells installed in 1994 have exceeded their life expectancy and are no longer infiltrating to the 60-inch pipe along Huttleston Avenue.
 - Based on test pits done at the field, existing soils on site were modeled as a Type B soil.

- The drainage upgrades will utilize the existing drainage lines located within public rights-of-way.
- The drainage system for the proposed field has been designed to improve water quality and reduce peak flows and runoff volumes with no adverse impacts to regulated flood zones.
- The stormwater management system is designed in accordance with the MassDEP Stormwater Handbook.
- Precipitation data used is from the latest NOAA Atlas 14 Precipitation Frequency Atlas of the United States: Northeast States.
- Synthetic turf fields function very similarly to porous pavement in terms of stormwater management and treatment. Stormwater runoff directed to the synthetic turf field is filtered by the synthetic turf backing and the stone base layers beneath the synthetic turf prior to discharging to the perimeter manifold system. The synthetic turf system is expected to provide a decrease in pollutant loading compared to the existing natural turf field. The Fairhaven Bylaws Chapter 198 defines the water quality depth as the “first flush” or the first 1.25 inches of flow. Because the synthetic turf and stone base layers filter out any sediments the first flush will be fully treated as it seeps through the turf.
- The lowest elevation on the proposed synthetic turf field is elevation 8.5’, which is 2.5’ higher than elevation 6.0’ for FEMA flood elevation.
- The proposed synthetic turf field is a pervious surface equipped with flat drains laid in a herringbone pattern across the field. The flat drains connect to a perforated perimeter manifold drain pipe set in crushed stone which is routed to two outlet control structures. The outlet control structures will tie-into existing drainage lines located within public rights-of-way.
- The primary outlet will be to the 60-inch drain culvert on Huttleston Ave. The secondary “back-up” outlet will be to the Green Street drainage system.
- If the Commission determines that a peer review is necessary, a very specific scope of work will need to be determined because the localized flooding issues appear to be related more to aging infrastructure rather than stormwater calculations.

RECOMMENDATION

- If the Commission feels peer review is necessary, I recommend continuing to a subsequent meeting and making a motion that is very specific about what needs to be peer reviewed.
- If the Commission is satisfied with the information provided by the applicant in regards to the above comments, I recommend closing the public hearing and issuing a Negative 6 Determination for 12 Huttleston Ave, CON 023-212 with the following recommended conditions:
 - CAP-3
 - Best management practices shall be used to prevent pollution or contamination of stormwater, the storm drain system, or any waters of the US.
 - A copy of the SWPPP shall be provided to the Commission prior to the start of work.

Staff Report

Date: April 23, 2021

To: Conservation Commission

From: Whitney McClees, Conservation Agent

Subject: **33 Whisper Lane – Notice of Intent – DEP# 023-1350, Fairhaven CON 023-218**

DOCUMENTS REVIEWED

- Notice of Intent and associated documents
- 310 CMR 10.00
- Fairhaven Wetlands Bylaw (Chapter 192)
- Fairhaven Stormwater Bylaw (Chapter 194)

RESOURCE AREAS ON/NEAR SITE

- Buffer Zone
- Land Subject to Coastal Storm Flowage (LSCSF) Zones VE and AE

PERFORMANCE STANDARDS

- **Buffer Zone General Provisions:** 10.53(1) “For work in the Buffer Zone subject to review under 310 CMR 10.02(2)(b)3., the Issuing Authority shall impose conditions to protect the interests of the Act identified for the adjacent Resource Area. ... where prior development is extensive, may consider measures such as the restoration of natural vegetation adjacent to a Resource Area to protect the interest of [the Act]. ... The purpose of preconstruction review of work in the Buffer Zone is to ensure that adjacent Resource Areas are not adversely affected during or after completion of the work.”
- **LSCSF General Provisions:** 10.24(1) “If the issuing authority determines that a resource area is significant to an interest identified in [the Act]...,the issuing authority shall impose such conditions as are necessary to contribute to the protection of such interests.”

PROJECT SUMMARY

- The applicant is proposing to upgrade a failed septic system to a Title-V compliant system.

COMMENTS

- The leaching field will need to be a mounded system to account for water table constraints.
- One variance to Title V is being asked for from the Board of Health.
- A very minimal portion of the work will occur within the outer 10 feet of the 100-foot buffer zone. The majority of the work will occur in the velocity flood zone.

- The total amount of disturbance is approximately 7,150 square feet entirely within previously landscaped/grassed areas with no trees or vegetation proposed to be removed.
- Erosion and sedimentation control barriers have been proposed.
- It appears the project will not have an adverse effect on the flood zone or nearby wetland.

RECOMMENDATION

- I recommend closing the public hearing and issuing an Order of Conditions for 33 Whisper Lane, SE 023-1350, CON 023-218, plans dated March 24, 2021, with the following recommended conditions:

Approve plan dated March 24, 2021

A. General Conditions

1. ACC-1
2. With respect to all conditions except_____, the Conservation Commission designates the Conservation Agent as its agent with full powers to act on its behalf in administering and enforcing this Order.
3. REC-1
4. REC-2
5. ADD-1
6. ADD-2
7. ADD-4b
8. ADD-4c
9. ADD-5
10. STO-4
11. STO-5
12. LOW-2
13. WET-1

B. Prior to Construction

14. CAP-2
15. CAP-3
16. REC-3
17. DER-1
18. PCC-3
19. EMC-1
20. PCC-1
21. SIL-5
22. SIL-9
23. SIL-10

C. During Construction

24. STO-1
25. STO-3
26. MAC-3
27. MAC-7
28. All equipment shall be inspected regularly for leaks. Any leaking hydraulic lines, cylinders, or any other components shall be fixed immediately.
29. DEB-1
30. DEB-5

- 31. BLD-3
- 32. BLD-4
- 33. EMC-2
- 34. SIL-3
- 35. SIL-4
- 36. SIL-8
- 37. LOW-3
- 38. WAT-3
- D. After Construction/In Perpetuity
 - 39. REV-1
 - 40. COC-1
 - 41. COC-2

Perpetual Conditions

The below conditions do not expire upon completion of the project.

- 42. CHM-3
- 43. DER-4

Staff Report

Date: April 23, 2021

To: Conservation Commission

From: Whitney McClees, Conservation Agent

Subject: **10 Nelson Ave – Notice of Intent – DEP# 023-1344, Fairhaven CON 023-207**

DOCUMENTS REVIEWED

- Notice of Intent and associated documents
- Enforcement Order issued June 15, 2020
- 310 CMR 10.00
- Fairhaven Wetlands Bylaw (Chapter 192)
- Comments from MassDEP dated March 4, 2021
- Comments from Division of Marine Fisheries dated March 3, 2021
- Revised site plan dated April 5, 2021
- Revised site plan dated April 16, 2021
- Response memo dated April 19, 2021

RESOURCE AREAS ON/NEAR SITE

- Coastal Bank
- Coastal Beach
- Rocky Intertidal Shore
- Buffer Zone
- Land Subject to Coastal Storm Flowage

PERFORMANCE STANDARDS

- **Coastal Bank: 10.30**

(4) Any project on a coastal bank or within 100 feet landward of the top of a coastal bank...shall not have an adverse effect due to wave action on the movement of sediment from the coastal bank to coastal beaches or land subject to tidal action.

(6) Any project on...a coastal bank [that is determined to be significant to storm damage prevention or flood control because it is a vertical buffer to storm waters] or within 100 feet landward of the top of such coastal bank shall have no adverse effects on the stability of the coastal bank.
- **Coastal Beach: 10.27**

(3) Any project on a coastal beach...shall not have an adverse effect by increasing erosion, decreasing the volume or changing the form of any such coastal beach or an adjacent or downdrift coastal beach.

(4) Any groin, jetty, solid pier, or other such solid fill structure which will interfere with littoral drive, in addition to complying with 310 CMR 10.27(3), shall be constructed as follows:

(a) It shall be the minimum length and height demonstrated to be necessary to maintain beach form and volume. In evaluating necessity, physical oceanographic and/or coastal geologic information shall be considered.

(b) Immediately after construction any groin shall be filled to entrapment capacity in height and length with sediment of grain size compatible with that of the adjacent beach.

(c) Jetties trapping littoral drift materials shall contain a sand by-pass system to transfer sediments to the downdrift side of the inlet or shall be periodically redredged to provide beach nourishment to ensure that downdrift or adjacent beaches are not starved of sediments.

(5) Beach nourishment with clean sediment of a grain size compatible with that on the existing beach may be permitted.

- **Rocky Intertidal Shore:** 10.31

(3) ...Significant to Storm Damage Prevention, Flood Control, or Protection of Wildlife Habitat, any proposed project shall be designed and constructed...so as to minimize adverse effects on the form and volume of exposed intertidal bedrock and boulders.

(4) ...Significant to the Protection of Marine Fisheries or Wildlife Habitat, any proposed project [that is water-dependent shall be] designed and constructed...so as to minimize adverse effects...on water circulation and water quality [and any proposed project that is not water-dependent shall have no adverse effects on water circulation and water quality.]

- **Buffer Zone General Provisions:** 10.53(1) "For work in the Buffer Zone subject to review under 310 CMR 10.02(2)(b)3., the Issuing Authority shall impose conditions to protect the interests of the Act identified for the adjacent Resource Area. ... where prior development is extensive, may consider measures such as the restoration of natural vegetation adjacent to a Resource Area to protect the interest of [the Act]. ... The purpose of preconstruction review of work in the Buffer Zone is to ensure that adjacent Resource Areas are not adversely affected during or after completion of the work."

- **LSCSF General Provisions:** 10.24(1) "If the issuing authority determines that a resource area is significant to an interest identified in [the Act]...,the issuing authority shall impose such conditions as are necessary to contribute to the protection of such interests."

PROJECT SUMMARY

- The applicant is seeking after-the-fact approval for reconstruction of the northern groin on the property and approval for reconstruction of the southern groin and adding a concrete cap on top of the concrete revetment. The plans also show stabilizing disturbed lawn area and the installation of a fence on top of the existing revetment.

COMMENTS

- This project was initiated prior to permits being requested and an Enforcement Order was issued because no permits were granted by the Commission and the property owner had large equipment on the Coastal Beach with no protections for the resource area.
- MassDEP noted that work is proposed in a Coastal Beach resource area and that the performance standards in 310 CMR 10.27 Coastal Beaches should be addressed.

- Filing with DEP for a 401 Water Quality permit may be necessary. The addition of the fence posts on the revetment may need Chapter 91 licensing as they are proposed on an already licensed structure.
- The applicant should submit information detailing how the project complies with each of the performance standards outlined in 310 CMR 10.27.
- The Division of Marine Fisheries provided a number of comments, which should be addressed before any decision is made on this submittal.
 - No narrative was submitted with the NOI. *Questions for Applicant:* How will the two groins be repaired/reconstructed? Will there be concrete forms in the water to contain the concrete? Will the work be conducted behind cofferdams in the dry? Will a barge be used to transport materials?
 - No side profile of the two groins was included. *Questions for Applicant:* Will the elevation of the groins be higher than the original groins? Is there any seaward encroachment of either groin?
 - Impacts to adjacent eelgrass beds is a concern for the project.
- Plans do not show the original licensed footprint of the groins, only what is proposed. The plan should show both what was originally licensed and permitted and what is being requested.
- Plans need to include side profiles of the groins to be reconstructed, again superimposed over what was originally licensed and permitted.
- During the site visit, the submission of a planting plan for the top of the seawall structure was discussed to help increase flood control and storm damage prevention.
- The southern groin is significantly deteriorated and work would constitute rebuilding the structure rather than repair. As such, it should be treated as new construction, and therefore comply with 310 CMR 10.27(4):
 - Any groin, jetty, solid pier, or any other such solid fill structure which will interfere with littoral drift...shall be constructed as follows:
 - a) It shall be the minimum length and height demonstrated to be necessary to maintain beach form and volume. In evaluating necessity, physical oceanographic and/or coastal geologic information shall be considered.
 - b) Immediately after construction any groin shall be filled to entrapment capacity in height and length with sediment of grain size compatible with that of the adjacent beach.
 - c) Jetties trapping littoral drift materials shall contain a sand by-pass system to transfer sediments to the downdrift side of the inlet or shall be periodically redredged to provide beach nourishment to ensure that downdrift or adjacent beaches are not starved of sediments.
- Hardened coastal engineering structures such as groins can impede downdrift sediment transfer, directly impacting the coastal beach from serving the purposes of storm damage prevention and flood control by dissipating wave energy, by reducing the height of storm waves, and by providing sediment to supply other coastal features, including coastal dunes, land under the ocean, and other coastal beaches (310 CMR 10.27(1)).
- The applicant must demonstrate how the proposed work does not have an adverse effect by increasing erosion, decreasing the volume or changing the form of any such coastal beach or an adjacent or downdrift coastal beach (310 CMR 10.27(3)).
- Reconstruction of the northern groin had already begun and was substantially completed by the time the Commission issued a cease and desist. Had the project come before the Commission before work was initiated, my comments would be the same as for the southern groin. If the

northern groin was substantially deteriorated similar to the southern groin, compliance with the above would need to be demonstrated.

- The applicant is asking for after the fact approval for the work that has already been completed on the northern groin. The plans need to clearly reflect this.
- Additionally, the Commission should determine the impacts of the northern groin remaining as is versus removing portions of it to minimize the length and height of the structure.
 - Having a comparison of what was originally licensed and constructed to what is proposed to be permitted would be helpful in determining this.
- A portion of the northern groin falls within rocky intertidal shore and must comply with those performance standards as well. The applicant should submit information demonstrating compliance with the performance standards outlined in 310 CMR 10.31.
- The applicant also needs to submit detailed information on what was done without a permit so the Commission can determine the exact scope of work that is being requested to be approved after-the-fact and whether or not it complies with the Wetlands Protection Act and Fairhaven Wetlands Bylaw. A narrative addressing what was done, what is proposed, and compliance with all applicable performance standards would be helpful.
- An abutter submitted a correction based on the discussion at a previous meeting: the two groins were systematically demolished with a sledge hammer over quite a few years, eliminating cement, putting the northern groin in a similar state of deterioration to the southern groin. Additionally, the northern groin appears to have been installed longer than what was previously there.
- The planting bed includes one non-native species (daylily) and does not include any shrubs, such as Northern Bayberry, Bearberry, or Beach Heather.
- The April 19 memo from the engineer addressed most of the comments above and those from the last meeting related to whether or not work continued after the cease and desist was issued.
- Because this is essentially an after-the-fact permit for the work done on the northern groin, the Commission will need to determine if they feel the significant reconstruction of the northern groin meets the provisions of 310 CMR 10.27(4) with regard to:
 - “[A groin] shall be the minimum length and height demonstrated to be necessary to maintain beach form and volume. In evaluating necessity, physical oceanographic and/or coastal geologic information shall be considered.

RECOMMENDATION

- Once the Commission determines whether or not the reconstruction of the northern groin meets the performance standards of Coastal Beach, I can provide a draft decision recommendation.