

ORDINANCE NO. 2026-12

**AN ORDINANCE OF THE TOWNSHIP OF
BARNEGAT, COUNTY OF OCEAN AND STATE OF
NEW JERSEY REPEALING AND REPLACING
CHAPTER 55-126.3 OF THE TOWNSHIP CODE
ENTITLED “BULKHEADING”**

NOW THEREFORE BE IT ORDAINED by the Mayor and Township Committee of the Township of Barnegat, County of Ocean, and State of New Jersey, that Chapter 55-126.3 of the Township Code entitled “Bulkheading” is hereby replaced in its entirety and shall read as follows:

SECTION 1.

§55-126.3 BULKHEADING

A. Definitions. As used in this article, the following terms shall have the meanings indicated:

LAGOON

Any natural, man-made, or man-improved body of water, providing access for watercraft to any property.

MARINE BULKHEAD

Any bulkhead or retaining wall which retains earth (or other materials) on one side and is exposed to water in a lagoon or other body of water along all or part of any of its boundary lines.

TOWNSHIP BULKHEAD ENGINEER OR MUNICIPAL ENGINEER.

A New-Jersey-licensed professional engineer appointed by the Township Committee to review and approve or deny applications submitted under this article.

TOWNSHIP BULKHEAD INSPECTOR

An inspector appointed by the Township Committee to inspect the condition and construction of bulkheads under this article and to enforce the provisions of this article or, in the alternative, the Township Engineer, Township Building Inspector or Code Enforcement Official.

WATERFRONT LOT

Any lot which has a lagoon or other body of water along or part of any of its boundary lines.

B. Permits required.

- (1) No marine bulkhead shall be altered, repaired, constructed, reconstructed, or installed, and no fill shall be placed on any waterfront lot, unless and until a bulkhead permit has been obtained from the Township of Barnegat.
- (2) No marine bulkhead shall be altered, repaired, constructed, reconstructed, or installed, including repairs of less than 50%, and no fill shall be placed on any waterfront lot, unless and until a zoning permit has been obtained from the Township of Barnegat.
- (3) No marine bulkhead shall be altered, repaired, constructed, reconstructed, or installed, and no fill shall be placed on any waterfront lot, unless and until a permit has been obtained from the New Jersey Department of Environmental Protection, as applicable and from any other governmental agency with jurisdiction.

C. Applications for permits.

- (1) Applications for a bulkhead permit shall be submitted to the Township Construction Office and shall be on the form provided by the Township.
- (2) All proposed new, altered, replacement, or reconstructed marine bulkheads in the Township of Barnegat shall be designed by a professional engineer licensed to practice in the State of New Jersey and/or homeowner.
- (3) Applications shall be accompanied by signed and sealed plans and specifications, showing the size, shape, configuration, materials, dimensions, and location of the bulkhead(s), including existing and proposed bulkheads.
- (4) All plans shall be based upon an accurate, current survey of the premises prepared by a New-Jersey-licensed land surveyor.
- (5) Applications shall be accompanied by fees established by the Township Committee of the Township of Barnegat.

- (6) Applications shall be accompanied by copies of applicable permits from the New Jersey Department of Environmental Protection regarding the proposed bulkhead, and/or other documentation verifying that the proposed bulkhead has been approved by the department or is in conformance with the department's rules and regulations governing bulkheads.

D. Permit approvals.

- (1) The Township Bulkhead Engineer shall review the application and plans and grant or deny the application within 10 business days upon receipt of a complete application.
- (2) The review by the Township Bulkhead Engineer shall be in conformity with the chapter, consistent with the minimum standards and specifications contained herein.

E. Conformance to standards.

- (1) The design engineer shall certify on the plan the type of water (i.e., freshwater or saltwater) to which the exposed side of the marine bulkhead will be exposed.
- (2) All bulkhead designs shall take into account the following minimum factors:
 - (a) Soil type(s) and conditions in front of wall;
 - (b) Soil type(s) and conditions behind the wall;
 - (c) Water depth in front of the wall (to mud line and to firm bottom, with allowance for future dredging, if needed);
 - (d) Water depth behind the wall;
 - (e) Tide fluctuations;
 - (f) Sheet pile and face pile (if used) embedment depth;
 - (g) Sheet pile and face pile (if used) exposed length above bottom of lagoon and above water;
 - (h) Sheet pile anchorage conditions behind wall;
 - (i) Currents, scour and wave action potential;
 - (j) Use of wall and land behind the wall (boat anchorage davit attachments, special loadings, driveways, buildings, surcharges, etc.);

- (k) Drainage behind the wall;
 - (l) Wall backfill materials;
 - (m) Slope behind the wall;
 - (n) Type and strength of materials used in wall; and
 - (o) If deadmen drag and anchor piles are eliminated, an alternative design must be submitted.
- (3) All marine bulkheads shall be generally of the deep-water, anchored (or “navy”) type unless otherwise approved by the Township Engineer, which typically consists of the following elements:
- (a) Face piles (tapered, round piles seaward of all other bulkhead components);
 - (b) Sheet piles (sheathing);
 - (c) Walers (horizontal beams between face piles and sheet piles):
 - (i) One at the top of the wall;
 - (ii) One at low tide (if needed for design conditions); and
 - (iii) Intermediate (if needed for design conditions).
 - (d) Steel tie rods with ogee washers and nuts, through the face piles and sheet piles and tied into deadmen, drag, and/or anchor piling;
 - (e) Key logs, deadmen, drag, and/or anchor piles for tie rod anchorage; and
 - (f) Wall caps.
- (4) If the bulkhead will be constructed of interlocking vinyl sheet piles and will utilize a design in which face piles will not be used, the design shall be subject to the approval by the Township Bulkhead

Engineer. Such bulkheads, however, shall include all other bulkhead elements listed in this article for marine bulkheads.

- (5) All marine bulkheads shall be installed by contractors who are equipped, experienced, qualified, and competent to install such structures and shall be constructed in a good workmanlike manner.
- (6) All development on waterfront properties abutting lagoons shall provide for marine bulkheading along the entire lagoon frontage. Only marine bulkheads are permitted along such lagoon frontages; in no case shall bank slopes, riprap, revetments, sod, vegetated or other types of bank stabilization be permitted.
- (7) Only clean fill shall be used for fill behind or on the landward side of the bulkhead and no construction debris.
- (8) All bulkheads shall be constructed to tie into existing bulkheads on either or both sides, if any exist, or shall be constructed with returns (at 90° to the main bulkhead) into the protected property, to prevent flanking of the main bulkhead. If the requirements of the New Jersey Department of Environmental Protection do not permit either of these alternatives, then the department's determination shall govern.
- (9) Wood that has been pressure-treated with chromated copper arsenate (CCA) is no longer permitted for use as sheet piles in any marine bulkhead constructed or reconstructed in Barnegat Township if commercial production of such wood has been discontinued.
 - (a) Thereafter, CCA shall only be permitted for:
 - (i) Use as walers, face piles, deadmen, anchor piles; or
 - (ii) For repair of sheet piles in an existing marine bulkhead which was originally constructed of such materials.
 - (b) In the event the repair of an existing marine bulkhead will constitute more than 50% of the surface area of the existing sheet piles exposed between the upper and the lowest waler in the bulkhead, then CCA-treated wood shall not be permitted for use therein.

F. Bulkhead penetration.

- (1) No stormwater piping connected to a roadway drainage system may penetrate a bulkhead unless there is an authorized easement by the Township of Barnegat or County of Ocean.
- (2) Commencement of construction; notification; inspections.
 - (a) No construction shall commence before and unless a permit for construction has been obtained in accordance with the requirements of this article.
 - (b) The permittee shall notify the Township Bulkhead Inspector at least two business days before construction is to commence or recommence on any bulkhead for which a permit has been issued. In the event of extreme weather conditions, the permittee may backfill the work completed to date; however, the permittee shall first notify the Township Bulkhead Inspector and expose the completed work, to the satisfaction of the Township Bulkhead Inspector, prior to closeout of any permit.
 - (c) Any work performed without notification to the Township Bulkhead Inspector is subject to removal by and at the cost and expense of the permittee.
 - (d) The Township Bulkhead Inspector shall inspect the materials delivered to the job site and verify that they are in conformance with the permit issued for that work, in size, quantity, and quality. If such materials do not conform to permit requirements, they shall be marked as "rejected" and removed from the job site by the permittee and shall not be incorporated into the bulkhead construction.
 - (e) The Township Bulkhead Inspector shall make periodic visits to the job site to verify that the work is proceeding in accordance with permit requirements and to document construction of deadmen, anchor piles and tie rods is in conformance with design plans. Final backfill of anchor systems shall not commence until the Township Bulkhead Inspector has inspected and approved the anchor system installation.
 - (f) The permittee and the contractor shall provide safe and adequate access to the site of the work for the Township Bulkhead Inspector for purposes of making the required inspections.

G. Final inspection.

- (1) The permittee shall notify the Township Inspector of the completion of the work done under the permit issued.
- (2) The Township Inspector shall, within three business days of the notification, make an inspection of the completed work to determine if it conforms to the approved plans issued with the permit.
- (3) If it is in conformance, the permittee will be so advised, and the permit file shall be marked as "completed." If it is not in conformance, the permittee will be so advised, and will be provided with a list of specific deficiencies requiring correction. The permittee shall then advise the Township Bulkhead Inspector when corrections have been made, and a reinspection will be made.

H. Utilities.

- (1) It is the responsibility of the permittee to protect all existing utilities at the bulkhead site.
- (2) The permittee shall obtain current utility mark-out from all applicable utilities prior to commencement of construction.

I. Minimum standards.

- (1) Materials.
 - (a) All materials incorporated into bulkheads constructed within the Township shall conform to the requirements contained herein.
 - (b) Wood that has been treated with chromated copper arsenate (CCA) shall not be used as sheet piles in any bulkhead regulated by these requirements.
 - (c) Only vinyl shall be used as sheet piles in any bulkhead regulated by these requirements.
 - (d) Wood.
 - (i) Material. All wood used in marine bulkhead construction shall be treated Southern pine (or a wood of equivalent strength and durability approved by the Township Engineer), and graded by a recognized lumber grading agency, meeting the following minimum standards:

- [1] Round piles, ASTM D 25, minimum ten-inch butt, eight-inch tip diameter, natural taper spaced a maximum of six feet on center and driven a minimum of eight feet into solid bottom, or greater if determined by the design engineer.
- [2] Square or sawn piling, not permitted.
- [3] Waler. Marine framing grade number two, minimum four inches by six inches with a maximum spacing of four feet between top and bottom walers, and with intermediate walers if required by the design engineer.
- [4] Sheet piles. Vinyl, see §55-126.3.I.(1)(e). Length shall be determined by the depth of the water six feet from the bulkhead and shall be driven a minimum of five feet into solid bottom or greater if determined by the design engineer.
- [5] Wallcaps. ACQ, PVC, Composite.
- [6] Anchor piles. ASTM D 25 minimum eight-inch tip diameter, natural taper, and length and depth as determined by the design engineer.
- [7] Key logs. Minimum six-inch by eight-inch or eight-inch diameter and 16 feet long, continuous for the entire length of the bulkhead with four-foot overlaps.

(ii) Preservative. All wood used in bulkhead construction shall be pressure-treated in accordance with the following specifications:

- [1] Round piles (including deadmen, anchor, or drag piles). Saltwater 2.5 CCA, AWPA C3 and C18.
- [2] Walers. Saltwater 2.5 CCA, AWPA C2 and C.
- [3] Sheet piles. Saltwater 2.5 CCA, AWPA C2 and 18.

[4] Wallcaps/topcaps. ACQ.

(iii) Installation. All wood materials shall be installed in strict accordance with the specifications, recommendations, and installation instructions of the Southern Pine Council (SPC) as contained in the current edition of the SPC Marine Construction Manual. The design engineer shall certify that the particular type, length, thickness, and shape of bulkhead is adequate and appropriate for the loads and conditions anticipated at the site.

(e) Vinyl.

(i) Vinyl used in bulkheading shall be extruded from ridge, impact modified, weatherable, UV resistant, polyvinyl chloride (PVC). Such PVC shall meet the minimum requirements of ASTM D-4216 for cell classification, current edition, and shall be guaranteed in writing by the manufacturer to resist rot, decay, marine borer, termite, and ultraviolet deterioration on a prorated basis for a minimum of 50 years from the date of installation.

(ii) Vinyl bulkheads shall consist of the following minimum components: interlocking PVC sheet piles; one or more horizontal beams as wafers; and an anchoring system consisting of tie rods and anchors.

(iii) Components of vinyl bulkhead systems which will consist of wood or metal parts shall conform to the standards of this article for wood or metal components.

(iv) The design engineer shall certify that the particular type, length, thickness and sectional shape of vinyl sheet pile used is adequate and appropriate for the loads and conditions anticipated at the site.

(v) All vinyl materials shall be installed in strict accordance with the specifications, recommendations, and installation instructions of the vinyl sheet pile manufacturer.

(f) Steel.

(i) Galvanized steel.

- [1] All tie rods shall be ASTM A-36 steel one-inch minimum diameter, hot dipped galvanized steel, per ASTM A-153 with two ounces of zinc per square foot, with matching hexagonal nuts (ASTM A-307) and cast-iron ogee washer (ASTM A-47).
- [2] All bolts shall be 3/4-inch minimum diameter, hot-forged bolts with hexagonal heads (ASTM A-307), with matching hexagonal nuts and washers.
- [3] Stainless steel. If stainless steel is used for tie rods or hardware, it shall be 300 series stainless steel, with matching hexagonal nuts and washers.
- [4] All hardware (including plates and turnbuckles) shall be of the same materials and protective coatings as the tie rods.

J. Maintenance and duty to repair.

- (1) All private bulkheads within the Township of Barnegat shall be maintained so that they shall not pose a danger to the health, safety and welfare of the citizens of the Township.
- (2) All bulkheads shall be kept in a state of repair which will prevent erosion or damage to abutting, adjacent, or adjoining properties or the lagoon on which it fronts.
- (3) Whenever a bulkhead has deteriorated to such a degree that it poses a danger to the property, or to abutting, adjacent or adjoining properties, or to the lagoon on which it fronts, the owner shall be required to make the necessary repairs to correct such conditions.
- (4) The indications that a bulkhead has deteriorated shall include (but not be limited to):
 - (a) Members which are bowed, bent, leaning, leaking;
 - (b) Holes in the sheet piles;
 - (c) Settlement or sinkholes in the ground landward of the bulkhead;
 - (d) Bulkhead backfill deposited in the lagoon seaward of the bulkhead; and

- (e) Other indications that it is structurally unsound or unsafe.
- (5) When notified by the Township Engineer, Township Bulkhead Inspector or Code Enforcement Official of a deteriorated bulkhead, a property owner shall submit a plan of corrective action to the Township no later than 60 days from the receipt of the notice.
- (6) Upon approval of the plan of corrective action by the Township Bulkhead Engineer, the property owner shall complete all necessary repairs within 120 days.
- (7) If permits are required from state or federal government agencies, such permits shall be immediately applied for prior to Township approval. In the event the property owner fails to submit a corrective action plan or fails to implement such plan following approval by the Township, he shall be liable for the penalties and violations contained herein.

K. Violations, penalties and fees.

- (1) Anyone violating any of the provisions of this article shall be subject to a fine not to exceed the sum of \$1,250 and/or imprisonment not to exceed 90 days for each violation. Each day of a violation shall be a separate offense and shall be punishable as a separate offense.
- (2) A fee of \$450 shall be paid by the applicant to the Township of Barnegat to cover the administrative costs for processing and reviewing the bulkhead permit and inspecting the work (exclusive of any required zoning permit fees).

SECTION 2. All ordinances or parts of ordinances inconsistent herewith are hereby repealed.

SECTION 3. If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held to be invalid or unconstitutional by a court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision, and such holding shall not affect the validity of the remaining portions hereof.

SECTION 4. This ordinance shall take effect after second reading and publication as required by law.

NOTICE

NOTICE IS HEREBY GIVEN that the foregoing ordinance was introduced and passed by the Township Committee on first reading at a meeting of the Township Committee of the Township of Barnegat on the **5th day of May, 2026**, and will be considered for second and final passage at a meeting of the Township Committee to be held on the **4th day of June, 2026, at 10:00 AM** at the Municipal Building located at 900 West Bay Avenue, Barnegat, New Jersey, at which time and place any persons desiring to be heard upon the same will be given the opportunity to be so heard.

Donna M. Manno, RMC
Municipal Clerk