

March. 31, 2021

HAI-MVRHS Questions March 2020–March 2021, by Topic

Click each question for written answer from the applicant

See staff report for further discussion

HW = Horsley Witten

OVERSIGHT/LOGISTICS

1. [What role is Daedalus still playing?](#)
2. [Is there currently a licensing agreement between HAI and the high school, or between Daedalus and the high school? If so, please provide a copy.](#)
[FOLLOW-UP: Question for MVRHS: Please provide whatever written agreements are in place between the MVRHS and each of HAI and Daedalus.](#)
3. [How much tree and other vegetation clearing is required for Phase 1 \(apart from the removal of 4 trees to make room for the bus drop-off\)? Would the clearing in the area proposed for the synthetic turf be different if a grass field were proposed for that](#)
4. [Warranties and Insurance](#)
 - a. [Are there warranty-voiding conditions?](#)
 - b. [Provide indications of out-of-warranty costs experienced by other users.](#)
 - c. [Who provides indemnities to MVRHS, and what is their insurance coverage?](#)
 - d. [Is liability insurance for the two options \(synthetic and natural turf\) the same?](#)
 - e. [What is the anticipated start date and duration of construction?](#)
 - f. [Will the school's current insurance policy cover this project?](#)*[FOLLOW-UP: Are there separate warranties for each element of the field? Please provide documentation. Will these be personalized warranties, and can you provide examples of personalized warranties from other HAI projects? Please provide a copy of the current insurance policy that covers the fields. Does the policy cover replenishment and/or replacement of synthetic products following a major storm? If not, where would that funding come from?](#)*
5. [Please provide copies of any agreements the high school has with Daedalus and Huntress.](#)
6. [In the Nov. 13 Huntress letter \(question 21\) the question was. "Are there warranty-voiding conditions?" The answer provided was, "no." As the manufacturer's warranty has not been provided, for clarification, there are any exclusions to the warranty for the In-filled Synthetic Turf System? Is there nothing the owner can do can which might void or limit the warranty?](#)

SPECS/GENERAL

7. [What are the Gmax ratings of the existing and proposed grass fields?](#)
8. [Please provide the MVC with samples of the BrockFILL material.](#)
9. [Please provide the MSDS for the Greenfields carpet material.](#)
10. [What are the square footages for 1\) the synthetic field, 2\) the renovated grass field, and 3\) the JV baseball diamond?](#)
11. [Does the current grandstand have 500 or 800 seats? \(We have conflicting information.\)](#)
12. [What aspects of Option B, phase 1 of the Master Plan are still relevant to this project?](#)

13. [Please provide a separate plan for pedestrian traffic on the site \(acknowledged at 5/5/20 staff-applicant meeting\).](#)
14. [Please confirm the phase one scope includes the following: 400m track \(Field #1\) and natural grass field \(Field #2\).](#)
15. [Is there a plan to remove the old track?](#)
16. [What are the reasons for moving the track?](#)
17. [How long can we expect the existing 400m track will last with routine maintenance? How can you extend its life? Will the new grandstand be designed so that it can be expanded? What would be involved in putting in natural grass instead?](#)
18. [Please respond to the position that it is not appropriate for a competition field to have a track when 1\) seating is behind the track, 2\) use of the field may impact use of the track, and 3\) a bigger field may be more appropriate for the proposed uses.](#)
19. [Will the new grass field be “rain-out” proof?](#)
20. [How much existing topsoil will be stripped? \(Plans say the top 12” are modified.\)](#)
21. [Are there any electric vehicle charging stations for the parking spots?](#)
22. [Will the buildings be all-electric?](#)
23. [Is there a lighting shutdown time?](#)
24. Provide a comparison of the carbon footprint of natural vs. synthetic turf. [See staff report.]
25. Talk more about the proposed infill for the synthetic field, including how it is spread out, where it sits in the system, and whether it migrates over time. [See staff report.]
26. [Confirm that future replacement of the synthetic field will include the same infill and products. \(The MVC could apply a condition that replacement needs to come back for review.\)](#)
27. [How is the sub-base layer for the synthetic field different than that of the natural field, in terms of cost and design?](#)
28. [Is the high school willing to install solar panels on the field house to power the improvements?](#)
29. [Job training: Knowledge of regenerative land use practices is a valuable, climate related workforce skill. Can the applicant please consider using the field renovations and maintenance as a workforce training experience for high school students?](#)
30. [One of the things the MVC looks at is the availability of suitable alternatives, which would include the possibility of all-grass fields. If the MVC does not approve the use of synthetic turf at the High School campus, what alternatives would be available to accommodate the existing athletic program on all natural grass athletic fields?](#)
31. [One of the things the MVC looks at is the availability of suitable alternatives, which would include the possibility of all-grass fields. In this regard, what specific issues were unable to be resolved with the Field Fund a few years ago which led to the termination of discussions? If the general sticking point was the terms of a license agreement, what aspects of that agreement were unable to be agreed? Putting aside the proposal before the MVC, are those issues still a bar to any arrangement with the Field Fund? \(A similar question was posed on Dec. 2, 2020 \(question 17 in the Dec. 12 response from the high school\), and the answer was not helpful.](#)
32. [Please provide the minutes of all MVRHS School Committee \(or subcommittee\) meetings at which the athletic fields project has been discussed.](#)

COST AND FUNDING

33. What will phase 1 of the project cost, and how will it be paid for?
34. How will this project affect taxpayers in each Island town?
35. How much has MVRHS spent annually for maintenance of the current playing fields since 2000?
36. How does this fit in with overall school building plans?
37. How will private funding affect future MSBA requests?
38. Will replacement also be covered by donations?
FOLLOW-UP: Question for MVRHS: Please provide documents/confirmation that the replacement of the synthetic field will be covered by donations.
39. How will future phases be funded?
FOLLOW-UP: What are future phases of master plan Option B likely to cost over 20 years?
40. Are ongoing additional landscaping costs built into the MVRHS budget?
41. Are there ways to organize additional funding, including from MVRHS alumni?
42. What is the current square-foot price for synthetic turf?
43. Detail the total amount committed by the donor, any capital costs that the donated funds will not cover, whether the donated funds are in place, and if they are subject to any contingencies.
FOLLOW-UP: Question for MVRHS: Please detail any capital costs that the donated funds will (or might) not cover, whether the donated funds are already in place, and if they are subject to any contingencies. Will the donors commit to longer term funding for the project, including replacement of the synthetic field (not just once but in perpetuity), and future phases of the master plan? Does the donor's pledge include paying for the entire \$7,729,928 Phase 1 estimated cost? If not, what does it cover specifically?
44. Will the donors commit to longer-term funding to support the project?
45. Relevant to financing, why did the prior Field Fund proposal to install natural turf not go forward? Are those issues still germane in light of the proposal?
FOLLOW-UP: Question for MVRHS: What specific issues or concerns did the high school have with the Field Fund proposal?
46. Breakdown of high school's 2019 annual budget for athletic fields maintenance.
FOLLOW-UP: Question for Mike Taus: How is the high school budget for athletic field maintenance spent? Has the high school spent its entire field maintenance budget on field maintenance in the last 3 years? If not, what portion was spent?
47. What is the cost to maintain proposed field house and other non-field facilities?
FOLLOW-UP: Confirm that the field house is no longer part of phase one. If so, those plans would need to return to the MVC for review. Please provide an estimate for the cost of non-field maintenance for phase one.
48. Please detail any specific equipment for installing or maintaining synthetic turf (other than the field groomer and sweeper attachments which are included in the vendor contract) which the MVRHS would require? Are these capital costs included in the cost comparisons provided?
49. Are you recommending and costing out standard grooming or premium? If the former, does the high school have the equipment and training to do the deep cleaning to remove debris and contaminants?
50. Clarify whether maintenance costs refer to all the grass fields, or just the one in the proposal.
51. Do grass fields typically need a full reconstruction after so many years?
52. Confirm that the estimated grass maintenance costs are for one field or all the fields, and how many acres that entails. (Refer to HW review and responses.)

53. [What is the current square-foot price for synthetic turf?](#)
54. [Is the maintenance budget provided for the natural grass field based on the Annual Maintenance Plan dated June 8, 2020? If not, please provide an updated maintenance budget for the grass field.](#)
55. [Huntress calculates that installation of a synthetic field over a 20-year period is \\$1,675,834. If, alternatively those funds were invested on grass field\(s\) instead, what would be the approximate economic benefit be to the island locally if maintenance crews and other personnel were hired, trained and retained on island?](#)
56. [What would be the annual cost of athletic field maintenance if the high school applied the maintenance proposal for Field #2 to all of the athletic fields, including the game field?](#)

FUTURE PHASES

57. [Has the high school committed to more than phase 1?](#)
58. [If later phases of the Athletic Field Master Plan do not proceed \(or only proceed after a number of years\), what are the implications for the Phase 1 project, in terms of usage, costs, field overlap, usability of remaining fields, etc.?](#)
[FOLLOW-UP: What would be the implications, in terms of usage and the quality of the synthetic field and field #2, if future phases of the master plan are not completed?](#)
59. [Is the high school likely to pursue other phases or elements of the master plan in the future?](#)
60. [What are the implications, if any, of returning a synthetic field to grass, if that proved desirable?](#)
61. [How do we know future phases of the master plan will include only natural fields? The applicant needs to explain the longer-term plan.](#)
62. [Other phases are likely in future, and the master plan recommends more fields. How will that affect the funding, budgets, environmental impacts, etc.?](#)
63. [Although the High School has not included any information in regard to later phases of the program for the improvement of the athletic fields, it is clear that as a consequence of phase 1, a softball diamond will be eliminated. There has been testimony that the diamond would be relocated in an area that is now forested. If cutting down the forest to accommodate the relocation were not permitted, what are the High School's contingency plans?](#)
64. [Is there anything that can be done prior to the installation of a synthetic field which would make the potential conversion to a grass field easier in the future?](#)

MATERIALS

65. [Show whether the proposed shockpad is made from recycled materials.](#)
66. [What is the material for the new running track?](#)
67. [Are there fire test reports for the proposed synthetic carpet and wood infill materials that you can provide to the MVC?](#)
68. [Is a synthetic turf field appropriate for the island in light of the available alternatives?](#)
69. [Does salt affect the 400m track or synthetic turf field surfaces?](#)
70. [Synthetic field and 400m running track are designed as a single project. Would you design the track any differently if the field was natural grass?](#)

71. [Why must Field #1 be synthetic?](#)
72. [Are there alternative track surfaces that are not rubber?](#)
73. [What is the synthetic turf field made of? How is it installed? What is its life expectancy?](#)
74. [Please explain why synthetic turf requires no watering. How do you keep it saturated?](#)
75. [Talk more about the proposed infill for the synthetic field, including how it is spread out, where it sits in the system, and whether it migrates over time.](#)
76. [Is the woven turf backing a new technology and has it been proven in practice? What is its durability?](#)
77. [Please provide any documentation of the risk of inhaled or ingested silica coming from the proposed sand layer of the synthetic field.](#)
78. [Have any of the relatively new hybrid turf/grass fields been considered for MVRHS by Huntress or their predecessors?](#)

USAGE

79. [Please provide a table or tables showing the following information \(acknowledged at 5/5/20 staff-applicant meeting\):](#)
 - a. [Current annual use per field, and the projected annual use for phase 1 only.](#)
 - b. [A list of sports offered at the high school, along with the playing seasons](#)
 - c. [The number players per year, and which fields they use.](#)
80. [Does the school share the goal of not exceeding 680 hours of use on any of its grass fields, as recommended by Huntress? How close will phase 1 get to that goal?](#)
81. [Please provide reference for the STMA 680-820 hours-per-field estimate for grass fields.](#)
82. [Provide intensity factor for field use estimate.](#)
[FOLLOW-UP: Please detail all of the assumptions in the field use analysis provided. In particular, please comment on each of the points raised by Richard Bennet in his email correspondence dated March, 4, 2020, specifically his point 2.](#)
83. [Are the size and orientation appropriate for the projected uses?](#)
84. [Do PE classes include all sports and all years? \(The more junior years would seem not to generate as much wear and tear.\)](#)
[FOLLOW-UP: Question for MVRHS: What specific activities for PE classes take place on the fields? Does this apply to all grades and classes?](#)
85. [In regard to field usage, are the natural grass assumptions premised on the field reconstruction/design, irrigation, drainage and maintenance recommendations generally outlined in the document submitted by the Natural Grass Advisory Group?](#)
86. [What about the Marblehead fields? Why are their field usage rates so high and why can't the Vineyard duplicate their usage?](#)
87. [Would there be user fees for the new track and field?](#)
88. [What rules would exist for users of the new track and field?](#)
89. [Could this project lead to an increase in use?](#)
90. [Has the high school considered MV Soccer United's intentions to use an expanded field network at the Boys and Girls Club? How would that affect the high school project?](#)
91. [Will user fees for community use of the athletic facilities increase as a result of the project?](#)

FOLLOW-UP: Question for MVRHS: Please provide the current fee schedule, and explain how the fees might increase after the project is completed.

92. Will the field be fenced and locked? What are the hours, especially during Covid?
93. Please clarify whether user fees will apply to field use by non-MVRHS students, and provide a copy of the current field use policy.
FOLLOW-UP: Question for MVRHS: Is the field use policy the same as the MVRHS Student Handbook?
94. Could the "community use" (youth groups and summer camps), estimated at 1,125 hours of use, be transferred to other Island fields to reduce usage on the MVRHS fields?
95. What is the overall campus plan for usage and play? Who will use what fields?
96. Provide a diagram showing the current hourly usage of the athletic fields.
97. How does the July 2020 field use analysis account for away games? (The Dec. 28 Q&A document, question 16, addressed the analysis, but not in terms of away games.)
98. Are there other playing fields on the Island that could be used by summer camps and youth groups in lieu of the High School's fields?

MAINTENANCE ACTIVITIES

99. Is there a plan for transitioning maintenance work to MVRHS staff once the product is out of the maintenance agreement AND the warranty period?
100. Please provide the recommended maintenance program for the synthetic field.
101. Is the high school currently using best maintenance practices?
FOLLOW-UP: Questions for MVRHS Facilities Director Mike Taus: What best management practices is the high school currently using for the maintenance of its natural grass fields? Assuming proper construction of the fields and adequate budgeting for maintenance, are there different management practices that would allow the fields to withstand greater usage? If so, a) what are those practices, b) how much more field use could they allow per year, and c) why does the school not use them currently? Does the high school maintenance staff have adequate training to apply the proposed BMPs?
102. Will the MVRHS purchase a maintenance package plan? How much would that cost?
103. How will the high school balance the additional maintenance needed for the fields with the maintenance needed inside the school itself?
104. Is there a plan for incident response if unexpected contaminants get on the field? What would that cost per year?
105. Why are the fields in the condition they are? Would like to understand how we plan to maintain the other five natural grass fields.
106. Can grass fields be better maintained and withstand the high school use?
107. What is the acreage of play area only? (For estimating potential cost of organic maintenance.)
108. Will proposed natural grass program succeed?
 - a. Grading, irrigation, soil amendments, planting, nutrient management, etc.
 - b. Does the proposed maintenance program align with current BMPs?
 - c. Work with organic grass expert to develop/revise program?
109. Please outline the processes for grading, irrigation, planting, aeration, and drainage to date.

110. What qualifications and requirements will there be for specialized contractors and equipment? Will this specify experience in natural grass field maintenance?
111. Are Huntress and MVRHS willing to work with a natural sports turf specialist to finalize/revise the construction and maintenance plans for Field 2, provide education to the school, and carry out maintenance? Questions were raised as to:
 - a. Field size and orientation
 - b. Grading
 - c. Resurfacing
 - d. Irrigation
 - e. Drainage
 - f. Soil products
 - g. Seed mixtures
 - h. Watering
 - i. Mowing
 - j. Fertilization
 - k. Liming
 - l. Pesticides
 - m. Aeration
 - n. Topdressing
 - o. Maintenance budget
112. Will the current irrigation system, including a well and booster pump, be upgraded in order to adequately irrigate all the fields?
FOLLOW-UP: Will irrigation requirements for field 2 reduce the water available for irrigating the other fields? Confirm that phase 1 before the commission will have no impact on existing fields besides field 1 and field 2, with the exception of reducing their annual usage.
113. Is it possible to provide a full-scale irrigation design at this stage? (To identify water source location, max pumping capacity, etc.)
114. Do the proposed improvements to the natural grass field (i.e. re-establishing the mid-field crown, improving the topsoil composition and adding infiltration trenches) include any other reconstruction or renovation? Are your recommendations consistent with TURI (or other applicable) recommendations for establishing a grass field capable of moderate to heavy usage with proper maintenance?
115. What are the risks of failure to properly maintain synthetic turf (for instance, due to lack of funding; e.g. loss of warranty protection, injuries, etc)?
116. Does the agriculture program at the high school teach organic grass maintenance? Could that program be involved in maintaining the high school fields?
117. In regard to maintenance activities, Chris's latest answers don't appear to cover infill replenishment – both periodic and regular top dressing (X% every #yrs) – or twice-annual deep-tine grooming. Can we assume that those activities are covered by the 2-year plan and that those costs are included in the detail of ongoing maintenance costs?
118. Are the following activities contemplated?
 - a. Spring/fall prep (Chris's answer says 2x in first year, but should it take place 2 times/year with a day each time?)
 - b. De-compacting

c. Watering

119. Clarify grass maintenance costs – replacement vs. sod only.
120. What qualifications and requirements will there be for specialized contractors and equipment? Will this specify experience in natural grass field maintenance?
121. Are Huntress and MVRHS willing to work with a natural sports turf specialist to finalize/revise the construction and maintenance plans for Field 2, provide education to the school, and carryout maintenance?
122. Provide details on existing sprinkler system for the playing fields.
123. What is the high school not doing in terms of current natural grass maintenance that leads it believe it must pursue a synthetic field?
124. How does HAI reconcile the statement made in the Q&A dated Dec. 28 (Question 1), “In my opinion, the natural grass fields at MVRHS cannot withstand greater usage, with or without additional BMP activities” to the statement by the Natural Grass Advisory Group in their submission that the problem with the MVRHS natural grass fields is not overuse but inadequate maintenance, and the statement in the Horsley Witten case study report, “It is likely that MVRHS could meet its usage needs with natural grass if they would commit to a maintenance program that focused on soil testing, aeration, soil amendments, frequent mowing, and the use of organic fertilizer to promote good soils and a strong root system”?
125. Please provide a list of the existing high school fields and the times of year when they are intentionally taken offline in order to support the field maintenance and quality. Please also show how that schedule aligns with the existing and proposed maintenance plans.
126. Natural versus artificial materials: Wherever possible, working with nature, rather than against it, is the preferred method of climate adaptation. Today there are grass field designs that are said to better withstand heavy use, reduce impacts to the land and absorb more carbon. Based on regenerative landscape practices, these techniques better absorb water, decrease the need for irrigation, and reduce the need for chemical fertilizers. Can the applicant please explain why these techniques have not been proposed for the athletic field renovations? And will the applicant consider proposing them?
127. Natural versus artificial materials: Wherever possible, working with nature, rather than against it, is the preferred method of climate adaptation. Today there are grass field designs that are said to better withstand heavy use, reduce impacts to the land and absorb more carbon. Based on regenerative landscape practices, these techniques better absorb water, decrease the need for irrigation, and reduce the need for chemical fertilizers. Can the applicant please explain why these techniques have not been proposed for the athletic field renovations? And will the applicant consider proposing them?

WASTEWATER

128. Please provide plans and details for the septic tight tanks and future tie-in to sewer.
129. How many bathrooms already exist on-site? Only the two portable toilets?
130. Please provide information about how frequently the proposed tight tank will be pumped out, and where the effluent will be disposed of.

131. [Please provide a letter from the Oak Bluffs board of health stating their position on the installation of the tight tank, and a letter from the town sewer board stating that the project can be connected to the sewer system once space is available.](#)
132. [Independent confirmation that the infill will not leach nitrogen.](#)
133. [Options for additional nitrogen reduction benefits for parking areas.](#)

STORMWATER/DRAINAGE

134. [What intensity of storm is the storm drainage system engineered to?](#)
135. [Provide details about rainwater harvesting and environmental educational opportunities for the high school, as mentioned in responses to HW.](#)
136. [Confirm whether the grass field will include underdrains, and confirm whether the proposed leaching basins are sized to accommodate predicted flows. \(Refer to HW review and responses.\)](#)
137. [Confirm that effluent from the synthetic field will be tested for nitrogen species. \(Refer to HW review and responses.\)](#)
138. [Will there be stormwater monitoring post-construction within the drainage system for Field #1?](#)

ENVIRONMENT

139. [Has Huntress investigated the likelihood of the synthetic field shedding microplastics into the environment? Is there a way to capture particles smaller than the proposed 0.212 mm geotextile fabric, or is there a finer fabric?](#)
140. [How will the plastic fibers be prevented from entering the watersheds over time?](#)
141. [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?](#)
142. [What firms will be involved in the PFAS/PFOS testing, and will the methods account for local environmental conditions? EPA Method 537 identifies 18 different PFAS in drinking water, but there are many thousands in existence.](#)
143. [How will fertilizers for the grass field be controlled so as not to negatively impact users or the environment?](#)
[FOLLOW-UP: If nitrogen is applied at the rates specified in, and otherwise in accordance with, the Island fertilizer regs, how much of that nitrogen is typically absorbed by the field, and how much goes into the groundwater? If fertilizer-grade urea cannot be applied to the synthetic turf field to melt ice, what is proposed to be applied to enable the field to be used in freezing temperatures?](#)
144. [Please describe what happens to synthetic fibers over time \(from wear and tear\), including at what point in their life it will occur with MVRHS projected usage. Please also provide photos of synthetic fields after a variety of years of use.](#)
[FOLLOW-UP: Please provide the photos of synthetic fields at various stages in their life cycles, including ones nearing end of life \(these don't have to be the same products as proposed\). Please comment on the effect of UV rays on the grass blades over time.](#)
145. [Synthetic Turf fibers may resist turf bind and work free at 18 lbs of force. What does that equate to?](#)

146. [Please provide a cost and energy comparison of current and proposed electrical use.](#)
147. [In the Q&A dated Dec. 28 \(Question 11\), HAI’s response notes that the fibers passed the UV tests. What does that mean to have passed the test in terms of the fiber's resistance to decomposition, durability, breakage, etc.? What has to be demonstrated to get such a score \(or any other\)?](#)
148. [Groundwater monitoring: Climate change will bring changes to the Island economy. For example, the potential for fewer visitors due to extreme weather events and their aftermath and a decline in the coastal real estate market. Another thing that will detract from the visitor economy is tainted groundwater, which is our sole source of drinking water and also enters our coastal ponds, affecting recreation and the shellfishing industries. If the two groundwater monitoring wells reveal the presence of microplastics, chemicals, or other contaminants related to the turf field, what will be done since the field will already be in place?](#)
149. [If the groundwater monitoring wells reveal the presence of microplastics, chemicals or other contaminants, what will be done since the field will already be in place?](#)

HEALTH AND SAFETY

150. [What is meant by a critical fall height of 1.2 meters for the synthetic field?](#)
151. [Are there more head and knee injuries with artificial turf than natural turf?
FOLLOW-UP: What are the concussion rates for the proposed system?](#)
152. [Will the synthetic field get hotter than a typical grass field? Please provide details.
FOLLOW-UP: Assuming a clear, hot summer day, what is the range of how much hotter the proposed synthetic turf would be, compared to natural grass turf? Please note the assumptions underlying your answer.](#)
153. [Is there any danger that the small particulates that make up the infill can be ingested, inhaled by athletes or get in their eyes?](#)
154. [What other risks are associated with synthetic fields \(friction, sliding, etc.\), and how have they been addressed by this plan?](#)
155. [Provide a field disinfection plan that meets new Covid response protocols and follows manufacturer guidelines.
FOLLOW-UP: Please specify which cleaning and disinfection chemicals/products will be used for spot-cleaning the field. Are there studies showing that rain water is enough to ward off bacteria like MRSA?](#)
156. [Independent confirmation that the synthetic field products do not contain fire retardants.](#)
157. [Independent confirmation of temperature data \(how much higher than natural grass\).](#)
158. [Provide a fire safety plan for the synthetic field.
FOLLOW-UP: Please reference the specific organizations and provide specific documents that conclude that synthetic turf is non-flammable. The Iron Turf MSDS states “material will burn in a fire,” and combustion products contain carbon dioxide, carbon monoxide, various hydrocarbons. \(Standard 29 CFR 1910.1200, referenced in response to question 1 on Nov. 13, refers to hazardous chemicals, not flammability.\) Please also provide the COD FF 1-70 test results for the Iron Turf product.](#)
159. [Do the federal flammability standards \(COD FF 1-70\) apply to synthetic fields? Are there other fire safety standards that apply specifically to synthetic fields?](#)

160. [On the issue of fire safety, please address the toxicity of smoke from a potential fire.](#)
161. [Infill may not ordinarily go airborne, but what about when it is not saturated, and how often is a non-saturated condition expected to occur? What are the risks if the infill becomes airborne in a heavy windstorm? What about infill “splash”?](#)
162. [Provide more information about the testing of PFAS and other contaminants. \[See staff report.\]](#)
163. [Who is being consulted to determine the location of the proposed groundwater monitoring wells, and are two wells enough?](#)
164. [We need a simple, clear plan for the monitoring wells, including the process for annual inspection, and what and who will determine if there is a problem.](#)
165. [What chemicals will be used in maintaining the natural fields \(amounts and types\)?](#)
166. [Explain the reduced impact associated with the shockpad under the synthetic field. Why is the range of risk reduction so large? What is the stated reduction relative to?](#)
167. [Confirm that field disinfection during the pandemic is limited to spot cleaning.](#)
168. [Will there be written guidance to protect athletes from high temperatures associated with the synthetic field? If so, please provide an example of what that guidance might look like.](#)
169. [What does it mean for the products to have passed the FIFA testing? \(See May. 26 Q&A.\)](#)
170. [Similarly, in the Q&A dated Nov. 13 \(Question 18\), HAI’s response notes that with wear and tear, fibers can fold and lay over. What effect does this have on durability, breakage, etc.? Given the anticipated use of the field over time \(per the high school estimates of use\), after how many hours/years of usage can that be expected to begin to occur?](#)
171. [In the Q&A dated Nov. 13 \(Question 19\) and elsewhere, HAI indicates that the plastic carpet blades can be dislodged with 18 lbs of force. With that in mind, how much breakage or pulling out of the fibers would occur during a typical athletic event, considering all the various types of contact with the field, including kicking, falling, scooping of lacrosse sticks, scuffing of cleats, and abrupt stops/turns?](#)
172. [What can be expected in terms of the percentage of carpet fiber loss annually due to wear and tear \(i.e. normal use, exposure to UV light, etc.\)? It would seem that carpet loss is expected, since the field must be replaced after 8–10 years.](#)
173. [Please specify the risks to athlete health and wellbeing if the synthetic turf field is not properly maintained once the 2-year maintenance program has ended.](#)

DISPOSAL/END OF LIFE

174. [What is the expected life span of the new track? How will it be disposed of at the end of its life?](#)
175. [Synthetic turf at end of life – how is the end-of-life determination made? We discussed GMax and HIC testing, along with infill depth and fiber wear testing.](#)
176. [Confirm that the proposed field is made from recycled materials.](#)
177. [Conduct an alternatives analysis for end-of-life recycling, or other waste stream diversion. *FOLLOW-UP: We still need to see an alternative plan for disposal, which accounts for the possibility that recycling will not be an option at the end of life.*](#)
178. [If recycling is not an option at the end of the synthetic field’s life, who will decide how, where, and when to dispose of the materials?](#)
179. [Does “no recycling for energy” mean that the products can’t be burned?](#)

180. What is the total estimated cost of recycling the synthetic turf field, and does that include the costs of dismantling, testing, packing, and shipping all field components? Is that cost included in the donated funds? What specifically is the \$50,000 in escrow funds intended to cover and under what conditions would funds be able to be withdrawn from the account? What entity or entities will provide the escrow funds?
181. If recycling is not an option at the end of the synthetic field's life, what alternatives will be pursued, and what would they cost?
182. What is the useful life, and the estimated cost and disposal plan, for the field elements other than the carpet: shock pad, infill, and the silica/sand layer? This estimate should include the costs of removal, transport, and any fees payable to a recycler/landfill.
183. What if recycling is not actually an option when the time comes (for instance, if the recycling business for this type of product is no longer economic)? What are the alternate disposal plans?
184. In the Q&A dated Dec. 28 (Question 23), HAI states that the escrow money can be accessed if the manufacturer "is unable for any reason to recycle as per the specifications". What are those specifications, and if they have already been provided, where can they be found?
185. Based on the Firefly Sports sample analysis for end-of-life determination, it appears the synthetic field should be regularly tested. However, the analysis does not seem to indicate how many of the tests would need to fail in order to conclude the field must be replaced. Is there an objective standard by which the high school can determine that the field needs to be replaced (and with which the manufacturer would agree)?
186. Firefly Sports Testing is quoted in an answer provided by the Applicant (Jan. 25, 2021 Q&A) as saying, "Other than g-max there is no other single end-of-life test recognized in the industry." Specify the condition of the field components that would give rise to a failing test score (a cumulative D or F), making replacement necessary.
187. You have stated that the turf blades won't break or pull free because there is not enough force applied and because of the woven technology. You have also stated that with wear and tear, fibers can fold and lay over (Nov. 13, 2021 Q&A, question 18). Your submissions indicate the product (i) meets the European standard (at least in part for durability, although it is not clear that "meeting the standard" means there is no loss of mass), and (ii) meets the FIFA standard, which may or may not be relevant on the issue of loss. Finally, the Labosport testing concluded that there was zero yarn loss over the course of the testing and that the monofilament fibers retained their integrity and remained upright through the testing. In your opinion, is there any loss of plastic through degradation from wear and tear and UV exposure? If there is loss, what percent (by weight) is lost by the end of the product's useful life?

TRAFFIC AND PARKING

188. How will the high school coordinate spillover parking from Sharks and MV Soccer United games, or from other events?
189. Is the proposed new pedestrian walkways and parking along Sanderson Road part of this proposal?
190. Are the new parking & walkways along Sanderson part of phase one?
191. What is the effect on school bus parking?

192. [Will there be charging stations for future electric busses?](#)
193. [Confirm total current and future parking spots at the school.](#)
194. [The Oak Bluffs Planning Board is concerned about the Edgartown-Vineyard Haven Road corridor in general. Provide more information about the effects on traffic.](#)