

COMMONWEALTH OF MASSACHUSETTS

LAND COURT
FILED

DUKES, ss

LAND COURT DEPARTMENT
NO.

2022 JUN -3 PM 12:54

MARTHA’S VINEYARD REGIONAL
SCHOOL DISTRICT,

Plaintiff

v.

TOWN OF OAK BLUFFS PLANNING
BOARD, and EWELL HOPKINS, ERIK
ALBERT, BILL CLEARY, MARK
CROSSLAND and JOJO CLEARY in their
capacity as members of the Town of Oak
Bluffs Planning Boar and not individually,
and the TOWN OF OAK BLUFFS,

Defendants

COMPLAINT PURSUANT G.L. c. 40A,
§ 17 AND G.L. c. 240, § 14A

INTRODUCTION

This is an action, pursuant to G.L. c. 40A, § 17 and G.L. c. 240, § 14A, appealing the May 16, 2022 decision (the “Decision”) of the Town of Oak Bluffs Planning Board (the “Board”) to deny a special permit to the Martha’s Vineyard Regional School District (the “MVRSD”) concerning the proposed construction of a 400 meter athletic track and synthetic turf field (the “Project”) at the Martha’s Vineyard Regional High School (the “High School”) located at 100 Edgartown Vineyard Haven Road, Oak Bluffs, Massachusetts (the “Site”), a parcel within the Town of Oak Bluffs’ (the “Town’s”) R-3 and Water Resource Protection Overlay Zoning Districts. After an extensive and exhaustive design process and comprehensive environmental assessment, and after approval of the Project by the Martha’s Vineyard Commission, the MVRSD sought a Special Permit under Section 8.2 of the Town’s

Water Resource Protection Overlay District Zoning Bylaw. Section 8.2, in sum, requires only that the Board find that “groundwater quality resulting from on-site waste disposal and other on-site operations will not fall below federal or state standards.” The Board nevertheless denied the Special Permit (a motion to grant approval failed: two votes for, two against, and one abstention). Although there was no majority in favor of denial, the Board’s written Decision mysteriously recites only grounds for denial and contains no statements whatsoever on behalf of the two members who voted in favor of the Project. The Decision principally cites concerns regarding Per- and Polyfluoroalkyl Substances (“PFAS”) which the Board, or at least two of its members, stylizes as an “open space” issue.

Although the Project is unquestionably an educational use which enjoys the protections of G.L. c. 40A, § 3, the so-called “Dover Amendment,” and which is an allowed by-right use under the Town’s Zoning Bylaws, the Board denied the Project, citing unfounded and unsubstantiated concerns well outside the scope of its authority. The Decision is wholly contrary to the intent and purposes of the Dover Amendment which, subject to certain limited exceptions not applicable here, exempts such projects from prohibitive local zoning bylaws and processes. The Board’s actions and Decision patently run afoul of the Dover Amendment.

As set forth herein, the Decision is arbitrary, capricious, exceeds the Board’s authority and is an error of law. Additionally, the MVRSD states that the zoning provisions relied upon by the Board are inapplicable and/or unreasonable as applied to the Project per G.L. c. 40A, § 3. Accordingly, the MVRSD also seeks a declaration that: (1) the Project is a use protected by the Dover Amendment; (2) the zoning provisions relied upon by the Board to deny the Project are inapplicable and/or are unreasonable regulations as applied to the Project; (3) the

Project does not require any substantive zoning relief; and (4) the Project may proceed as-of-right.

JURISDICTION AND PARTIES

1. The jurisdiction of this Court is founded upon the general equitable powers of G.L. c. 185, § 1, G.L. c. 240, § 14A, and G.L. c. 40A, § 17.

2. Plaintiff Martha's Vineyard Regional School District is a duly constituted regional school district, with an address of 4 Pine Street, Vineyard Haven, Massachusetts.

3. Defendants Ewell Hopkins, Erik Albert, Bill Cleary, Mark Crossland and JoJo Lambert are or were members of the Town of Oak Bluffs Planning Board during all times relevant hereto and are named only in their capacity as members of the Town of Oak Bluffs Planning Board.

4. Defendant the Town of Oak Bluffs is a municipal corporation with an address of 56 School St, Oak Bluffs, Massachusetts.

FACTS

5. The MVRSD currently owns and operates the existing Martha's Vineyard Regional High School.

6. The High School presently has an existing 400 meter athletic track and field facility that is beyond its useful life and which has been identified as having compromised safety by school officials.

7. The Project entails replacing the existing track and field with a new resilient track running surface and a state of the art synthetic turf infield.

8. Representatives of the MVRSD investigated available track surfacing products and, after careful review for performance suitability and, among other things, environmental

impacts, the MVRSD elected to pursue the current proposal which is a resilient track surfacing systems manufactured by Rekortan, entitled Rekortan G13.

9. Rekortan G13 is a World Athletics certified, high grade, environmentally friendly product made from 88% recycled or renewable products. The synthetic turf infield surface is comprised of a woven synthetic turf fiber and engineered wood infill. The selected products are all able to be “Cradle to Cradle Certified®” and have undergone significant review, including third-party independent testing for toxicology and groundwater protection, with the Martha’s Vineyard Commission (“MVC”). This Project was already reviewed by the Oak Bluffs Planning Board and received a Site Plan Review Approval on October 12, 2021.

10. On or about February 25, 202, the Board, in conjunction with granting Site Plan Approval for the Project, referred the Project to the MVC for review as a Development of Regional Impact.

11. In that proceeding, representatives of the MVRSD submitted extensive and detailed materials including, but not limited to: Site Plans, describing existing and proposed conditions, grading and drainage, layout and materials, construction details, landscaping plans, overall campus plan, proposed groundwater monitoring wells; the Martha’s Vineyard Regional High School Athletic Field Master Plan, illumination plans, cut and full design documents, sanitary sewer plans and construction details, pedestrian and vehicular improvements, and traffic crossing signal plans.

12. Representatives of the MVRSD also submitted extensive technical reports including, but not limited to, Estimating the Required Global Warning Offsets to Achieve a Carbon Neutral Synthetic Field Turf System Installation, Technical Assessment of the Carbon Sequestration Potential of Managed Turfgrass, Surface Temperature of Synthetic Turf

Presentation, Synthetic Turf Heat Evaluation, Material Safety Data Sheets, Materials Test Report, Sport Turf Alternatives Assessment, Materials Test Reports, Investigation of Reported Cancer among Soccer Players, Surface Flammability, Laboratory Test of an Artificial Turf Product, a report entitled Assessing the Ability of the Cradle-to-Cradle Certified Products Program to Reliably Determine the Environmental Performance of Products, Typical Properties and Specifications, Laboratory Tests of Infill Materials, Materials Test Report of Grass Field, Per-and Poly-fluoroalkyl Substances(PFAS) in Artificial Turf Carpet, Typical Properties and Specs, Environmental Performance Review of the Proposed Athletic Field Improvements, Standard Operating Procedure, Phase One Preliminary Analytical Report, Determination of Selected Per-fluorinated Alkyl Substances, Phase Two Preliminary Analytical Report, Laboratory Reports on Greenfield Turf, and Synthetic Turf Laboratory Testing and Analysis Summary Report.

13. After public hearings on January 14, 2021, February 4, 2021, February 18, 2021, March 4, 2021, March 18, 2021, April 1, 2021 and April 15, 2021, the MVC issued a written decision, dated August 25, 2021, approving the Project. The MVC's approval includes extensive conditions to protect "Human and Environmental Health," including numerous and detailed groundwater protection requirements.

14. Following the approval of the MVC, representatives of the MVRSD met with the Town's Building Commissioner who, in a written determination on October 21, 2021, found that the Project required a Special Permit under Section 8.2.2 of the Town's Zoning Bylaw "[s]ince the proposed material for this track has greater quantities than that associated with normal household use, and these materials appear to meet the definition of toxic or hazardous materials...under [S]ection 8.2 of the Zoning By-laws."

15. On or about December 21, 2021, representatives of the MVRSD then filed an application for a Special Permit with the Planning Board although the representatives of the MVRSD noted in their transmittal letter and narrative that “it is the District’s position that a special permit under Section 8.2 is not required for the District’s installation...because the Town cannot lawfully regulate, restrict, or prohibit the school district’s educational use of its property...with limited exceptions not applicable. Notwithstanding, in the interest of moving forward and working with the Town in an amicable and productive manner, the District is submitting the enclosed application...”

16. The application filed on behalf of the MVRSD included, among other things, the Martha’s Vineyard Commission’s approval, together with Rekortan G13 product information, manufacturer safety data sheets, and the synthetic turf laboratory testing and analysis summary report.

17. The Site is within the Town’s R-3 and Water Resource Protection Overlay Zoning Districts.

18. The Project is an allowed as-of-right use but, as noted above, was referred to the Planning Board for a Special Permit by the Building Commissioner under Section 8.2 of the Town’s Zoning Bylaws.

19. Section 8.2.7(3) states, in its entirety:

Special Permits shall be granted only where the Planning Board determines, in conjunction with the other town agencies as specified herein, that

a. groundwater quality resulting from on-site waste disposal and other on-site operations will not fall below federal or state standards, if existing groundwater quality is already below those standards on-site disposal will result in no further deterioration.

b. the intent of this by-law, as well as the criteria, has been satisfied, after consideration of the simplicity, reliability, and the feasibility of the control measures proposed and the degree of the threat to water quality which would result if the control measures failed.

c. The Planning Board shall explain any departures from the recommendations of the other town agencies in its decision. Section 4533 of Town's Zoning Bylaws requires a minimum lot size of 60,000 square feet per dwelling unit within the Groundwater Protection District.

20. Assuming *arguendo* Section 8.2.7(3) is applicable to this Project, which it is not, the Project manifestly satisfies these standards.

21. Considering the extensive and exhaustive design and review process both by the MVRSD and the Martha's Vineyard Commission, the Project will not cause "groundwater quality, resulting from on-site waste disposal and other on-site operations," to "fall below federal or state standards."

22. Following a duly noticed public hearing, the Board, on May 16, 2022, issued its written Decision and filed it with the Town Clerk. A true and accurate copy of the Board's May 16, 2022 Decision is attached hereto as **Exhibit A**.

23. The Board denied the Special Permit (a motion to grant approval failed: two votes for, two against, and one abstention) although there was no majority in favor of denial.

24. The Board's written Decision mysteriously recites only grounds for denial and contains no statements whatsoever on behalf of the two members who voted in favor of the Project.

25. The Decision principally cites concerns regarding PFAS which the Board, or at least two of its members, puzzlingly stylizes as an "open space" issue.

26. At least two consultants, Weston and Sampson and Tetra Tech, Inc., provided the Board written opinions regarding the proposed turf materials and specifically as they related to PFAS.

27. Weston and Sampson, in its January 4, 2022, report concluded that “we believe the trace levels of PFAS identified pose No Significant Health Risk to field users or the Environment.” Tetra Tech, Inc. reached the same conclusion in its February 26, 2021 report concluding that “elevated risk and environmental impacts from PFAS associated from the proposed synthetic turf field appear unlikely.”

28. Another peer review consultant, Horsley Witten Group, reached the same conclusion finding in its March 1, 2021 report that the risks “are likely insignificant.”

29. All of these expert opinions were available to the Board.

30. The Board was also guided by two written opinions from Town Counsel, dated June 8, 2020 and September 9, 2021. In counsel’s July 8, 2020 opinion, counsel states unequivocally that “it is more likely than not that the Board is precluded from exercising its power to review the Project beyond an examination of any dimensional limitations and an analysis of the proposed parking plan, consistent with the limits imposed by the Dover Amendment.”

31. Notwithstanding the weight and credibility of these expert scientific and legal opinions, the Board (or at least two members) rejected them, finding that PFAS was not only a significant risk but that the Board could deny the Project on that basis under the guise of a reasonable open space regulation under the Dover Amendment.

32. Although the Project is unquestionably an educational use which enjoys the protections of G.L. c. 40A, § 3, the so-called “Dover Amendment,” and which is an allowed

use by-right under the Town's Zoning Bylaws, the Board denied the Project (and did not even attempt to approve it subject to conditions) citing unfounded and unsubstantiated concerns well outside the scope of its authority.

33. The Decision nullifying the Project is wholly contrary to the intent and purposes of the Dover Amendment which, subject to certain limited exceptions not applicable here, exempts such projects from prohibitive local zoning and prohibitive local zoning process.

34. The Board's actions and Decision patently run afoul of the Dover Amendment and otherwise is arbitrary and capricious, an abuse of discretion, and constitutes an error of law.

COUNT I
G.L. c. 40A, § 17

35. The facts asserted in paragraphs 1 through 34 of this Complaint are hereby incorporated and reasserted as if fully restated herein.

36. By written decision filed with the Town Clerk on May 16, 2022, the Board issued a decision denying zoning relief to the MVRSD and nullifying the Project.

37. By virtue of the Board's denial of its application for a Special Permit for the Project, the MVRSD is "aggrieved" by the Decision.

38. For each and all of the reasons set forth in this Complaint, and to be submitted as evidence at trial, the MVRSD states that the Board's decision exceeds the authority of the Board, constitutes an error of law, is arbitrary and capricious, and constitutes an abuse of discretion.

39. For each and all of the reasons set forth in this Complaint, and to be submitted as evidence at trial, the MVRSD states that the zoning provisions relied upon by the Board are inapplicable and/or are otherwise unreasonable regulations per G.L. c. 40A, § 3.

40. For each and all of the reasons set forth in this Complaint, and to be submitted as evidence at trial, the MVRSD states that the Decision should be annulled and this Court should enter an order directing the Board to grant appropriate zoning relief to the Project to allow it to proceed or, in the alternative, declare that the Project may proceed as-of-right as prayed for below.

COUNT II
G.L. c. 240, § 14A

41. The facts asserted in paragraphs 1 through 40 of this Complaint are hereby incorporated and reasserted as if fully restated herein.

42. By written decision filed with the Town Clerk on May 16, 2022, the Board issued a decision denying zoning relief to the MVRSD and nullifying the Project.

43. For each and all of the reasons set forth in this Complaint, and to be submitted as evidence at trial, the MVRSD states that the Board's decision exceeds the authority of the Board, constitutes an error of law, is arbitrary and capricious, and constitutes an abuse of discretion.

44. For each and all of the reasons set forth in this Complaint, and to be submitted as evidence at trial, the MVRSD state that the Decision should be annulled.

45. G.L. c. 40A, § 3, the so-called "Dover Amendment," states, in relevant part:

No zoning ordinance or by-law shall regulate or restrict the interior area of a single family residential building nor shall any such ordinance or by-law prohibit, regulate or restrict the use of land or structures for religious purposes or for educational purposes on land owned or leased by the commonwealth or

any of its agencies, subdivisions or bodies politic or by a religious sect or denomination, or by a nonprofit educational corporation; provided, however, that such land or structures may be subject to reasonable regulations concerning the bulk and height of structures and determining yard sizes, lot area, setbacks, open space, parking and building coverage requirements.

46. The Project is a use protected by G.L. c. 40A, § 3, the Dover Amendment.

47. The zoning provisions relied upon by the Board to deny the Project are inapplicable and/or are otherwise unreasonable regulations per G.L. c. 40A, § 3.

48. The Water Resource Protection Overlay Zoning District Zoning Bylaw is patently not reasonable regulation concerning the bulk and height of structures and determining yard sizes, lot area, setbacks, open space, parking and building coverage requirements. In fact, the Board acknowledges that reality in its Decision on Page 26 when it cites to pending legislation that may add such authority and on Page 27 when it recites its own counsel's opinion that "it is more likely than not that the Board is precluded from exercising its power to review the Project beyond an examination of any dimensional limitations and an analysis of the proposed parking plan, consistent with the limits imposed by the Dover Amendment."

49. The Project does not require any zoning relief, as application of the above zoning provisions and/or application of a special permit requirement would, as it did here, nullify the Project.

50. This Court should accordingly enter an order directing the Board to grant appropriate zoning relief to the Project to allow it to proceed or, in the alternative, declare that the Project may proceed as-of-right.

51. The MVRSD is, therefore, entitled to a declaration that (1) the Project is a use protected by the Dover Amendment; (2) the zoning provisions relied upon by the Board to deny the Project are inapplicable and/or are otherwise unreasonable regulations as applied to the

Project; (3) the Project does not require any zoning relief; and (4) the Project may proceed as-of-right.

RELIEF REQUESTED

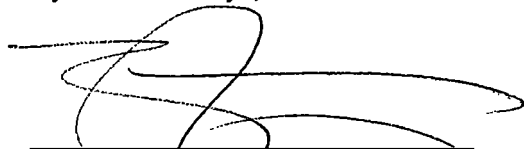
WHEREFORE, the MVRSD respectfully requests this Honorable Court to:

- A. Annul the Decision;
- B. Declare that (1) the Project is a use protected by the Dover Amendment; (2) the zoning provisions relied upon by the Board to deny the Project are inapplicable and/or are otherwise unreasonable regulations; (3) the Project does not require any zoning relief; and (4) the Project may proceed by-right;
- C. Award the MVRSD their costs and attorney's fees; and
- D. Grant such additional relief as the Court deems just and proper.

PLAINTIFF,

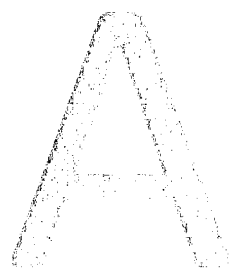
MARTHA'S VINEYARD REGIONAL SCHOOL
DISTRICT,

By their attorneys,



Jason R. Talerman (BBO#567927)
Brian Winner (BBO#654997)
MEAD, TALERMAN & COSTA, LLC
730 Main Street, Suite 1F
Millis, MA 02054
(508) 376-8400
jay@mtclawyers.com
brian@mtclawyers.com

Dated: June 3, 2022





RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

Town of Oak Bluffs, Massachusetts
Office of the Planning Board
P.O. Box 1327
Oak Bluffs, MA 02557
508-693-3554 x154
PLANNING BOARD

NOTICE OF DECISION **May 4, 2022**

RE: SPECIAL PERMIT
Athletic Track and Synthetic Turf Field

Martha's Vineyard Regional High School
100 Edgartown Vineyard Haven Road, Oak Bluffs, MA
Map 55 Parcel 2&4, zoning district R3

The Oak Bluffs Planning Board held a Virtual Public Hearing
on May 4, 2022 at 5:00 p.m. via Zoom on the
application of the referenced petitioners seeking:

A Special Permit under Section 8.2 of the Zoning Bylaws (Water Resource Protection Overlay District) for the installation of a 400m Track and Synthetic Turf Field

DECISION: A motion was made to approve the special permit under Zoning Bylaw 8.2–Water Resource Protection Overlay District. The Board, consisting of Ewell Hopkins (Chair), Erik Albert, Bill Cleary, and JoJo Lambert voted 2-2 to approve the special permit. **Motion failed and special permit was denied.**

Procedural History:

- 08/27/21 The Martha's Vineyard Commission issued DRI Decision 352-M4
- 09/09/21 Town counsel project advice was that applicant required a special permit from the Planning board under 8.2-Water Resource Protection Overlay District
- 10/05/21 The Planning Board, under the limitations of the Dover Amendment approved the Site Plan
- 11/02/21 Building Commissioner agreed applicant needed a special permit from the Planning Board under 8.2–Water Resource Protection Overlay District

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

- 12/17/21 Incomplete Special Permit application filed with Town Clerk and received by the Planning Board (*missing Building Commissioner signature*)
- 12/20/21 Special Permit application distributed via e-mail directly from the Applicant to the Board of Health, Conservation Commission, Building Inspector, Director of Public Works, Police Chief, Fire Chief, Sewer Commissioner and Water District
- 12/21/21 Special Permit application with Building Commissioner signature filed with Town Clerk and received by the Planning Board
- 01/21/22 Notice of Planning Board Public Hearing posted at Town Hall and on web site
- 01/24/22 Notice of Planning Board Public Hearing mailed to abutters (and abutters of abutters) within 300 feet, the applicant and abutting planning boards
- 01/27/22 First Notice of Hearing published in Martha's Vineyard Times
- 02/03/22 Second Notice of Hearing published in Martha's Vineyard Times
- 02/10/22 Planning Board Public Hearing opened – Inventory of assembled materials**
- 02/24/22 Planning Board Public Hearing continued for Howard Stein Hudson report of area
- 03/24/22 Planning Board Public Hearing continued for Applicant presentation & Public testimony in support
- 03/31/22 Planning Board Public Hearing continued for Public testimony in support
- 04/21/22 Planning Board Public Hearing continued for Public testimony opposed
- 04/28/22 Planning Board Public Hearing continued for Applicant rebuttal
- 05/04/22 Planning Board Public Hearing continued for deliberation and vote**

General Findings:

1. The Site is located at **100 Edgartown Vineyard Haven Road** in the R-3 Zoning District shown on **Assessors Map 55** as **Parcels 2 & 4**.
2. The proposed installation of Athletic Track and Synthetic Turf Field falls within the Water Resource Protection Overlay District (WRPOD).

Applicable Laws and Decision Criteria:

The application is governed by **Section 8.2** of the Zoning By-Laws (Water Resource Protection Overlay District) and **Sections 10.3** (general special permit criteria) and M.G.L. Chapter 40A § 9 and 11.

Specific Findings / Testimony:

1. The Planning Board received numerous **letters of support** that are part of the public record. In addition, the following individuals gave verbal testimony in support during the public hearing: *Walter Vail, John Zarba, Brian Patrick Hall, Rebecca Nutton, Donald Herman, Ryan Kent, Louis Paciello, Lisa Knight, Mark McCarthy, Matt Malowski, Douglas Oliveira, Zachary Smith, John Wilson, Mackenzie Condon, Alana Nevin, Graham Stearns, Tania Laslovich, Charlotte Packer, Sterling Bishop, Terry Donahue, and Joe Mikos.*

2. The Planning Board received numerous **letters of opposition** that are part of the public record. In addition, the following individuals gave verbal testimony in opposition during the public hearing: *Susan Desmarais, Richard Toole, Jonah Maidoff, Scarlet Johnson, Garri Saganenko, Robert Bates, Jeremy Houser (VCS), Doug Reece, Casey Hayward, Diana Carpinone, Carole Vandal, Dardy Slavin, Kristen Mello, Stefan Knight, Kyla Bennett, Dianne Woelke, Ann Rosenkranz, and Beka ElDeiry.*

3. There were questions made of the applicant from the planning board:

a. *Member Bill Cleary* asked for clarification on the filtration system and the monitoring frequency. Chris Huntress said the MVC required them to be monitored annually.

b. *Member Bill Cleary* asked if there was any action plan should the monitoring wells be infiltrated or compromised. Chris Huntress said their plan is to test the materials in advance of putting them in the ground.

c. *Members Albert and Lambert* had no questions.

Specific Findings / Zoning By-Law 8.2:

1. With its vote, the planning board has determined that the Applicant's project **does not meet** the purposes and criteria of **By-Law 8.2**; namely that:

The groundwater underlying this Town is the only source of its existing and future drinking water supply. The groundwater aquifer is integrally connected with, and flows into, the surface waters, lakes, streams and coastal estuaries which constitute significant

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

*recreational and economic resources of the town used for bathing and other water related recreation, shellfish and fishing. Accidental spills and discharge of petroleum products and other toxic and hazardous materials have repeatedly threatened the quality of such groundwater supplies and other related water resources on Martha's Vineyard and in other Massachusetts towns, posing potential public health and safety hazards and threatening economic losses to the affected communities. Unless preventive measures are adopted to prohibit discharge of toxic and hazardous materials and to control their storage within the town, further spills and discharge of such materials will predictably occur, and with greater construction, commercial and industrial development, population, and vehicular traffic in the Town of Oak Bluffs and on Martha's Vineyard. The foregoing conclusions are confirmed by findings set forth in the "Water Quality Management Plan for Martha's Vineyard", April 1978, prepared by the Martha's Vineyard Commission pursuant to Section 208 of the Federal Clean Waters Act; by the report entitled "Edgartown Water Resource Protection Plan", February 1983, prepared for the Edgartown Board of Health by Anderson-Nichols and Co., Inc. and "Public Drinking Water Resource Protection Plan", May 1985, by the Martha's Vineyard Commission. Therefore, **it is the purpose of the WRPOD to protect the public health by preventing contamination of the groundwater resources providing water supply for the Town.***

2. The following uses are permitted in the WRPOD by special permit:

1) Any use established after the date of adoption of this by-law which involves the **generation, use or storage of any toxic or hazardous materials in greater quantities than that associated with a normal household use.**

2) Parking lots greater than 3,500 square feet, unless the lot shall have an impervious surface and shall be constructed with oil retention catch basins.

3. The following is the criteria under **By-Law 8.2** for the approval of a special permit. *Special Permits shall be granted only where the Planning Board determines, in conjunction with the other town agencies as specified herein, that*

a. **Groundwater quality resulting from on-site waste disposal and other on-site operations will not fall below federal or state standards,** if existing groundwater quality is already below those standards on-site disposal will result in no further deterioration.

b. **The intent of this by-law, as well as the criteria, has been satisfied, after consideration of the simplicity, reliability, and the feasibility of the control measures proposed and the degree of the threat to water quality which would result if the control measures failed.**

c. The Planning Board shall explain any departures from the recommendations of the other town agencies in its decision.

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

Decision of the Board:

Chair Hopkins made a motion to discuss and move forward the applicant's request for a special permit under **Section 8.2 – Water Resource Protection Overlay District**, and the motion was seconded by Member Albert. There was no discussion. A roll call vote was made to grant the special permit:

The Board, constituting a quorum and the required supermajority, consisting of Ewell Hopkins (Chair), Erik Albert, Bill Cleary, and JoJo Lambert voted 2-2. **The motion failed and the special permit was denied.**

- A. Position of Votes to Deny:** page 5-20
- B. Board of Health Attachment:** page 21-24
- C. Application of the Dover Amendment:** page 24-30

A. Position of Votes to Deny:

PFAS are hazardous within the definition of By-Law 8.2: Section 8.2.2 of the Oak Bluffs Zoning By-Law defines "Toxic or Hazardous Materials" broadly as "Any substance or mixture of such physical, chemical or infectious characteristics as to pose a significant, actual potential hazard to water supplies, or other hazard to human health, if such substance or mixture were discharged to land or waters of this zone of contribution." Per- and polyfluoroalkyl substances (PFAS) are a "toxic or hazardous material" pursuant to 8.2.2 by virtue of the fact that they "pose a significant, actual potential hazard to water supplies." The Commonwealth of Massachusetts currently regulates six PFAS (known as "PFAS6") in soil, groundwater, and drinking water: perfluorooctanesulfonic acid (PFOS), perfluorooctanoic acid (PFOA), perfluorodecanoic acid (PFDA), perfluorohexanoic acid (PFHpA), perfluorohexane sulfonic acid (PFHxS), and perfluorononanoic acid (PFNA). The Maximum Contaminant Level (MCL) for these six PFAS in groundwater and/or drinking water is 20 parts per trillion (ppt). Specifically, 310 CMR 22.16, states, "Some people who drink water containing these PFAS in excess of the MCL may experience certain adverse effects. These could include effects on the liver, blood, immune system, thyroid, and fetal development. These PFAS may also elevate the risk of certain cancers." These serious health effects enumerated by the Commonwealth indicate that PFAS6 pose a significant, potential and actual hazard to water supplies, consistent with a determination that these PFAS are hazardous within the definition of By-Law 8.2.

It is also important to note that Massachusetts Department of Environmental Protection (MADEP) is statutorily obligated to reassess both the number of PFAS regulated, and the MCLs at which they are regulated. Specifically, 310 CMR 22.07G(3)(e) states, "Not later than December 31, 2023, and once every three years thereafter, the Department shall perform a review of relevant developments in the science, assessment and regulation of PFAS in drinking water for the purpose of evaluating whether to amend 310 CMR 22.07G(3) in light of any advancements in analytical or treatment technology, toxicology and/or any other relevant information." The Interagency PFAS

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

Task Force Report, issued on April 20, 2022, recommends that MADEP "Define PFAS as "fluorinated organic chemicals containing at least one fully fluorinated carbon atom" for the regulation of PFAS in consumer products"; and states that they want "to establish standards for PFAS in drinking water and groundwater beyond PFAS6 as part of its upcoming review cycle" (see PFAS Interagency Task Force Report, p. 64 at <https://malegislature.gov/Commissions/Detail/556/Documents>). In other words, it is likely that MADEP will not only expand PFAS regulation beyond the six currently regulated, but that those MCLs will be decreased.

In addition, the Toxics Use Reduction Agency (TURA) recently added "certain per- and polyfluoroalkyl substances not otherwise listed" to the list of hazardous substances so that manufacturers are required to report on the quantities of these listed substances used and wasted in production (see 301 CMR 41.03). This is additional evidence that PFAS are hazardous within the definition of By-Law 8.2.

Testimony given at the Oak Bluffs Board of Health meeting on December 14, 2021 also supports the contention that PFAS are hazardous. Specifically, Dr. Graham Peaslee of Notre Dame University testified that, "The entire class of PFAS has got a problem, it's all bioaccumulative. It is all persistent and inasmuch as we can study it, it's all toxic, it's just various levels. There's no such thing as a 'good PFAS' at this point and it looks like it's getting worse." In addition, Dr. Courtney Carignan from Michigan State University testified that PFAS are toxic, and have "been found to affect multiple systems in the body...[and are] very toxic to the immune system."

Therefore, the Planning Board has ample evidence to determine that PFAS are hazardous materials pursuant to Section 8.2.2.

PFAS in the turf products will leach off into the water, posing a hazard to the aquifer. The February 26, 2021 Synthetic Turf Laboratory Testing and Analysis Summary Report done by TetraTech for the Martha's Vineyard Commission (MVC) (see https://www.mvcommission.org/sites/default/files/docs/2021-02-26%20%28TurfAnalysisReport_FINAL%29.pdf) found:

...perfluoropentanoic acid (PFPeA) and 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2FTS) were detected at low concentrations above the MDL but below the RL and are considered estimated values. PFPeA was detected in the Greenfield Turf (0.148 nanograms per gram (ng/g)) and the BrockFill (0.455 ng/g). 6:2FTS was detected at a concentration of 0.848 ng/g in the MAPEI Ultra Bond. In the SPLP analysis for PFAS, perfluoroheptanoic acid (PFHpA), perfluorooctanoic acid (PFOA), Perfluorobutanoic Acid (PFBA) perfluoropentanoic Acid (PFPeA) and Perfluorodecanesulfonic Acid (PFDS) and Perfluorohexanoic Acid (PFHxA) were detected in one or more of the synthetic turf components...

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

Note that ng/g is parts per billion (ppb), not parts per trillion (ppt), which is how PFAS are regulated in Massachusetts. Moreover, in the Synthetic Precipitation Leaching Procedure (SPLP), TetraTech found:

The PFAS6 compounds were detected in the SPLP analysis of the Greenfield Turf (1.02 ng/L), Brock Shock Pad (1.40 nanograms per liter(ng/L)), the BrockFill (5.01 ng/L) and the MAPEI Ultra Bond (0.395 ng/L)... Select PFAS compounds were detected in the SPLP analysis that were not detected in the total PFAS analysis...The detection of PFAS compounds in the samples of the synthetic turf components via SPLP PFAS analysis but not via total PFAS analysis may suggest that these products contain PFAS compounds that were not extractable via the analytical method utilized for total PFAS analysis (isotope dilution method), but were extractable by the more rigorous SPLP extraction process. There are many PFAS compounds, and laboratory analysis can only be performed on a small subset of PFAS compounds.

Finally, the total oxidizable precursor analysis (TOPA) found:

The oxidized samples of each of the synthetic turf components contained detectable concentrations of perfluorobutanoic acid (PFBA) at concentrations ranging from 2.11 ng/g to 28.7 ng/g...Perfluoroheptanoic acid (PFHpA) was detected in the oxidized sample of the BrockFill at a concentration of 20.4 ng/g.

Most importantly, the TetraTech report states that:

Leachable PFAS6 compounds were detected in four of the five components of the synthetic turf field at concentrations ranging from 0.395 ng/L to 5.01 ng/L, with the highest concentration being reported in the BrockFill...because these PFAS materials are persistent and potentially bioaccumulate, we have also reviewed the estimated mass of PFAS6 that may leach from the field over time....The resulting PFAS6 concentration in SPLP is estimated at 12 ng/L, which is also below the MMCL and the MCP Method 1 GW-1 standard of 20 ng/L. Based on 45 inches of rain per year and a maximum SPLP PFAS6 concentration of 12 ng/L, a total of 0.000295 pounds of PFAS6 may leach from the field in one year...

In other words, of the six PFAS compounds currently regulated by MADEP, the MVC's consultant estimates that the concentration is approximately 12 ppt in the leachate coming off the field. Based on annual rainfall, this is **0.000295 pounds of PFAS6 per year**. One of these PFAS is PFOA. The U.S. Environmental Protection Agency (EPA) released a new toxicity assessment of PFOA in November of 2021, concluding that the maximum dose that a person can have of PFOA per day from drinking water without having adverse health effects is 0.000000079 mg/kg (part per million) (see <https://www.natlawreview.com/article/no-safe-level-pfas-next-litigation-soundbite>). In other words, there is virtually no safe level of PFOA in drinking water.

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

On November 11, 2021, Ms. Ayesha Khan forwarded an email from Dr. Graham Peaslee of Notre Dame University, dated November 10, 2021 (see <https://www.oakbluffsma.gov/DocumentCenter/View/7724/Ayesha-Khan---Nov-11-2021>). In this email, Dr. Peaslee states:

...this polymer [PVDF] is completely immiscible with polyethylene and polypropylene extrusions...which is what helps the mixture through the extrusion process. These fluoropolymers coat the outside of the extruded plastic sheet and they never tightly bond to it, nor to the metal extrusion ports during the process. That means these polymeric PFAS are free to come off the finished product. Now, if they were just inert fluoropolymers, while certainly a plastics pollution problem, it may not be a public health concern. However, in the US, all fluoropolymers are currently made in reactors with short-chain PFAS solvents. When the PVDF (or any other fluoropolymer) is made, it comes along with significant numbers of impurities in the form of short-chain PFAS which are highly soluble, and can contribute significantly to our drinking water pollution... Our independent measurements find somewhere in the ~100-200 ppm range of total fluorine on the surfaces of new turfgrass, which is a mixture of this fluoropolymer and short-chain PFAS....all readily available to the environment. Older turfgrass samples have lower total fluorine values which suggests it is coming off with exposure to the elements (or use). This is concerning.

Therefore Dr. Peaslee testified that not only does the PFAS on the grass blades freely come off the finished product, but that when the so-called "inert" fluoropolymer is made, short-chain PFAS hitchhike on, and "can contribute significantly to our drinking water pollution." In addition, he stated that the fact that older turf has lower total fluorine values indicates that the PFAS is coming off during use and weathering. In other words, as the field ages, and is exposed to ultraviolet light from the sun, slightly acidic rain, and abrasion from use, more PFAS will leach off.

Kristen Mello, an analytical chemist working on PFAS issues, testified at the Board of Health meeting on December 14, 2021 and summarized the effects of the proposed artificial turf field as, "this installation is going to affect your groundwater and your ... sole source aquifer."

On January 5, 2022, Ms. Mello sent an email to the Planning Board (see <https://www.oakbluffsma.gov/DocumentCenter/View/7618/Kristen-Mello-WRAFT-email-response-to-Dr-Laura-Green-with-attachments---Jan-5-2022>) stating:

The data from the SPLP and the Total Oxidizable Precursor Assay (TOPA) analyses performed for the proposed MVRHS field project ... are charted below and clearly indicate that the components of this proposed artificial turf field installation are likely to discharge measurable amounts of PFAS into stormwater. This conclusion is further supported by the fact that in their Turf Analysis Final Report's Appendix C, Tetra Tech assumed a stormwater loading for PFAS6 of 12ng/L.

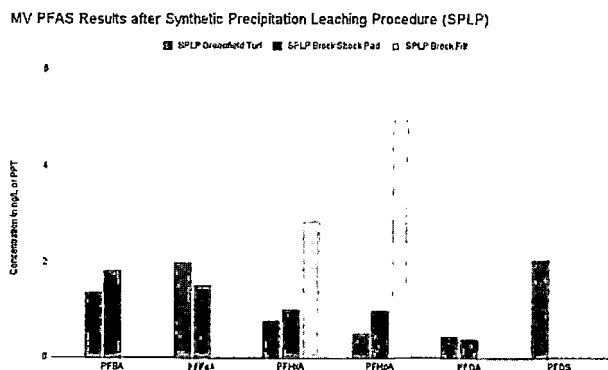
RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

Ms. Mello attached a graph based on the SPLP results (see Figure 1) showing how much PFAS could leach off the fields into storm water, which will ultimately enter groundwater and the sole source aquifer. Referencing a 2021 study on the impacts of UV exposure on PVDF (see <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8122610/>), Ms. Mello continues:

In my opinion, based on the information referenced here, it is likely that UV exposed samples would yield higher PFAS results to these same tests. Based on their own testing, it is essentially known that at least some significantly measurable PFAS will leach off these brand new artificial turf field components into stormwater and into your aquifer. What is unknown is how much PFAS will leach off the field components after they are exposed to sunlight for years and the PVDF-HFP coating increasingly degrades.

Figure 1

*Please note that these samples were not specifically exposed to UV radiation prior to testing.
Also please note the difference in units on these charts. 1 PPB = 1,000 PPT*



In addition, Ms. Mello sent an email on February 27, 2022 (see <https://www.oakbluffsma.gov/DocumentCenter/View/7865/Kristen-Mello-email---Feb-28-2022>) forwarding a recent peer-reviewed article entitled, "An Outdoor Aging Study to Investigate the Release of Per- And Polyfluoroalkyl Substances (PFAS) from Functional Textiles." Ms. Mello stated that the article discusses how PFAS can be discharged from textiles after "weathering," and concluded, "While these are not identical materials and conditions, the results from this research certainly support the concerns so many have raised regarding the release of coating-type PFAS and their degradation products into the surrounding environment."

Therefore, evidence on the record shows that: 1) PFAS, including PFAS6, will leach off the fields into the aquifer, and this will likely become more pronounced as the field ages; 2) these PFAS will degrade the drinking water of the aquifer; 3) the purpose of the Water Resource Protection Overlay District (WRPOD) is to protect the public health by preventing contamination of the groundwater resources providing water supply for the Town, and the proposed artificial turf field

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

will contaminate this water supply; and 4) since there is virtually no safe level of at least one of these PFAS, PFOA, this is an unacceptable risk.¹

The Oak Bluffs Water District expressed concern about impacts to the water supply, and financial consequences of these impacts. On January 10, 2022, Michael G. Silvia, Superintendent of the Oak Bluffs Water District, sent a letter to the Planning Board (see <https://www.oakbluffsma.gov/DocumentCenter/View/7532/OB-Water-District-letter-2-Jan-10-2022>) stating:

...it is crucial to note the location of the field and its potential impact on some of the larger sources. The high school is approximately 0.5 miles from Wells 3, 4, and 5, and is within the Zone II for those wells. It also falls within the Zone II of the Farm Neck Road Wellfield ... in an extreme scenario where elevated PFAS6 levels resulted in some of our largest sources being taken offline temporarily for costly treatment upgrades, the system would be left without any operational redundancy. So it is not without risk... While there is risk, the available data suggest the impact would not currently be enough to interrupt service at the wells, as the 12ppt from the turf field plus the existing concentrations is still within the 20ppt Massachusetts PFAS6 MCL. However, under current regulations, levels over 10ppt would trigger monthly PFAS testing as opposed to quarterly, which carries added cost. In addition, as your e mail notes, regulations can change... If the turf field did in fact result in higher levels of PFAS, and stricter limits were imposed in 2023, it could very well mean the addition of millions of dollars 'worth of treatment to continue operating the impacted wells.

While the Superintendent acknowledges that there are uncertainties, he is concerned about costs associated with PFAS contaminated water, and concludes that the artificial turf "is not without risk." He also acknowledges the possible risk to the District's water supply because "the current combined capacity of Wells 3, 4, and 5 is approximately 2.34 MGD, which constitutes roughly two thirds of the District's supply." Given that Martha's Vineyard Regional Aquifer is the sole source of drinking water to all of the residents and visitors to the island, the Planning Board decision reflects the position that it is not worth taking this risk, particularly when the project can be built with natural grass, which would minimize the risk of PFAS contamination.²

It is important to note that Mr. Silvia stated in his letter that "PFAS levels are currently relatively low, with PFAS6 readings of 2.12-3.37 ppt at Wells 1 and 2 (and non-detects elsewhere), compared to the current Massachusetts MCL of 20 ppt." However, in response to a consultant

¹ The Planning Board read and listened to a number of experts and testimony on both sides of the issue; however, it is clear that the weight of the evidence - and indeed, the applicant's own consultant - shows that PFAS will leach off the field and contaminate the groundwater and aquifer. The Planning Board considered all of the evidence, and finds the scientists warning of the PFAS contamination more credible.

² While it is possible that the track itself may also contain PFAS, there does not appear to be a viable alternative to the track materials. In addition, the track is solid, and will not as readily shed PFAS-laden microplastics into the water and surrounding areas. There is a clear, safer alternative to the artificial turf - grass. If there were a viable alternative material for the track, the Planning Board would be requesting that the applicant explore those options.

RE: Martha's Vineyard Regional High School
 Athletic Track and Synthetic Turf Field
 100 Edgartown Vineyard Haven Road
 Oak Bluffs, MA, Map 55 Parcel 2&4

reiterating this information, Ms. Mello sent an email (see <https://www.oakbluffsmma.gov/DocumentCenter/View/7617/Kristen-Mello-WRAFT-email-re-PFAS-in-OB-Drinking-Water-with-attachments---Jan-5-2022>) stating:

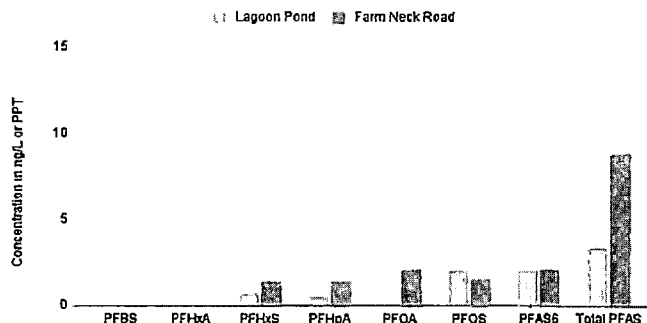
When calculating a water supplier's PFAS level, MA DEP only uses values that exceed the 2ppt Reporting Limit. Thus, PFAS concentrations less than 2ppt will not contribute to the PFAS6 regulatory numbers. Estimated values that are above the Method Detection Limit, but below the Reporting Limit are still PFAS in your drinking water. They are just not used in the calculation for regulatory action. Because of this, I also find it helpful to see the Total PFAS found in each sample.

Ms. Mello used MADEP data to make the following graphs (Figure 2) to show how much PFAS6 and PFAS are currently in Oak Bluffs water. These graphs show that “while within regulatory limits, the wells are pulling PFAS contaminated water already; and ... with the exception of PFOS at Lagoon Pond, PFAS concentrations increased between 2020 and 2021 sampling events, including the regulatory PFAS6.”

Figure 2

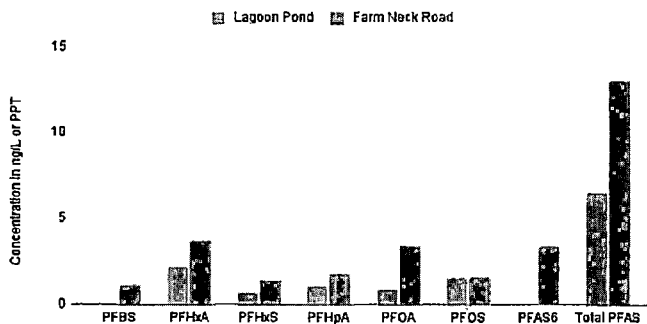
2020 Oak Bluffs Water District PFAS Results

Sample Collection November 10, 2020



2021 Oak Bluffs Water District PFAS Results

Sample Collection November 10, 2021



RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

Therefore, it is entirely possible that PFAS leaching off the proposed artificial turf field could ultimately push the PFAS6 limits over the current MCL of 20 ppt, resulting in financial and public health impacts to the residents of Martha's Vineyard. Specifically, this degradation of the island's water supply could, as the Superintendent of the Oak Bluffs Water District stated, "very well mean the addition of millions of dollars 'worth of treatment to continue operating the impacted wells."

On March 12, 2020, James L. Ferraro, Esq. sent a letter to the Planning Board (see <https://www.oakbluffsma.gov/DocumentCenter/View/4524/Ferraro-Law-Firm--James-L-Ferraro-Esq-letter-March-12-2020-1>). Mr. Ferraro is a part time resident of Tisbury, and an attorney with experience in mass tort litigation. He noted that PFAS are of such concern that the "Martha's Vineyard Airport Commission voted unanimously to retain my law firm, The Ferraro Law, to represent them in the multi-district AFFF litigation." He stated that several years ago, he wrote a letter to the "Superintendent of Martha's Vineyard Public Schools, urging the school not to install a synthetic turf field on the high school campus and warning of potential legal exposure if they did." He concluded:

...knowingly installing a product that is intended for long term, regular use by minors, that sits atop a Zone II Wellhead Protection Area, and is likely to contain PFAS would be beyond irresponsible. As designated protectors of the Vineyard's lands and waters, committed to ensuring responsible development, I strongly urge you to demonstrate what true leadership looks like and reject the proposed installation of any synthetic playing fields on Martha's Vineyard.

Therefore, it is the determination of the Planning Board's decision that Mr. Silvia's concern about the potential financial burden from the proposed artificial turf field goes beyond filtering out PFAS from drinking water; specifically, a resident lawyer with direct knowledge of PFAS litigation is concerned about financial liabilities if the project goes forward as proposed.

It is also worth noting that the proponents of the project expressed concerns over nitrogen loading should the project be constructed with natural grass. On March 30, 2022, Jack Higgins, a Regional Agronomist forwarded a October 16, 2020 letter (see <https://www.oakbluffsma.gov/DocumentCenter/View/8124/Jack-Higgins-email---Mar-30-2022>) in which he states: "resilient natural turfgrass fields are properly maintained with very little soluble nitrogen in the soil. It is because of the living system that is a natural turfgrass field, the soluble nitrogen, (the waterway pollutant of concern) is not higher." Therefore, the Planning Board believes that the negative impact of PFAS contamination associated with the artificial turf field is outweighed by any concerns of nitrogen loading.

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

The applicant did not comply with Section 8.2.7 of the By-Laws. Section 8.2.7 of the By-Laws states that when:

...applying for a Special Permit under this section, the information listed below *shall* be submitted. a. A complete list of all chemicals, pesticides, fuels, and other potentially toxic or hazardous materials to be used or stored on the premises in quantities greater than those associated with the normal household use, accompanied by a description of measures proposed to protect all storage containers/facilities from vandalism, corrosion, and leakage, and to provide for control of spills. b. A description of potentially toxic or hazardous wastes to be generated, indication storage and disposal methods (emphasis added).

Therefore, the applicant has a mandatory duty to provide a complete list of all chemicals and potentially toxic materials used or stored if the quantities are greater than those associated with normal household use. The amount of PFAS in the artificial turf components was deemed to be greater than those associated with "normal household use," as established by an October 21, 2021 letter from Thomas Perry, Building Commissioner from Oak Bluffs (see <https://www.oakbluffsma.gov/DocumentCenter/View/7428/Letter-from-Building-Official-recd-Nov-2-2021>).³ Specifically, Mr. Perry states:

Since the proposed material for this track has greater quantities than that associated with normal household use, and these materials appear to meet the definition of toxic or hazardous materials, MVRHS must apply for a special permit from the Planning board under Section 8.2 of the Zoning By-Laws.

On January 26, 2022, the Planning Board Chairperson sent a letter to the TenCate, the manufacturer of the proposed artificial turf field, to ask which PFAS were used in the production of their products (see <https://www.oakbluffsma.gov/DocumentCenter/View/7674/Oak-Bluffs-PB-letter-to-Joe-Fields-at-TenCate-Grass---Jan-26-2022>). The Board stated that testing showed PFAS in "all the synthetic turf components," and asked TenCate to confirm which PFAS were used, since they only claimed to not use one PFAS, PFOS (see <https://www.oakbluffsma.gov/DocumentCenter/View/3900/No-PFAS-in-TenCate-Fibers>). No response was received.

In addition, the Board Chairperson wrote to Brock USA on February 8, 2022 to ask the same question (see <https://www.oakbluffsma.gov/DocumentCenter/View/7818/Oak-Bluffs-PB-letter-to-Tom-Murphy-at-BROCK-USA---Feb-8-2022>). That letter stated that in other municipalities, "The Brock YSR Shockpad tested positive for PFBA, PFPeA, PFHxA, PFHpA, and PFOA"; "The BrockUSA BrockFILL tested positive for PFPeA, PFHxA, and PFHpA"; and "Total oxidizable

³ Note that the applicant's consultants disputed this finding; however, Dr. Laurel Schaidler of Silent Spring Institute sent an email on April 27, 2022 (see <https://www.oakbluffsma.gov/DocumentCenter/View/8384/Dr-Schaidler-letter-to-EH---Apr-27-2022>) correctly explaining how the applicant's consultant made a mathematical error in its efforts to dispute Mr. Perry's findings and cautioning against drawing conclusions based on a sample size of one. Therefore, the Planning Board finds that Mr. Perry's determination is correct.

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

precursor assays of both products suggest that significant amounts of other PFAS are present as well." Brock USA did not respond.

MVC's consultant, TetraTech, stated:

...low concentrations of PFAS compounds are also present in the components of the synthetic turf field and may leach at very low concentrations from the field over time. Undiscernible organic fluorine compounds are also present in the synthetic turf field components as indicated by the results of total organic fluorine analysis. It is also possible that if the synthetic turf field was subject to specific oxidizing conditions, precursor PFAS compounds may be present that could transform into other PFAS compounds...the understanding of PFAS detection and risk are limited for the vast majority of PFAS compounds, and certainty in such as assessment is not possible at this time.

Further, Dr. Graham Peaslee testified on December 14, 2021 that, "there's a lot more PFAS than they're actually measuring [in the artificial turf]."

A March 1, 2021 letter from Horsley Witten Group (see https://www.mvcommission.org/sites/default/files/docs/210301_Turf%20Laboratory%20Testing%20Report%20Review_HWSIGNED%281%29.pdf) reviewing the TetraTech report states:

Given the detection of TOF, it is likely that PFAS related compounds beyond the list of 24 are present in the materials tested. ... Our recommendation is that MVC acknowledge that both the TOF analysis and the TOPA detection indicate a ***currently unquantifiable potential for PFAS contamination*** as part of the decision- making process. This issue should be evaluated within the context of other unknown PFAS contributions (or other contaminants) expected from a natural grass field or, frankly, any other development activities within a groundwater protection district (emphasis added).

Therefore, not only did the applicant not comply with Section 8.2.7 of the By-Laws by not providing a list of chemicals that would be used or stored on the premises, but both the consultant and an expert witness stated that they do not know the full list of chemicals that could potentially leach off the field.

The project as proposed does not comply with Section 8.2.7(3) of the By-Law. Section 8.2.7(3) of the By-Law states:

Special Permits shall be granted only where the Planning Board determines, in conjunction with the other town agencies as specified herein, that a. groundwater quality resulting from ...on-site operations will not fall below federal or state standards, if existing groundwater quality is already below those standards on-site disposal will result in no further deterioration. b. the intent of this by-law, as well as the criteria, has been satisfied, after consideration of the simplicity, reliability, and the feasibility of the control measures

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

proposed and the degree of the threat to water quality which would result if the control measures failed.

In this case, the Oak Bluffs Water District expressed concern, saying the project was "not without risk," and raised the possibility that the project could result in "higher levels of PFAS" in the water, which would be "degradation." Moreover, there have been no "control measures" proposed to prevent such threats to the water quality. Monitoring wells will only alert the Town to contamination after the fact, and cannot "control" or prevent the release of PFAS into groundwater or the sole source aquifer.

One of the project consultants, Chris Huntress, was asked if it was true that cloth filters designed to manage runoff at the proposed track and field don't capture PFAS. Mr. Huntress replied, "No, PFAS are measured in parts per trillion, so they're very, very small, and even the best of industrial filter fabrics put in, I don't think, would be able to catch that..." When asked if there was any way to catch and treat PFAS in runoff before it went into the ground, Mr. Huntress stated, "Not that I'm aware of... Again, I'm a landscape architect, not a scientist, so I'm not sure if there are PFAS removal processes that could be introduced into a subsurface system."

(see <https://www.mvtimes.com/2022/01/26/huntress-just-inert-pfas-field-materials/>). Therefore, there are no control measures proposed, in violation of Section 8.2.7(3) of the By-Law. Indeed, it does not appear that there are any control measures available or technologically feasible for PFAS leaching off artificial turf.

The project as proposed does not comply with Section 10.4.8(7). Section 10.4.8 of the By-Law states that any "site alteration *shall* be designed...to... Minimize contamination of groundwater from ...operations on the premises involving the use, storage, handling, or containment of hazardous substances" (emphasis added). This is a mandatory duty, as evidenced by use of the word "shall." The record does not contain any efforts to minimize contamination of groundwater from the artificial turf field. Indeed, the decision of Planning Board does not believe there exist any methods to prevent the PFAS from leaching off the proposed field into the aquifer, other than replacing the proposed artificial turf with natural grass.

The adverse effects of the proposed project outweigh the beneficial impacts to the town or the neighborhood, in view of the particular characteristics of the site, and of the proposal in relation to that site pursuant to Section 10.3.2 of the By-Law. Section 10.3.2 of the By-Law requires that the Planning Board make a:

written determination that the adverse effects of the proposed use will not outweigh its beneficial impacts to the town or the neighborhood, in view of the particular characteristics of the site, and of the proposal in relation to that site... the determination shall include consideration of each of the following... Impacts on the natural environment; and ... Potential fiscal impact, including impact on town services, tax base, and employment.

In the case at hand, the Planning Board decision finds that the weight of the evidence shows that the adverse effects of the proposed artificial turf *do* outweigh the beneficial impacts to the town,

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

particularly in light of impacts to the groundwater and drinking water, and potential fiscal impacts. Specifically, the threat posed to the groundwater and aquifer from 12 ppt of PFAS6 leaching off the fields, together with an unknown amount of additional PFAS, and the financial repercussions of this contamination, outweighs the benefits of an artificial turf field. This risk is unnecessary given that this project can be built with natural grass fields, which would minimize the PFAS contamination, hazardous waste issues, and threats to Oak Bluffs' drinking water and fiscal situation.

Other island Towns, industry groups, and environmental organizations have expressed concern about the artificial turf's impacts on the island's water supply and resources. An October 21, 2021 letter from the Town of Tisbury's Planning Board Chair to Mr. Thomas Perry, Oak Bluffs' Inspector of Buildings (see <https://www.oakbluffsma.gov/DocumentCenter/View/7683/Tisbury-Planning-Board---Oct-21-2021>) states:

In regard to this specific project, the use of a synthetic field may pose a serious risk to our water supply. The emerging science around the ubiquitous use of "forever chemicals" such as PFAS, PFOS, PFOAS and others in these types of products require we carefully review their usage. Already, the island has identified through testing that pollution in private wells is occurring due to these chemicals, and the testing is limited and only just beginning. Towns within the Commonwealth where more extensive testing has been conducted have had to determine their water supplies unsafe to drink, and coastal water bodies all over the Cape have tested above safe limits. This is all unfolding with just the limited knowledge at hand, we must be aware of these dangerous emerging pollutants. More revelations are sure to follow as we begin to address this issue in earnest.... We hope as the Building Inspector for the Town of Oak Bluffs you will use the bylaws the voters have put in place to safeguard the public from pollution and its effects on human health (citations omitted).

In addition, on October 13, 2021, the Planning Board received an email from Virginia Crowell Jones, the Chair of the West Tisbury Planning Board (see <https://www.oakbluffsma.gov/DocumentCenter/View/7276/West-Tisbury-PB-Ginny-Jones-letter-to-Building-Inspector-Oct-13-2021>). In this email, she stated:

I understand that you are currently reviewing the MVRHS project and application for the installation of plastic turf playing fields. As you know West Tisbury is an abutting town -- I understand that as an abutting town our Planning Board has standing to appeal if you grant a permit to the High School without a SPECIAL PERMIT as required under section 8.2 of the Oak Bluffs Zoning By-Law. Because of the potential impacts to our ground water and single source aquifer, and as the Chairman of the Planning Board I plan to address this as well as our "intentions" at our next Planning Board meeting...

Because all the towns on Martha's Vineyard share the same sole source aquifer, what the Town of Oak Bluffs does within its borders affects the drinking water for everyone on island. The Planning Board is taking these valid concerns from neighboring towns into account.

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

On January 7, 2021, the Martha's Vineyard Shellfish Group wrote a letter to the Commissioners of the MVC; this letter was forwarded to the Planning Board on January 10, 2022 (see <https://www.oakbluffsma.gov/DocumentCenter/View/7737/Emma-Green-Beach-MV-Shellfish-Jan-10-2022>). The Board of Directors and staff at the Martha's Vineyard Shellfish Group wrote that:

We...feel it is our duty to discuss just one of the potential ***negative and irreversible environmental consequences*** of the 2.7-acre synthetic field being proposed by the MVRHS and Huntress Associates. We want you to know that microplastic contamination of the shellfish beds of the Vineyard ***could change the fabric of our community***... microplastics will be shed from the shock-absorbing pad, the woven backing and the plastic "grass" blades themselves, as the plastic field system naturally wears over time. Tiny shreds of plastic will be carried away from the athletic field by wind and rain, through the soil and through the air, possibly contaminating the soil, the aquifer and eventually the ponds... All plastics concentrate toxins from the environment which, especially in the case of tiny microplastics, gives those toxins a pathway into the food chain. Once in the food chain, the toxins are made available for human exposure through consumption of seafood and even sea salt. Plastics also leach toxic additives into the environment. The alarming truth is that there is a lack of transparency regarding the chemicals that go into plastics (i.e. to make it durable) and also the chemicals that are used to assist in the manufacturing process (i.e. to smooth the surface during extrusion). This lack of information prevents consumers and regulators from fully understanding the risks. Substances found in marine animals exposed to microplastics include, but are not limited to, polyaromatic hydrocarbons, phthalates, bisphenol A (BPA), nonylphenol and phenanthrene, Triclosan, PBDE-47 ***and PFAS*** (per-and polyfluorinated substances of which there are over 5,000). It is hard to make informed decisions without a complete and accurate bank of information. The petrochemical components of synthetic turf – shock pad, woven backing and plastic carpet – are not exceptions... ***We have concluded that the risks associated with this project greatly outweigh the potential benefits when compared to those of the viable alternative of grass*** (emphasis added).

Seafood is a major component of the Martha's Vineyard economy, for both residents and tourism. The Martha's Vineyard Shellfish Group's concerns are not to be taken lightly, and the Planning Board decision agrees that the risks to the waters on island (and hence, the shellfish industry itself) outweigh the benefits of the project as proposed, particularly in light of the fact that the project can be completed without the artificial turf.

The following environmental organizations raised concerns and questions on the record to the Martha's Vineyard Commission, Oak Bluffs Board of Health, and/or the Planning Board about the possible impacts of an artificial turf field:

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

Aquinnah Climate and Energy Committee
Chilmark Energy Committee
Dukes County Health Council
The Ecology Center
Fire Emergency Coalition
First Congregational Church Green Team
Island Grown Initiative
Lagoon Pond Association
MA Audubon Felix Neck
Mass Sierra Club
Millbrook Watershed Management Company
MV Environmental Educators Alliance
MV Shellfish Group
NAACP Martha's Vineyard Branch
Nantucket Land Council
Nantucket PFAS Action Group
Nantucket Professional Fire Fighters Local
Non Toxic Communities
Oak Bluffs Democratic Town Committee
Plastic Free MV
Public Employees for Environmental Responsibility (PEER)
Safe Healthy Playing Fields
Silent Spring Institute
Tisbury Waterways Board of Directors, Inc.
UMASS Toxics Use Reduction Institute (TURI)
Vineyard Conservation Society
We Stand Together/Estamos Todos Juntos
West Tisbury Conservation Commission
West Tisbury Energy Committee
Westfield Residents Advocating for Themselves (WRAFT)

The project as proposed does not comply with the project specifications. In the May 26, 2020, document from Huntress Associates, Section 14 asks, "What fiscal and economic safeguards will be in place to protect the towns should the groundwater become contaminated as a result of the synthetic field?" The response by Huntress indicates that the project specifications "**require**" that the artificial turf vendor provide third party testing stating that they "do not use any PFAS chemicals currently listed as part of California's Proposition 65 regulations or identified as part of US EPA's Method 537" to manufacture any part of the turf system (emphasis added).

Therefore, the PFAS prohibited in the project specifications are limited to EPA's list of 29 PFAS, which are found in Figure 3, below, and to California's Prop 65 list, which currently only includes only PFOS:

RE: Martha's Vineyard Regional High School
 Athletic Track and Synthetic Turf Field
 100 Edgartown Vineyard Haven Road
 Oak Bluffs, MA, Map 55 Parcel 2&4

Figure 3

<u>Analyte*</u>	<u>Acronym</u>	<u>Chemical Abstract Services Registry Number (CASRN)</u>
Hexafluoropropylene oxide dimer acid	HFPO-DA	13252-13-6 ^b
N-ethyl perfluorooctanesulfonamidoacetic acid	NEFOSAA	2991-50-6
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluorodecanoic acid	PFDA	335-76-2
Perfluorododecanoic acid	PFDoA	307-55-1
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluorohexanesulfonic acid	PFHxS	355-46-4
Perfluorohexanoic acid	PFHxA	307-24-4
Perfluorononanoic acid	PFNA	375-95-1
Perfluorooctanesulfonic acid	PFOS	1763-23-1
Perfluorooctanoic acid	PFOA	335-67-1
Perfluorotetradecanoic acid	PFTA	376-06-7
Perfluorotridecanoic acid	PFTDA	72629-94-8
Perfluoroundecanoic acid	PFUnA	2058-94-8
11-chloroicosafafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	763051-92-9 ^c
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	9Cl-PF3ONS	756426-58-1 ^d
4,8-dioxo-3H-perfluorononanoic acid	ADONA	919005-14-4 ^e

TetraTech's SPLP tests found PFOA, as well as PFHpA, PFBA, PFPeA, and PFHxA. All of these are on EPA's 537 list. Therefore, the project as proposed does not meet the project specifications as articulated by the applicant's consultant.

The Board of Health is concerned about the adverse impact PFAS would have on Oak Bluffs' drinking water. On February 1, 2022, Meegan Lancaster, then-Board of Health agent, sent a letter to the Board of Health Commissioners (*see Attachment 1, page 21*), stating:

I am writing to bring to your attention the fact that I believe the installation of artificial turf containing per-and polyfluoroalkyl substances (PFAS) will pose a risk to human health and the environment, not only to the Town of Oak Bluffs, Massachusetts, but to the sole-source aquifer that the island of Martha's Vineyard shares. Installation of a field with components known to contain PFAS is an improper action by the Martha's Vineyard Regional High School (MVRHS). I also believe such installation will violate the project specifications as set forth in the decision of the Martha's Vineyard Commission (MVC) dated August 26, 2021.... As you know, the Board of Health (hereinafter "the Board") has heard from a number of consultants and experts on the issue of whether these PFAS will cause a risk to human health and the environment. As your Board of Health agent, I believe that the PFAS found in the turf system will find their way into our soil, groundwater, and drinking water, and therefore pose such a risk to residents of Oak Bluffs as well as the Island due to our sole-source aquifer.

While Ms. Lancaster is no longer the Oak Bluffs' Health Agent (see <https://www.mvtimes.com/2022/02/11/o-b-health-agent-quits-due-death-threat/>), the Board of Health is proposing a moratorium on artificial turf due primarily to the PFAS concerns (see <https://www.oakbluffisma.gov/DocumentCenter/View/7477/Artificial-Turf-Aquifer-Model-Board-of-Health---DRAFT>). Specifically, the draft moratorium states the impetus for the moratorium is:

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

...the siting of artificial turf has the potential to release PFAS and metals in drinking water supply areas; and these pollutants have repeatedly threatened surface and ground water quality throughout Massachusetts; and surface and ground water resources contribute to the Oak Bluffs public drinking water supplies...

The Planning Board Decision is consistent with EPA's designation of the Sole Source Aquifer. In 1988, EPA designated the Martha's Vineyard aquifer as a Sole Source Aquifer. In its Federal Register notice (<https://www3.epa.gov/region1/eco/drinkwater/solemart.html>), EPA stated:

The Martha's Vineyard Regional Aquifer is the sole source of drinking water to all of the residents of, and visitors to, the Island of Martha's Vineyard... There exists no reasonable alternative drinking water source or combination of sources of sufficient quantity to supply the designated service area, nor is there any cost-effective future source or combination of future sources available to serve Martha's Vineyard due to its physical separation from the mainland...the Island's ground water ...is highly vulnerable to contamination due to the Island's geological characteristics and land-use patterns... contaminants can be rapidly introduced into the aquifer system from a number of sources with minimal assimilation... Since all Island residents and visitor trade are dependent upon the aquifer for their drinking water, a serious contamination incident could pose a significant public health hazard and place a severe financial burden on the Island's residents.

The Planning Board decision shares EPA's concerns, and under Section 8.2, has the authority to reasonably regulate projects to protect the WRPOD. Indeed, even TetraTech concludes in its report that, "the understanding of PFAS detection and risk are limited for the vast majority of PFAS compounds, and certainty in such as assessment is not possible at this time." Given the vulnerability of the sole source aquifer, together with the known contaminants and uncertainty regarding additional impacts of the artificial turf, the Planning Board decision is attempting to avoid a serious contamination incident that could result in a significant public health hazard and a severe financial burden to the residents. Because this project can be constructed in a way as to avoid this contamination, the Planning Board decision reflects the belief that it is reasonable to deny the project if the project proponent insists on using artificial turf. The Planning Board's denial of this project as proposed is *not* tantamount to a denial of the project as a whole, but rather a denial of the hazardous materials used in one portion of the project. Should the applicant choose to submit the same development proposal with grass fields, it is highly likely the project would comply with the By-Law.

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

B. Board of Health Attachment –

Dear Members of the Board of Health,

I am writing to bring to your attention the fact that I believe the installation of artificial turf containing per-and polyfluoroalkyl substances (PFAS) will pose a risk to human health and the environment, not only to the Town of Oak Bluffs, Massachusetts, but to the sole-source aquifer that the island of Martha's Vineyard shares. Installation of a field with components known to contain PFAS is an improper action by the Martha's Vineyard Regional High School (MVRHS). I also believe such installation will violate the project specifications as set forth in the decision of the Martha's Vineyard Commission (MVC) dated August 26, 2021. My specific concerns are described in more detail below.

Project specifications require that no PFAS be used. There is no dispute that the project specifications require that the turf be free from PFAS listed in the U.S. Environmental Protection Agency's (EPA) Method 537 or California's Proposition 65.⁴ The project specifications explicitly state:

The best way to safeguard and protect the Towns from future groundwater contamination is to research and test the products we specify for the new multi-purpose synthetic turf field. Our project specifications require that the artificial turf vendor provide third-party independent testing certifying their products and manufacturing processes, including upstream suppliers, do not use any PFAS chemicals currently listed as part of California's Proposition 65 Regulations or identified as part of US EPA's Method 537 to manufacture the components of its turf field products, including the fibers, backing, and any coating materials.

Note that EPA's Method 537 was updated to Method 537.1. The chart of PFAS covered in Method 537.1 is shown below, in Table 1.

⁴ See page 4, number 14.

RE: Martha's Vineyard Regional High School
 Athletic Track and Synthetic Turf Field
 100 Edgartown Vineyard Haven Road
 Oak Bluffs, MA, Map 55 Parcel 2&4

Table 1

Analyte ^a	Acronym	Chemical Abstract Services Registry Number (CASRN)
Hexafluoropropylene oxide dimer acid	HFPO-DA	13252-13-6 ^b
N-ethyl perfluorooctanesulfonamidoacetic acid	NEFOSAA	2991-50-6
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluorodecanoic acid	PFDA	335-76-2
Perfluorododecanoic acid	PFDoA	307-55-1
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluorohexanesulfonic acid	PFHxS	355-46-4
Perfluorohexanoic acid	PFHxA	307-24-4
Perfluorononanoic acid	PFNA	375-95-1
Perfluorooctanesulfonic acid	PFOS	1763-23-1
Perfluorooctanoic acid	PFOA	335-67-1
Perfluorotetradecanoic acid	PFTA	376-06-7
Perfluorotridecanoic acid	PFTDA	72629-94-8
Perfluoroundecanoic acid	PFUnA	2058-94-8
11-chlorooicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	763051-92-9 ^c
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	756426-58-1 ^d
4,8-dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4 ^e

^a Some PFAS are commercially available as ammonium, sodium and potassium salts. This method measures all forms of the analytes as anions while the counterion is inconsequential. Analytes may be purchased as acids or as any of the corresponding salts (see Section 7.2.3 regarding correcting the analyte concentration for the salt content).

^b HFPO-DA and the ammonium salt of HFPO-DA are components of the GenX processing aid technology and both are measured as the anion of HFPO-DA by this method.

^c 11Cl-PF3OUdS is available in salt form (e.g. CASRN of potassium salt is 83329-89-9).

^d 9Cl-PF3ONS analyte is available in salt form (e.g. CASRN of potassium salt is 73606-19-6).

^e ADONA is available as the sodium salt (no CASRN) and the ammonium salt (CASRN is 958445-44-8).

There is also no dispute that the artificial turf system contains several of those PFAS. Specifically, TetraTech, the consultant, found PFOA in the turf and the shock pad; PFHpA in the turf, the shock pad, and the Brock Fill; and PFHxA in the turf, the shock pad, and the Brock Fill, all found in EPA's Method 537.1 (see Table 2 for the lab results).

Table 2⁵

Table 2 - Laboratory Analytical Data Summary for Constituents via SPLP

Location:	MVC TURF GREENFIELD TURF	MVC TURF BROCK SHOCK PAD	MVC TURF BROCK FILL	MVC TURF REYNOLDS 775 GLUE	MVC TURF MAPEI ULTRA BOND	MCP Method 1 Standard ³	MCP Method 1 Standard ³	MCP Method 1 Standard ²	Lowest EPA RSL ⁴	EPA MCL ⁵
Sample Name:	Alpha	Alpha	Alpha	Alpha	Alpha	GW-1	GW-2	GW-3	Tap Water	THQ<0.1
Laboratory:	Alpha	Alpha	Alpha	Alpha	Alpha					
Laboratory ID.:	L2052415-01	L2052415-02	L2052415-03	L2052415-04	L2052415-05					
Sample Date:	11/24/2020	11/24/2020	11/24/2020	11/24/2020	11/24/2020					
Consultant:	CASB	Uniba	Tetra Tech	Tetra Tech	Tetra Tech					
Method(s):										

SPLP Perfluorinated Alkyl Acids by Isotope Dilution & EPA 1312

MA Regulated PFAS:	ng/l	0.545J	1.00J	5.01F	<1.81	<1.83	as total PFAS	NA	40,000,000	NA	NA
Perfluoroheptanoic Acid (PFHpA)	375-85-9	ng/l	0.545J	1.00J	5.01F	<1.81	<1.83	as total PFAS	NA	40,000,000	NA
Perfluorooctanesulfonic Acid (PFHxS)	355-46-4	ng/l	<1.87	<1.75	<1.77	<1.81	<1.83	as total PFAS	NA	600,000	NA
Perfluorooctanoic Acid (PFOA)	335-67-1	ng/l	0.471JFB	0.403JFB	<1.77	<1.81	0.96J	as total PFAS	NA	40,000,000	NA
Perfluorononanoic Acid (PFNA)	375-95-1	ng/l	<1.87	<1.75	<1.77	<1.81	<1.83	as total PFAS	NA	40,000,000	NA
Perfluorooctanesulfonic Acid (PFOS)	1763-23-1	ng/l	<1.87	<1.75	<1.77	<1.81	<1.83	as total PFAS	NA	600,000	NA
Perfluorodecanoic Acid (PFDA)	335-76-2	ng/l	<1.87	<1.75	<1.77	<1.81	<1.83	as total PFAS	NA	40,000,000	NA
TOTAL PFAS: (PFHpA, PFHxS, PFOA, PFNA, PFOS, PFDA)		ng/l	1.02J	1.62J	5.01F	ND	0.355J	20	NA	NA	NA
Unregulated PFAS:	ng/l	1.29J	1.84	<1.77	<1.81	<1.83	NA	NA	NA	NA	NA
Perfluorobutanoic Acid (PFBA)	375-22-4	ng/l	1.29J	1.84	<1.77	<1.81	<1.83	NA	NA	NA	NA
Perfluoropentanoic Acid (PFPeA)	2706-80-3	ng/l	2.01	1.52J	<1.77	<1.81	<1.83	NA	NA	NA	NA
1H,1H,2H,2H-Perfluorododecane-1-sulfonic Acid (6:2FTS)	27618-97-2	ng/l	<1.87	<1.75	<1.77	<1.81	<1.83	NA	NA	NA	NA
Perfluorohexanoic Acid (PFHxA)	307-24-4	ng/l	0.93J	1.03J	2.86F	<1.81	<1.83	NA	NA	NA	NA
Perfluorodecane-1-sulfonic Acid (PFDS)	335-77-3	ng/l	2.07F	<1.75	<1.77	<1.81	<1.83	NA	NA	NA	NA

⁵ at pp. 22-23.

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

Therefore, it appears as though the turf system proposed by the MVRHS does not meet the project specifications required by the final decision of the MVC.

Risk to human health and the environment. *As you know, the Board of Health (hereinafter "the Board") has heard from a number of consultants and experts on the issue of whether these PFAS will cause a risk to human health and the environment. As your Board of Health agent, I believe that the PFAS found in the turf system will find their way into our soil, groundwater, and drinking water, and therefore pose such a risk to residents of Oak Bluffs as well as the Island due to our sole-source aquifer. For example, EPA has recently declared that PFOA is a "likely carcinogen." The Commonwealth of Massachusetts already regulates PFOA and PFHpA in groundwater, soil, and drinking water; installation of the turf will likely increase the levels of these PFAS into our environment, putting us at risk of violating state law. Specifically, Oak Bluffs already has PFAS in our drinking water, and I have reason to believe that installing the PFAS-laden artificial turf field will contribute to our water approaching or exceeding the Maximum Contaminant Level (MCL) of the six PFAS currently regulated by Massachusetts. It is important to note that Massachusetts is going to be regulating additional PFAS in the near future, putting us at additional risk of violating state law.*

In addition to the specific PFAS identified through testing, a high level of total organic fluorine (TOF) was found. The Horsley Witten (HW) report to the MVC dated March 1, 2021 states, "[t]he detection of detection of TOF indicates that PFAS related compounds beyond the list of 24 are potentially present in the materials tested. For comparison purposes, the sum of TOF for all tested material is 117 parts per million (one part per million equals 1,000,000 parts per trillion). It is unclear how much if any of the TOF could leach into the underlying groundwater"

The study and identification of specific PFAS compounds is rapidly evolving. As more PFAS compounds are able to be individually identified my concern, shared by HW is that, "[i]t is reasonable to expect more PFAS compounds will be added to the list of regulated compounds in the future." As the listing of regulated compounds expands, it is not likely that the regulatory threshold will be elevated, rather, more compounds will be included while the threshold will stay the same or even be lowered. This puts the Town at a greater risk of a violation of future regulatory standards.

Massachusetts whistleblower law. *Massachusetts General Laws Chapter 149, Section 185 states that as a municipal employee, I am considered an employee covered by this law. That law's application is outlined in the Oak Bluffs Personnel Policies & Procedures handbook.⁶ This letter serves as written notice that I reasonably believe installation of the artificial turf poses a risk to public health, safety or the environment, and that I am bringing this fact to the attention of my supervisors, i.e., the Board.*

⁶ <https://www.oakbluffsma.gov/DocumentCenter/View/6990/Oak-Bluffs-Personnel-Policies-and-Procedures> at p. 16-17.

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

Conclusion. *Although there is no requirement for a direct application to the Board, the project specifications require that the project be PFAS free by the criteria set forth by the final decision of the MVC. The claims by MVRHS that this project meets the requirements of the MVC have been disproven. Additionally, the stated amount of TOF suggests there are large quantities of yet-to-be identified PFAS present in the proposed products.*

I am concerned that by having brought these facts to light I may suffer professional, and personal, harm. I am aware that proponents of the artificial turf are claiming that I am biased against this project, are actively harassing me and are seeking to engage other locally elected officials in an effort to disparage me. I am not biased against this project. On the contrary, I am simply doing my job, trying to protect the citizens of our community from additional PFAS contamination. I am happy to answer any questions you might have regarding this matter.

Sincerely,

*Meegan Lancaster, Agent
Board of Health*

C. Application of the Dover Amendment.

On July 8, 2020, Town Counsel wrote a letter to T.E. Hopkins, the Chair of the Planning Board, regarding the application of the Dover Amendment to this project (see <https://www.oakbluffsma.gov/DocumentCenter/View/6820/Legal-Opinion-July-8-2020>). According to the Massachusetts Municipal Association (MMA), the Dover Amendment, found at M.G.L. Ch. 40A Section 3) was enacted in 1950 “in response to local zoning bylaws that prohibited religious schools within a town’s residential neighborhoods.”⁷ The applicable part of the statute states:

No zoning ordinance or by-law shall regulate or restrict the interior area of a single family residential building nor shall any such ordinance or by-law prohibit, regulate or restrict the use of land or structures for religious purposes or for educational purposes on land owned or leased by the commonwealth or any of its agencies, subdivisions or bodies politic or by a religious sect or denomination, or by a nonprofit educational corporation; provided, however, that such land or structures ***may be subject to reasonable regulations*** concerning the bulk and height of structures and determining yard sizes, lot area, setbacks, open space, parking and building coverage requirements (emphasis added) (see <https://malegislature.gov/Laws/GeneralLaws/PartI/TitleVII/Chapter40A/Section3>).

⁷ <https://www.mma.org/dover-amendment-can-present-challenges-for-cities-towns/#:~:text=Massachusetts%20enacted%20the%20Dover%20Amendment,within%20a%20town's%20residential%20neighborhoods>

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

In other words, while a zoning by-law cannot regulate or restrict the use of municipal or state land for educational purposes, an exception is carved out for reasonable regulations relating to a number of issues, including "open space." Regulations concerning public health, safety, or the environment are still enforceable regardless of the applicant's proposed educational use. Moreover, the Dover Amendment does not strip local governments of their authority to regulate, unless it is tantamount to a project denial as a whole. Therefore, cities and towns can still apply limitations and requirements related to legitimate municipal concerns, and the burden of proving that this regulation of educational use is unreasonable falls to the applicant.

The Planning Board's authority is outlined in the Town of Oak Bluffs Recodified Zoning By-Laws. Specifically, Section 10.4.8 of the By-Law states that the Planning Board may impose reasonable conditions in order to:

- "[m]inimize...[the] threat of...water pollution";
- "[m]inimize contamination of groundwater from operations on the premises involving the use... of hazardous substances"; and
- "[e]nsure compliance with the provisions of this Zoning By-Law, including... environmental performance standards."

These three goals all relate to environmental protections, including the protection of groundwater from hazardous substances. Indeed, the evidence outlined above demonstrates that the project as proposed threatens Martha's Vineyard's sole source aquifer with hazardous substances, and that no reasonable conditions – other than switching from an artificial turf field to a natural grass field – can minimize these threats.

In the July 8, 2020 letter, Town Counsel stated that the Dover Amendment does apply to the case at hand, given that the fields are part of an "educational purpose." The Planning Board does not dispute this. Town Counsel goes on to state:

The Dover Amendment aims to strike a balance between legitimate municipal goals advanced by reasonable zoning regulations and protected uses – such as educational ones... Under this framework, zoning regulations containing use restrictions that "facially discriminate against the use of land for educational purposes" are obvious violations of the Dover Amendment... Reasonable dimensional requirements, *or other areas expressly mentioned in the Dover Amendment*... still apply to Dover protected uses so long as the zoning restrictions do not "have the practical effect of nullifying the use exemption contained in the Dover Amendment... When an institution considers a ... requirement unreasonable as applied to its project, it bears the burden of "demonstrating that compliance [with the zoning regulation] would substantially diminish or detract from the usefulness of a proposed structure... without appreciably advancing the municipality's legitimate concerns"... This demonstration is heavily fact specific, depending on the context of each case (citations omitted).

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

In this case, the Planning Board and Board of Health have legitimate municipal goals about protecting the drinking water of the island. Moreover, as stated above, the *only* portion of the project that the Boards object to is the use of artificial turf, and the applicant has *not* demonstrated that using natural grass would “substantially diminish or detract from the usefulness” of the field.

It is important to reiterate that the Dover Amendment was written in 1950, before the U.S. Environmental Protection Agency (EPA) was formed, before the Safe Drinking Water Act and Clean Water Act were enacted, and before most people knew what PFAS are and how toxic they can be. It is unlikely that the legislative history contemplated a time when plastic grass coated with hazardous materials was the norm. Indeed, the first artificial turf field was not constructed until 1964.⁸ It is hard to imagine that the legislature at the time would allow drinking water for an entire community to be compromised under the guise of the Dover Amendment. The Planning Board is not alone in this; a bill is currently pending in the Massachusetts legislature to amend the Dover Amendment so as to allow local zoning to consider wetland and natural resource area protections.⁹

Moreover, the Dover Amendment itself states that the municipalities can impose reasonable conditions on “open space.” Open space is defined by the Commonwealth of Massachusetts as:

The term “open space” is often used to refer to conservation land, forested land, recreation land, agricultural land, corridor parks and amenities such as small parks, green buffers along roadways or any open area that is owned by an agency or organization dedicated to conservation. However, the term can also refer to undeveloped land with particular conservation or recreation interest. This includes vacant lots and brownfields that can be redeveloped into recreation areas. Some open space can be used for passive activities such as walking, hiking, and nature study while others are used for more active recreational uses including soccer, tennis, or baseball.¹⁰

In this case, the field in question falls within the definition of open space. The Dover Amendment provides a list of things that “may be subject to reasonable regulations,” and that list includes “open space” as well as the words:

- the bulk and height of structures
- determining yard sizes
- lot area
- setbacks
- parking
- building coverage requirements

⁸https://en.wikipedia.org/wiki/Artificial_turf#:~:text=Artificial%20turf%20was%20first%20installed,the%20Astrodo me%20in%20Houston%2C%20Texas.

⁹ <https://malegislature.gov/Bills/192/H2141>
<https://malegislature.gov/Bills/192/S1325>

¹⁰ <https://www.mass.gov/doc/open-space-and-recreation-plan-workbook/download>

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

All of these words concern the human-made, built environment – buildings, the amount of space the buildings can take up on a particular lot, parking, etc. The legal doctrine *noscitur a sociis* means that an unclear or ambiguous word in a statute should be determined by considering the words with which it is associated in the context.¹¹ Therefore, the ability to impose reasonable conditions on the open space (i.e., the playing field itself) should be considered to include the human-made, built aspects of that open space. As such, the Planning Board takes the position that regulating the human-made materials used in that open space can be regulated, particularly when the proposed materials will contaminate the water supply of the island.

When Town Counsel stated in his letter that “it is more likely than not that the Board is precluded from exercising its power to review the Project beyond an examination of any dimensional limitations and an analysis of the proposed parking plan,” he left out the words “open space.” The plain language of the Dover Amendment gives the Planning Board authority to regulate the open space, and in this case, that is what we are doing. The use of artificial turf in that open space leads to a legitimate concern that the island’s water will be contaminated; and as such, the Planning Board would likely approve the project were it to include only natural grass fields.

Town Counsel also suggests that the Dover Amendment does not extend to Board of Health authority. In this case, the Board of Health is actively seeking to issue a moratorium on the use of artificial turf on Town lands.

On September 9, 2021, Town Counsel sent a second letter to the Planning Board (see <https://www.oakbluffsmma.gov/DocumentCenter/View/7438/Legal-advice-re-Special-Permit-in-WPROD-9-9-21>) regarding whether the Martha’s Vineyard Regional High School (“MVRHS”) requires a special permit under Section 8.2 of the Zoning By-laws. Town Counsel stated, “MVRHS is not exempt from the requirements of Section 8.2 by virtue of the so-called Dover Amendment,” but he reiterated that the Board “may not *unreasonably* condition MVRHS’ selection of location or materials” (emphasis added). The letter noted that the MVC found that “the proposed development would have a more adverse impact upon the environment in comparison to alternative manners of development,” primarily due to the shedding of 441 to 772 pounds of microplastics per year, and the currently unquantifiable risk of PFAS contamination. While the MVC imposed conditions to attempt to control the shedding microplastics, as the applicant has testified, there is no way to control the leaching of PFAS.

Town Counsel’s letter acknowledges that “the purpose of the WRPOD to protect the public health by preventing contamination of the groundwater resources providing water supply for the Town,” and that PFAS is a hazardous substance. The letter notes that:

There is a line of cases, however, affirming municipal authority to review Dover-protected uses under a special permit procedure when an overlay district is established to protect a public resource, such as an aquifer, and the regulations are use-neutral.

¹¹ See, e.g., *Yates v. United States*, 574 U.S. 528 (2015)

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

The opinion goes on to cite several cases (citations omitted) which held:

- “The board does not lack the power . . . [to] require[] . . . a special permit because the locus is within an aquifer protection district. The protection of an aquifer is a valid public interest. But the special permit may not be imposed unreasonably and in a manner designed to prohibit the operation of the [use], nor may the permit be denied merely because the board would prefer a different use of the locus, or no use.”
- “...the Legislature did not intend that [the Dover Amendment] exempt a religious use from lawful wetlands control under a local zoning by-law” because “[t]he Wetlands Protection Act, G. L. c. 131, § 40, has no concern for particular land uses [and] has the broader purpose of protecting wetlands from destructive intrusion . . . the act is use-neutral.”
- “...the board may not apply the special permit requirement in a way that is tantamount to an arbitrary denial or an unwillingness to allow the protected use. . . . Thus, a special permit cannot unreasonably regulate, cannot impose conditions that go beyond statutory limits provided under § 3, cannot be used either directly or pretextually as a way to prohibit or ban the use, and cannot be used to allow the board any measure of discretion on whether the protected use can take place in the district, because to do so would be at odds with the penumbral protections that are provided under § 3.”

These cases confirm that the Dover Amendment does not give carte blanche to applicants of educational projects on government property. Instead, Massachusetts courts have held that municipal boards can require a special permit for projects in aquifer protection districts; that the Legislature did not intend for the Dover Amendment to exempt applicants from environmental damage or destruction; and that so long as the Board does not apply the special permit in a way that is “tantamount to arbitrary denial,” reasonable limits and conditions are acceptable. In the case at hand, then, the Planning Board’s *primary* concern is that the PFAS leaching off the artificial turf will compromise the sole source aquifer and the island’s drinking water, which are valid concerns that can be easily addressed by using natural grass.

The letter goes on to state that:

The Board cannot refuse to issue a Special Permit to MVRHS because the Board would prefer MVRHS to construct Field #1 in another manner or not to construct Field #1 at all with the materials MVRHS has chosen. The Board may not impose conditions on the Project that are “unreasonable” or are designed to prohibit the installation of Field #1.

This instruction appears somewhat contradictory; Town Counsel states the Planning Board cannot refuse to issue a Special Permit on the basis of the “materials MVRHS has chosen,” but then states the Board may not impose “unreasonable” conditions or anything designed to prohibit installation of the field. Requiring MVRHS to abandon a plastic field containing leachable toxic chemicals (which will be placed in an aquifer protection district over a sole source aquifer) is not unreasonable, particularly when a non-toxic alternative exists.

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

The letter also states that:

It is more likely than not that a reviewing court would afford a measure of deference to the Board's imposition of reasonable, non-pretextual conditions directed at requiring MVRHS to establish "control measures" to monitor whether the infiltration of PFAS or toxins into the surrounding soils from the synthetic field – that is, from "on-site operations" – is causing "groundwater quality" . . . "to fall below . . . state standards." Section 8.2.7.3(a). However, since the MVC has imposed conditions (conditions 5.1-5.5, 5-7-5.8, and 5.11) designed to require MVRHS to monitor, report, and limit the infiltration of microplastics into the surrounding soil and ultimately the Town's protected water resources, I am constrained to advise you that the Board needs to exercise caution in considering conditions that are more onerous than those imposed by the MVC.

As the record indicates, there are *no* conditions that the Board can require that would limit or mitigate PFAS from entering groundwater and drinking water. The evidence presented to the Board indicates that there is a genuine risk of this field ("on-site operations") to cause groundwater quality to fall below state standards. While MVC imposed conditions to mitigate the microplastics, it is unable to address the PFAS contamination, and as such, the Board must do what it can to protect the island's drinking water.

The letter states:

In the absence of a scientific record indicating that infiltration of toxic substances into surrounding soils and groundwater would occur to a greater extent than the MVC determined, it is my judgment that, based on the limited case law to date, a reviewing court would likely find that more stringent conditions than those imposed by the MVC to be in excess of the Board's authority. Whether the Board has the legal authority to impose conditions that address different types of monitoring, reporting, and remediation from the MVC's conditions will depend on the evidence before the Board and adopted by it in findings.

As stated above, the Planning Board's record reflects significant amounts of new scientific information regarding impacts of infiltration of toxic substances into surrounding soil and groundwater, indicating that conditions imposed by the Commission are not sufficient to safeguard against contamination. As such, the Board is acting to prevent such contamination of the island's sole source aquifer.


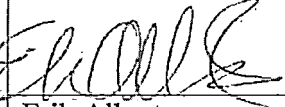

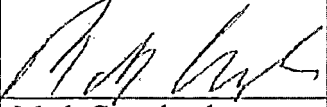
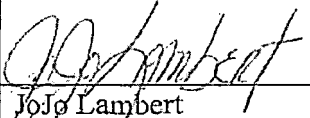
Finally, the Dover Amendment was meant to apply to nonprofits seeking exemptions from local zoning requirements for educational and religious projects. It is unclear where the funding for the proposed project at hand is coming from, but it is possible that private money is being funneled through a nonprofit for construction of this project. The implications of this are potentially far-reaching: if any citizen or group of citizens can pass money through a nonprofit in order to benefit from the zoning relief contained in the Dover Amendment, it defeats the spirit and intent of the law.

RE: Martha's Vineyard Regional High School
 Athletic Track and Synthetic Turf Field
 100 Edgartown Vineyard Haven Road
 Oak Bluffs, MA, Map 55 Parcel 2&4

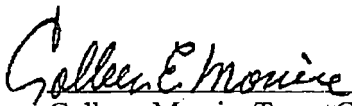
In conclusion, the Planning Board takes the position that it has the authority to regulate the use of open space, as provided in the Dover Amendment, and to pursue its legitimate goals of protecting the island's drinking water and shellfish. Moreover, the applicant has not demonstrated that changing the field from artificial turf to natural grass "would substantially diminish or detract from the usefulness of a proposed structure...without appreciably advancing the municipality's legitimate concerns."

Record of Board Vote.

The members of the Planning Board voted as follows to grant a Special Permit subject to the above-stated terms and conditions:

Signature	In Favor	Against	Abstain	Recuse
 Ewell Hopkins		X		
 Erik Albert	X			
 Bill Cleary	X			
 Mark Crossland				X
 JoJo Lambert		X		

Filed with the Town Clerk by: May 18, 2022


 Colleen Morris, Town Clerk

 Assistant Town Clerk

Oak Bluffs, MA
 Town Clerk's Office
 May 16 2022
 Rec'd for Record
 AT/HSEM/AM

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

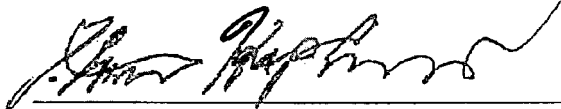
Copy of Special Permit Mailed to:

Superintendent, Martha's Vineyard Public Schools
100 Edgartown Vineyard Haven Rd.
Oak Bluffs, MA 02557

All Noticed Parties (see abutter list)

The Planning Board of the Town of Oak Bluffs hereby certifies that a Special Permit has been **DENIED** to **Martha's Vineyard Regional High School**, 100 Edgartown Vineyard Haven Rd., Oak Bluffs, MA 02557, affecting the rights of the owner with respect to land or buildings at 100 Edgartown Vineyard Haven Rd., Map 55, Parcels 2&4. Said Planning Board further certifies that the decision attached hereto is a true and correct copy of its decision denying said special permit, and that copies of said decision have been filed with the town clerk.

The Planning Board also calls to the attention of the Owner or Applicant that General Laws, Chapter 40A, Section 11 (last paragraph) provides that no special permit [decision], or any extension, modification or renewal thereof, shall take effect until a copy of the decision bearing the certification of the town clerk that twenty days have elapsed after the decision has been filed in the office of the town clerk and no appeal has been filed or that, if such appeal has been filed, that it has been dismissed or denied, is recorded in the registry of deeds for the county and district in which the land is located and indexed in the grantor index under the name of the owner of record or is recorded and noted on the owner's certificate of title. The fee for such recording or registering shall be paid by the Owner or Applicant.



Ewell Hopkins, Chair

Dated: May 16, 2022

A copy of this decision was filed in the office of the Town Clerk, ^{by} ~~on~~ May 18, 2022. Appeals, if any, should be made pursuant to Section 17, of Chapter 40A of the Massachusetts General Laws and should be filed within 20 days of the filing of this decision in the office of the Town Clerk.

Date Appeal Period Expired

RE: Martha's Vineyard Regional High School
Athletic Track and Synthetic Turf Field
100 Edgartown Vineyard Haven Road
Oak Bluffs, MA, Map 55 Parcel 2&4

I hereby certify that no appeal has been filed within the twenty-day period following the date of the filing of this decision.

Attest: _____
Colleen Morris, Town Clerk