

**COMMONWEALTH OF MASSACHUSETTS**  
**LAND COURT**  
**DEPARTMENT OF THE TRIAL COURT**

ESSEX, ss.

MISCELLANEOUS CASE  
NO. 19 MISC 000187 (RBF)

\_\_\_\_\_)  
MICHAEL SILVERIO )  
 )  
Plaintiff, )  
 )  
v. )  
 )  
TOWN OF NORTH ANDOVER, and THE )  
PLANNING BOARD OF NORTH ANDOVER, )  
 )  
Defendants. )  
\_\_\_\_\_)

**MEMORANDUM AND ORDER ALLOWING IN PART AND DENYING IN PART**  
*WAS* ~~PLAINTIFF'S~~ **PLAINTIFF'S MOTION IN LIMINE**

In this action Michael Silverio seeks judicial review pursuant to G.L. c. 40A, § 17, of the approval of a site plan special permit granted to the Town of North Andover (Town) by the Town's Planning Board (Board) to make improvements to a roughly 16-acre town-owned recreational field (field) located in the R-4 residential zoning district under the Town of North Andover Zoning Bylaw (bylaw). The site plan special permit approved a site plan showing the creation of 2 multipurpose fields, 2 softball/baseball fields, shuffle ball courts, 2 half-court basketball courts, 2 children's playgrounds, an amphitheater, two picnic areas, bocce courts, two multi-purpose courts, walking paths, 148 parking spaces, and other amenities (project). As part of the project, lighting is proposed for the walking paths and athletic fields, and synthetic turf for

the athletic fields. The project is a municipal recreational use under the bylaw, a use permitted in the R-4 residential zoning district "as of right." without the need for a special permit.

Mr. Silverio owns property that abuts the field. As relevant here, Mr. Silverio alleges that (1) the project's synthetic turf softball field and multi-use synthetic turf field will create heat island effects that will affect his property, and (2) the "crumb rubber" that is used for the artificial surfacing contains a "toxic cocktail" of carcinogenic chemicals and the artificial grass blades contain lead that will inevitably migrate offsite, into the air and the water. Mr. Silverio intends on calling three expert witnesses regarding synthetic turf fields, two who will testify regarding the heat island effect. Mr. Silverio also intends to examine Town officials and witnesses concerning their consideration of environmental impacts.

The Town seeks to preclude Mr. Silverio from introducing evidence regarding synthetic turf, because there are no requirements or criteria in the bylaw that authorize the Board to deny the project on the basis of the use of synthetic turf or the use of certain components of synthetic turf. Mr. Silverio argues that the synthetic turf fields will impede the natural infiltration of precipitation, resulting in loss of stormwater recharge, and cause heat island effects. He argues that groundwater recharge, as a "natural feature", as well as the existing grass fields, will not be protected.

The Defendant's Motion in Limine Requesting the Court to Exclude Evidence and Testimony Regarding the Use of Synthetic Turf and the Health and Heat Effects of the Same (Motion in Limine), was filed on January 29, 2021. Plaintiff's Opposition to Defendants' Motion in Limine was filed on February 8, 2021. The court heard the Motion in Limine on February 17, 2021 and took the matter under advisement. This Memorandum and Order follows.

## Analysis

The Town argues that evidence regarding synthetic turf should be excluded because there are no site plan design criteria that address the type of ground covering used, and therefore the condition permitting the synthetic turf is not challengeable on appeal. The first question is whether evidence concerning the synthetic turf is relevant to Mr. Silverio's standing. To have standing to challenge the decision, Mr. Silverio must be a "person aggrieved" under G.L. c. 40A, § 17. He must assert "a plausible claim of a definite violation of a private right, a private property interest, or a private legal interest," *Harvard Sq. Defense Fund, Inc. v. Planning Bd. of Cambridge*, 27 Mass. App. Ct. 491, 493 (1989), and the right or interest asserted must be one that the bylaw intends to protect. *Standerwick v. Zoning Bd. of Appeals of Andover*, 447 Mass. 20, 27-28 (2006). See *Murchison v. Zoning Bd. of Appeals of Sherborn*, 485 Mass. 209, 212-214 (2020). The project is a municipal recreational use, a use the bylaw permits as of right in the R-4 zoning district. Harms from an as-of-right use that complies with all setback and dimensional requirements of the bylaw are not, by definition, harms to an interest protected by the bylaw. Rather, the bylaw, by allowing the use as-of-right, expressly deems those harms acceptable. Based on the project's use as municipal recreation, the synthetic turf cannot create a harm that renders Mr. Silverio a "person aggrieved."

Of course, the project is not solely an as-of-right use, but is also subject to site plan review. The bylaw sets forth criteria for site plan review, and these criteria create protected interests the harm to which can provide the basis for standing. Any site plan review criteria that Mr. Silverio can point to that would have protected him from the complained-of harm from the synthetic turf could be a basis for standing. The bylaw sets out the following relevant guidelines for site plan review:

A. General. (1) Conformance with all appropriate provisions of the Zoning Bylaw. (2) Protection of abutting properties from detrimental site characteristics.

B. Environmental. (1) Protection of unique or important natural, historic or scenic features. [...] (4) Adequacy of the proposed drainage system to mitigate runoff increases and protect water quality. [...] (8) The proposed development must not present a demonstrable adverse impact on the surrounding area resulting from excessive noise, dust, smoke, or vibration which is higher than levels now experienced from uses permitted in the surrounding area. [...]

E. Stormwater management. (1) At a minimum, all projects subject to site plan review shall comply with the criteria, specifications, and performance standards of the most recent version of Massachusetts Stormwater Management Standards and accompanying Stormwater Management Handbook. The Lake Cochichewick Watershed Area shall be considered a critical area in terms of applicability of the standards. [...]

Bylaw, Part 3. While the site plan review criteria address “detrimental site characteristics” and “excessive noise, dust, smoke, or vibration,” under which the Board could mitigate other grounds for nuisance, these criteria do not mention of heat effects, and such effects do not fall within their penumbra. Read together, the criteria protect Mr. Silverio from other environmental harms, but do not protect his property from heat island effects. Evidence of the synthetic turf’s adverse heat island effects is therefore irrelevant to Mr. Silverio’s standing and will not be admitted for that purpose.<sup>1</sup>

The next question is whether the evidence concerning the synthetic turf and its adverse effects is admissible evidence addressing the merits of the case. The Board was within its rights to require a site plan review for an otherwise as-of-right use so long as the site plan review provision of the bylaw “(a) set forth proper standards for review; (b) [did] not authorize prohibition of the permitted use; and (c) provide[d] for regulation of the permitted use through reasonable terms and conditions.” *Muldoon v. Planning Bd. of Marblehead*, 72 Mass. App. Ct. 372, 374 (2008). Site plan review for an as-of-right use may not be used by a board to deny a

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<sup>1</sup> Should Mr. Silverio’s anticipated heat island effects come to fruition, nothing in this Memorandum and Order would preclude him from bringing a nuisance action on those grounds. Of course, the court expresses no view on the legal or factual merits of such a claim.

use, but rather to “impos[e] reasonable terms and conditions on the proposed use.” *SCIT, Inc. v. Planning Bd. of Braintree*, 19 Mass. App. Ct. 101, 105 n.12 (1984), citing *Y.D. Dugout, Inc. v. Board of Appeals of Canton*, 357 Mass. 25, 31 (1970). In imposing those conditions, “[t]he board is forbidden from entertaining any ‘standard, criterion or consideration not permitted by the applicable statutes or by-laws.’” *Muldoon*, 72 Mass. App. Ct. at 374, quoting *Britton v. Zoning Bd. of Appeals of Gloucester*, 59 Mass. App. Ct. 68, 73 (2003); *Mechanicwillow, LLC v. Evans*, 28 LCR 587, 593 (2020) (18 Misc. Case No. 000183) (Vhay, J.). If the Board has entertained the proper standards under the bylaw, the next question becomes “whether the board’s conditions are reasonable, based on the facts found by the court, in light of the use or structure that triggers site-plan review.” *Mechanicwillow, LLC*, 28 LCR at 593.

Evidence concerning the synthetic surfacing material will be admissible, therefore, only to the extent that the Town’s use of the material would have been grounds for denial of the site plan special permit. There must be something in the bylaw, a “standard, criterion or consideration,” *Britton*, 59 Mass. App. Ct. at 73, that would have allowed the Board to deny the site plan special permit without being unreasonable. As outlined above, none of the applicable criteria address “heat island” effects that Silverio complains of. Had the Board denied the site plan special permit for this as-of-right project on the basis that it would create heat island effects with the use of synthetic turf, the denial would likely be overturned on appeal, since there is nothing in the Site Plan Review criteria that permits the Board to regulate the project on those grounds. It was not unreasonable for the Board to interpret “unique or important natural, historic or scenic features” to exclude the existing lawn on the 16-acre site. Although Mr. Silverio’s experts are prepared to testify as to the deleterious effects of the synthetic turf from a climate perspective, that is not a basis to challenge this site plan special permit.

The site plan review criteria do, however, require the Board to consider the “adequacy of the proposed drainage system to mitigate runoff increases and protect water quality.” Bylaw, Part 3 at B (4). Mr. Silverio argues that the Board’s approval of the synthetic surfaces is unreasonable given the “toxic cocktail” of chemicals in the crumb rubber and the lead content of the synthetic turf. While this specific criterion says nothing explicitly about toxic cocktails or lead requirements, it does afford the Board the ability to deny the site plan special permit on the basis that water quality will be adversely impacted. If the synthetic materials—by their design or by their disintegration—will negatively impact water quality or cause the project to violate the stormwater management criteria, then evidence concerning the synthetic surfacing is relevant. Evidence concerning the effects of synthetic turf and its components on water quality will not be excluded.

#### **Conclusion**

For the foregoing reasons, Motion in Limine is **ALLOWED** in part and **DENIED** in part. Expert testimony and evidence regarding the heat island effects of synthetic turf is excluded from trial. Expert testimony and evidence regarding the effects of synthetic turf on water quality will, if otherwise admissible, be heard at trial.

#### **SO ORDERED**

By the court (Foster, J.) /s/ Robert B. Foster

Attest:

/s/ Deborah J. Patterson

Deborah J. Patterson, Recorder

Dated: February 26, 2021