



TOWN OF LOS GATOS
PARKS AND SUSTAINABILITY
COMMISSION REPORT

MEETING DATE: 08/03/2026

ITEM NO.: 4

ADDENDUM

DATE: August 03, 2026
TO: Parks and Sustainability Commission
FROM: Nicolle Burnham, Parks and Public Works Director
SUBJECT: Provide a Recommendation to Town Council Regarding the Future of
Creekside Park Synthetic Turf Field

REMARKS:

Attachment 3 contains public comments received by 11:00 a.m. on Friday, July 31, 2026.

Attachments Previously Received with Staff Report:

1. Kimley Horn Report
2. GMAX Test Results Dated 5/30/2025, 7/14/2026, and 7/27/2026

Attachment Received with this Addendum:

3. Public Comments

PREPARED BY: Nicolle Burnham
Parks & Public Works Director

From: Leanne McAuliffe
To: [PPW Comment](#)
Subject: Public Comment - Parks and Sustainability Commission meeting August 3, Creekside Field Replacement
Date: Friday, July 31, 2026 11:00:21 AM
Attachments: [SCCMA Artificial Turf Report by Kimley-Horn - ESD 24-01 Evaluate the Use of Artificial Turf Versus Living Groundcovers - Sunnyvale.pdf](#)
[Los Gatos.pdf](#)

[EXTERNAL SENDER]

Dear Parks and Sustainability Commissioners

The Kimley Horn Creekside Sports Park Artificial Turf Replacement Assessment, though better than some reports, is still biased towards artificial turf and missing some basic and important data. I only have time to address a few below. When deciding whether or not to accept this Assessment or request amendments, and when you decide what to recommend to the Town Council please consider the attached Santa Clara County Medical Association letter and the following points :

PAGE 3. Reference is made to the County of Santa Clara Public Health Department in 2024 stating it is *uncertain* whether artificial turf itself is harmful.

It would have been more balanced if the writer had also included the fact that the Santa Clara County Medical Association (SCCMA) does not support artificial turf for children and youth and in fact recommends an artificial turf ban on public and residential property. **Attached is a letter the SCCMA recently sent to Sunnyvale City Council specifically addressing the Kimley Horn Turf Report completed for Sunnyvale.** Sunnyvale's report also happens to reference some of the information from the Kimley Horn assessment made for Los Gatos so given the commonalties much of this letter is especially relevant to our town also.

PAGE 3. Reference is also made to the Federal Research Action Plan (FRAP) Report on Tire Crumb Rubber regarding metals exposures to artificial turf users. **But this FRAP Report does not give artificial turf the all clear and it clearly states that itself.**

As commissioners you are already likely aware, tire crumb rubber is absolutely NOT the only issue with plastic grass as some industry proponents claim. However, on the subject of tire crumb rubber, in April 2024, the EPA released Part 2 of a Federal Research Action Plan (FRAP) report which studied Recycled Tire Crumb Rubber Exposure Characterisation.

The Synthetic Turf Council (STC) jumped on this report claiming it verified that plastic grass was safe. Melanie Taylor, President and CEO of the STC, stated "We thank the EPA for the dedication and time that went into this report and are pleased to see it reaffirms what other research has shown: *synthetic turf and its system components are safe*". It is not! An uninformed, innocent consumer could easily believe this blanket statement but this statement

is incorrect and here are just a few reasons why:

- Both parts were a study of tire crumb rubber ONLY (NO other components or infills were studied)
- Part 1, (just the Tire Crumb Rubber Characterization part) released in July 2019, **only studied tire crumb rubber to F140 degrees.** (Wholly insufficient given plastic fields with tire crumb rubber easily reach F180 degrees an average day and F200 and over on a hot day as documented for Creekside.)
- Part 1 did not take into account that children have higher exposures and are uniquely vulnerable to even low levels of toxins
- The study itself stated:
"What is this report and what is it not...Part 1 provides tire crumb rubber characterization research results that provide greater insight into potential human exposure to chemicals present in the material. Neither Part 1 nor Part 2 of this study, separately or combined, will constitute a human health risk assessment of playing on synthetic turf fields with tire crumb rubber. The results of the research described in the final versions of both Part 1 and Part 2 of this study can inform future risk assessments."
- What Dr Kyla Bennett, PEER had to say about Part 1,
"Unfortunately, this report is just the latest example of EPA abdicating its public health responsibilities."
- Part 2, the Exposure Characterization, only studied a few chemicals
- Part 2 only had a very small subject pool (which I believe did not include small children).
- Jeff Gearhart of the Ecology Center stated Part 2 of the study basically admits to not doing what it set out to do. Deep within Part 2 of the study it states:
"the data was not adequate to support exposure modeling approaches"
"there was limited or no data for some of the important parameters needed to estimate exposure for athletes using synthetic fields with tire crumb rubber"
"there are a large number of chemicals substances associated with tire crumb rubber infill that have not been included in exposure assessments. Lack of certainty and identification of many of these chemicals and lack of measurements inhibit a more complete cumulative exposure assessment"
- NO PFAS were analyzed in either Part 1 or Part 2 of the study. (The FRAP study itself was requested by the Obama administration in 2016 which was before PFAS were discovered in plastic grass by Jeff Gearhart and Dr Kyla Bennett in 2019. Part 1 was also released before the PFAS discovery.)

PAGE 4. Table 1.

Chemicals in the artificial turf should include **antibacterials, colorants, PFAS, flame retardants, UV stabilizers, anti-static treatments, phthalates, latex, etc.**

As per many maintenance manuals, other chemicals that may be applied to the surface of artificial turf can include **pesticides, fungicides, antibacterials, anti-statics, and solvents, etc.** These chemicals should be included in Table 1.

PAGE 5. Under Heat Generation it refers to Los Gatos having a "mild" climate.

Mild compared to what? When artificial turf in and around Los Gatos has measured 40 to 87 degrees hotter than natural turf on "mild" to "hot" days I wouldn't call this a mild problem. These temperature differences were not just recorded on tire crumb infilled fields but also on cork infilled fields and non-infilled fields. Los Gatos often has conditions which lead it to have the hottest temperatures on artificial turf, that being sunny, cloudless and windless days and we often have daytime highs that exceed those of our immediately neighbouring towns and cities such as San Jose, Saratoga and Campbell. **These extremely elevated temperatures on artificial turf deserve more attention.** Please see attached slides.

PAGE 6. "greenhouse gas emissions between artificial turf and natural turf may be greatly reduced with increased hours of use for artificial turf grass to decline in greenhouse gas."

What does this even mean? Is this basically saying that if you get more hours of use on artificial turf then this compensates (even justifies) the amount of greenhouse gases being emitted? **But aren't the additional hours of use on artificial turf making the field degrade faster and potentially increasing the release of greenhouse gases?**

PAGE 6. General Plan Policy Consistency

There is great effort here to align artificial turf with various town policies. **Has the same amount of effort been made to connect natural turf to town policies, with regards to sustainability for example??** (Artificial turf isn't going to align with anything relating to sustainability.)

Resolution 2023-062, which created the Parks and Sustainability Commission, states under powers and duties "The function of the Commission shall be to serve in an advisory capacity to the Town Council regarding town policies within its scope of expertise; specifically on matters pertaining to public parks, off-street trails, open space, grounds, street trees and *sustainability topics pertaining to the natural environment that meets the needs of the present without compromising the ability of future generations to meet their own needs.*"

As long as artificial turf is plastic it will never be a natural environment. **And will the future costs of artificial turf (replacements, environmental pollution effects, pollution remediation, potential health costs, potential litigations) compromise the ability of future generations to meet their own needs?**

PAGE 7. PFS-1.2 The artificial turf option would not need to be consistent with Bay Friendly Landscaping guidelines.

Why? This should be elaborated on.

PAGE 7. OSPR-4.4

Excessive heat limiting use on artificial turf fields should be added to the artificial turf column.

PAGE 7. OSPR-7.1

Heat should be taken seriously. Protocols should be in place that acknowledge the much higher temps on artificial turf which would close artificial down long before closure was needed for natural turf. I've even heard sports reps say when it gets too hot they move the kids from the artificial turf to natural turf, but not all locations have that choice.

So in this column it should be acknowledged that grass fields would be open longer in heat and artificial turf may lose some days to heat.

PAGE 8. Project Visibility, Appearance and Colors

This talks about color consistency and visual appeal. Of all issues this seems the least important. But if that's important to you, have you seen Creekside's field recently. Have you seen the black patches from tire crumb infill. This is not color consistent, and it's not specific to Creekside. There are also patches of brown on artificial fields with cork infill or brock infill. It's a common occurrence, and can mean the artificial turf fields aren't maintained enough to disperse the infill evenly for the level of use the field gets. I've also seen patched artificial turf fields with the patches differing greatly in color to the main field.

Is color consistency really an issue? Isn't the bigger issue that even if an artificial turf field looks color-consistent, this sometimes masks a danger lurking below, as is the case with the hardness of the Creekside field right now. I've heard people say it looks great. But it's not great. It's life threateningly not great. (See concussion slide)

PAGE 9. Field-Use, Capacity and Lifespan

It's worth remembering that the Creekside field broke ground in October, 2011 and wasn't available for use until October, 2012. It took one year to construct a field that staff then were likely told was a modern version which would be safe and last a certain amount of time. In

March, 2022, the fields 9th year, GMAX testing showed several areas of the field were unsafe. It was likely unsafe for some time prior to that, maybe even years, but no annual GMAX testing was being done. Unfortunately this scenario is not uncommon and not specific to Los Gatos. It's also not uncommon for towns, cities and schools to not have the funds to replace fields that fail sooner than expected or even when expected because the cost of simple replacements in 10 years time can sometimes exceed the whole cost of the initial installation.

So, can we trust when we are told that there are newer, safer, longer lasting plastic turf

products on the market??

Page 1 of the assessment refers to "improvement to turf products" and indeed, **there are improvement to ALL turf products INCLUDING NATURAL TURF!**

There are newer varieties of real, drought tolerant, disease resistant grasses. These new natural turfs can be combined with modern design, install and best management practices to provide many more hours of use than the fields of old that weren't even maintained well. Modern electric machinery combined with automated stripers and even mowers can cut down on maintenance hours and hence reduce maintenance costs.

We had the Creekside field down for a year to install plastic turf and up to 40,000 pounds of tire crumb infill, isn't it worth taking some more down time to return it back to natural grass and return to good health and sustainability?

PAGE 10. paragraph 1, Is the claim that artificial turf can provide more revenue than natural grass because of the increased hours of use really relevant to Los Gatos?

Based on current bookings the field is already booked out for a reasonably low rate to non-profit sports orgs. Or are we going to start charging non-profits an arm and leg for using the bulk of desirable hours, or maybe community members who have to use the least desirable hours? (Two non-profit sports leagues have typically booked the fields out from 4-9 on week days and 8am to 7pm on weekends, leaving less desirable hours for the rest of the community.)

PAGE 10. paragraph 3 states "natural grass systems do no accommodate the amount of usage hours annually that artificial turf systems do."

How reasonable is this statement. Some warranties only cover artificial fields for standard use but do not define what this means in terms of hours. Warranties certainly don't cover unlimited hours of use. They generally don't even cover high use areas for the full warranty period. **Is it possible that the Creekside field wore out early and became unsafe due to overuse?**

PAGE 10, paragraph 6, this paragraph should incorporate unpredictable things like field hardness and heat for artificial turf. But it doesn't. Have we seen consistency and reliability for the Creekside artificial turf field?

PAGE 11. The Cleaning, grubbing and disposal of artificial turf line item **should state exactly what portion is solely related to the artificial turf removal and disposal for full transparency since this is a specific detail decision makers often ask for.**

PAGE 13. Life Cycle Costs

I find the numbers for natural turf hard to believe. There's no accounting for modern day drought tolerant grasses, nor modern day electric and automated machinery which could cut maintenance costs down significantly. And over \$800,000 per renewal every 4 years for natural grass replacements over 20 years?? \$800,000 to essentially re-sod? And every 4 years? (Note that they included a replacement at year 20 so they should include an equivalent replacement for artificial turf at year 20 as detailed below.)

The natural turf figures need some independent 2nd or 3rd opinions.

If managing an artificial field properly, and not pushing it to unsafe limits, would it really last 12 years? Creekside didn't. It didn't really even safely last 10 years. Replacement is more likely to be around 10 years meaning another full replacement of artificial turf would be due around year 20 but this large expense is not included in the table. If there is to be no bias this large expense should be included.

The "Note" at the bottom should be more transparent and state that the annual maintenance contract with FieldTurf is at a cost **\$27,690 per year**. This amount covers relatively routine bi-annual maintenance and an annual GMAX test. On top of this there should be daily inspections and many other tasks along with at least bi-annual GMAX testing. Maybe more, depending on a field's history. Professional players have their fields GMAX tested before every game.

(Artificial turf maintenance manuals often state inspections are required before any events, and various other tasks like sweeping, brushing and cleaning, should be performed according to how often the field is used. In the case of fields like Creekside with daily use, this means a lot more maintenance is required on top of the bi-annual contract with FieldTurf.

PAGE 14. Table 5

This table is biased. Any modern field, whether it's artificial or natural, will require an amount of maintenance according to the amount of use. Just like a natural turf field, if an artificial turf field is overused, or simply not maintained properly the quality will be poor. Creekside artificial turf is our own proof of that since it has been "poor" since year 9 and likely before that.

PAGE 14. Material Renewability.

Chemical recycling is not recycling.

As for mechanical recycling, there is no reference or evidence given for the statement that FieldTurf mechanically recycles artificial turf., whether it is done at scale and what it is recycled into. References and valid proof should be provided for this claim.

PAGE 16. Table 6.

The chart is biased.

- **Drainage** - In heavy rain, water pools on the Creekside field and may restrict playability.

(my own daughter played on Creekside in the rain and took a bad slip fall when play should have been suspended.)

- **Maintenance** - If managed properly, artificial turf essentially requires as much maintenance as natural turf field.
- **Playability** - it is stated that artificial turf is "Unlimited" - not true, see "Weather" column. Artificial fields also have to be taken offline for maintenance and sometimes for safety reasons as we well know.
- **Weather** - it states "Extreme heat can limit use" for artificial turf - this is true and hence means the Playability claim of "unlimited" is untrue.
- **Life Expectancy** - Properly designed, installed and managed natural turf fields do not need replacement every 2 to 3 years.
- **Health concerns** - pesticides have been recommended for artificial turf too. Not only are chemicals used on artificial turf, the artificial turf itself is nothing but chemicals.

At the end of the day, any perceived benefits of artificial turf are at least questionable and are not worth the trade offs when it comes to the health of the environment, the health of the people that use it, or the health of our Town's purse.

I hope you will not accept the Kimley-Horns assessment as it is and that you will request amendments to make it more balanced.

I also hope that you will seriously consider a recommendation to the Town Council to go back to natural grass at the Creekside field.

Plastic Turf & Play - Points to Ponder

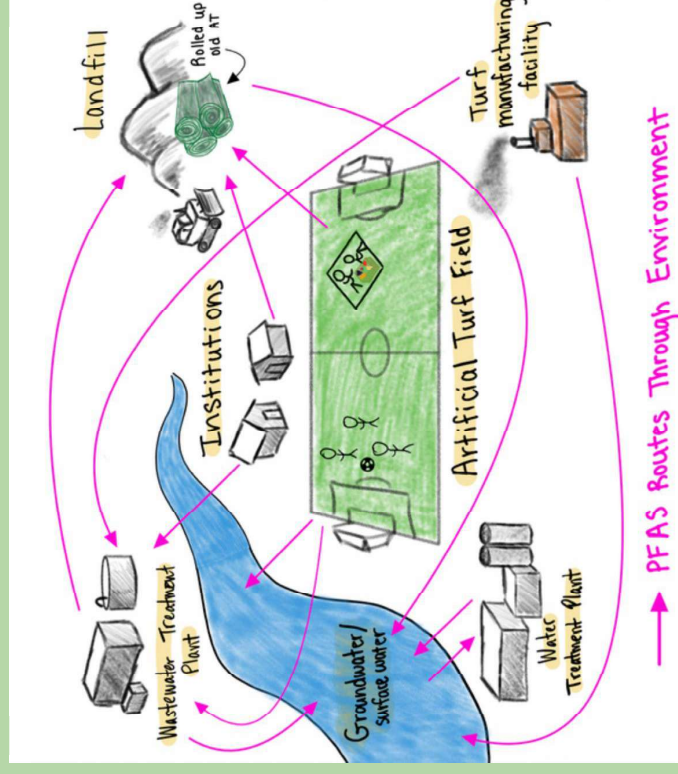


Image credit: [Northeastern University PFAS Project Lab](#)

Children's health is intrinsically linked to the health of their environment which includes the surfaces they play on.

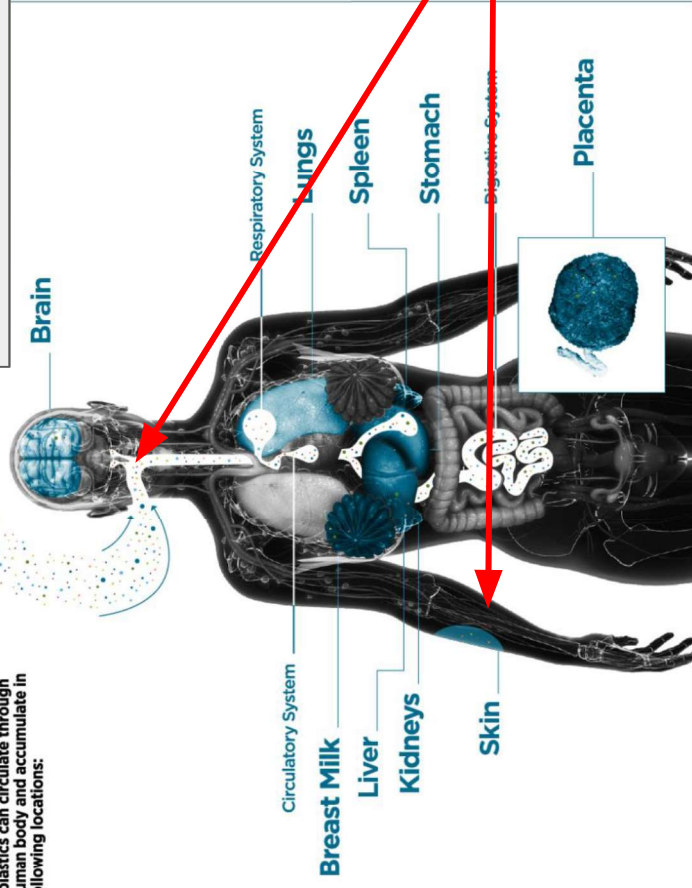
Micro- & nanoplastics can accumulate in the body.

(Artificial/Synthetic/Imitation/Faux/Fake Turf = Plastic Turf)

Microplastics in the Human Body

Studies now show that micro- and nanoplastics can circulate through the human body and accumulate in the following locations:

According to the [EPA](#), microplastics are up to 5mm and nanoplastics are invisible to the eye.



Source: Based on visuals by the United Nations Environment Programme (from the 2021 report, "From Pollution to Solutions") & the World Health Organization. (from the 2022 report, "Dietary and inhalation exposure to nano- and microplastic particles and potential implications for human health").

Source: <https://www.ciel.org/breathing-plastic-the-health-impacts-of-invisible-plastics-in-the-air/>



Santa Clara County plastic turf field micro & nano plastics lifted off soccer socks.



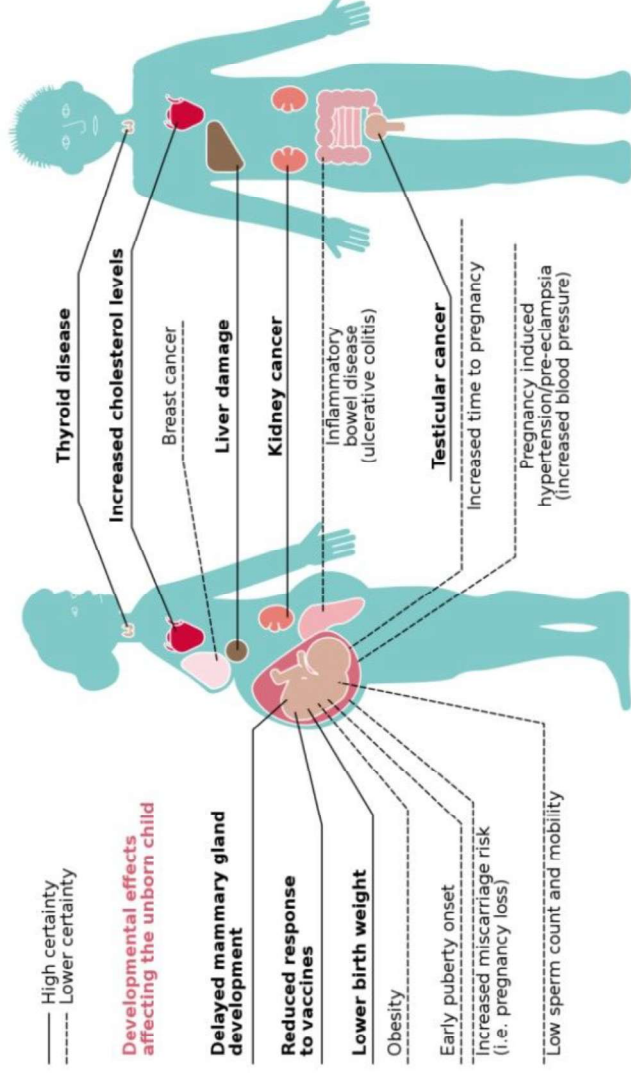
Image credit:
[ATX Turf](#) →

PFAS, just one chemical group of concern with plastic turf, are being associated with multiple adverse health effects.

There are around 15,000 PFAS.

PFAS expert, Dr. Graham Peaslee, Professor Emeritus, University of Notre Dame: "There are no safe kinds" of PFAS.

PFAS and microplastics are more toxic when combined.



Long-term exposure to PFAS is detrimental to human health. Credit: European Environment Agency, Wikimedia Creative Commons

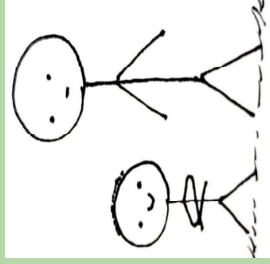
Inspection of public records by Safe Healthy Playing Fields Inc. has revealed over 30 PFAS in various plastic turf components.

PVDF-HFP, a PFAS according to the CA EPA, is sometimes used in the manufacturing of plastic turf.

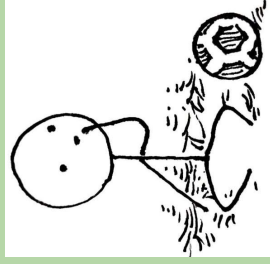
Children & Teens are Uniquely Vulnerable to Toxic Effects

- **Biological systems are still developing** (reproductive, nervous, metabolic)
- **Greater exposure** (breathe, drink, eat more per pound of body weight)
- **More years for disease to develop** (latency period can be decades)

Children are More Susceptible to Exposures on Plastic Turf than Adults



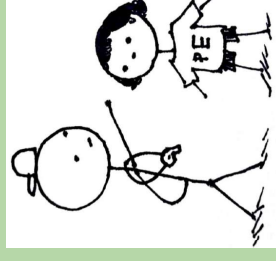
Smaller size:
closer to the ground



Play habits:
hand to mouth



More hours of exposure:
school playgrounds, sports



& They have no choice:
must play where they are told to

Cancer Link?

Absence of evidence is not evidence of absence.

BBC

Home News Sport Business Innovation Culture Arts Travel Earth Video Live



News: Teenager diagnosed with brain cancer

A 'Trisday' and happy 'Wee' Ham academy goalkeeper has died aged 15 after being diagnosed with cancer.

Oscar Paus from Bendle, Essex, was found to have a rare 7cm (2.8in) operable brain tumour in August 2020.

He underwent seven surgeries, one round of chemotherapy and one round of radiotherapy, but was told palliative care was the only option.

<https://www.bbc.com/news/articles/c5y46daml4dq>

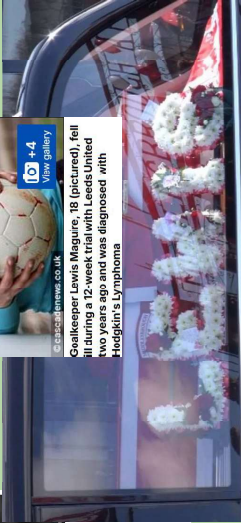
My teenage son's cancer was caused by artificial football pitches, says former NHS boss as he launches campaign to halt turf's use over fears they contain dangerous chemicals

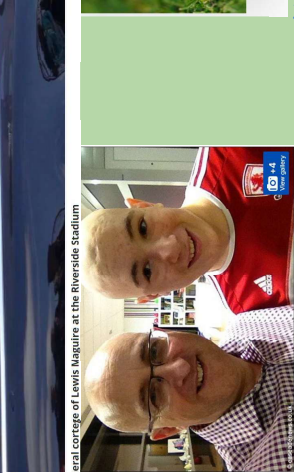
- Nigel Maguire fears his son Lewis developed cancer from synthetic pitches
- 18-year-old goalkeeper found to have Hodgkin's Lymphoma two years ago
- His father, 52, believes toxic chemical in artificial surfaces sparked cancer
- The former NHS boss said: 'The more I look into it, the more horrified I am'

Source and image credit: [BBC](#) and [Gazetelive](#)



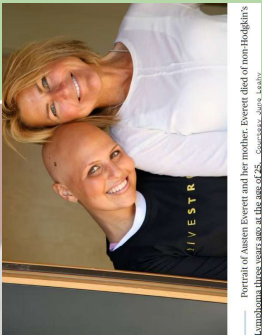
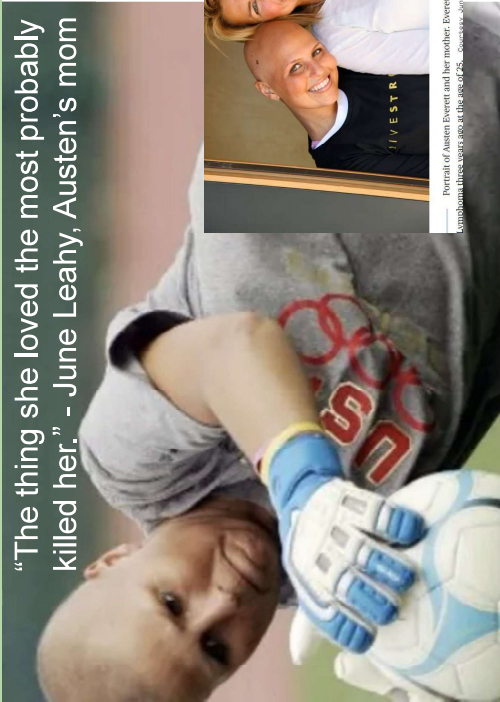
Goalkeeper Lewis Maguire, 18 (pictured), fell ill during a 12-week trial with Leeds United two years ago and was diagnosed with Hodgkin's Lymphoma





Oral cottage of Lewis Maguire at the Riverside Stadium

"The thing she loved the most probably killed her." - June Leahy, Austen's mom



Portrait of Austen Everet and her mother. Everet died of non-Hodgkin's lymphoma three years ago at the age of 28. - Spencer Platt / Getty

AUSTEN'S STORY 1986-2012

Source and Image Credit: [Daily Mail](#)

Monsanto-Made AstroTurf Linked to Fatal Brain Cancer of Six Former Phillies Players

Blog / 2023 / March / Monsanto-Made ...

March 29, 2023

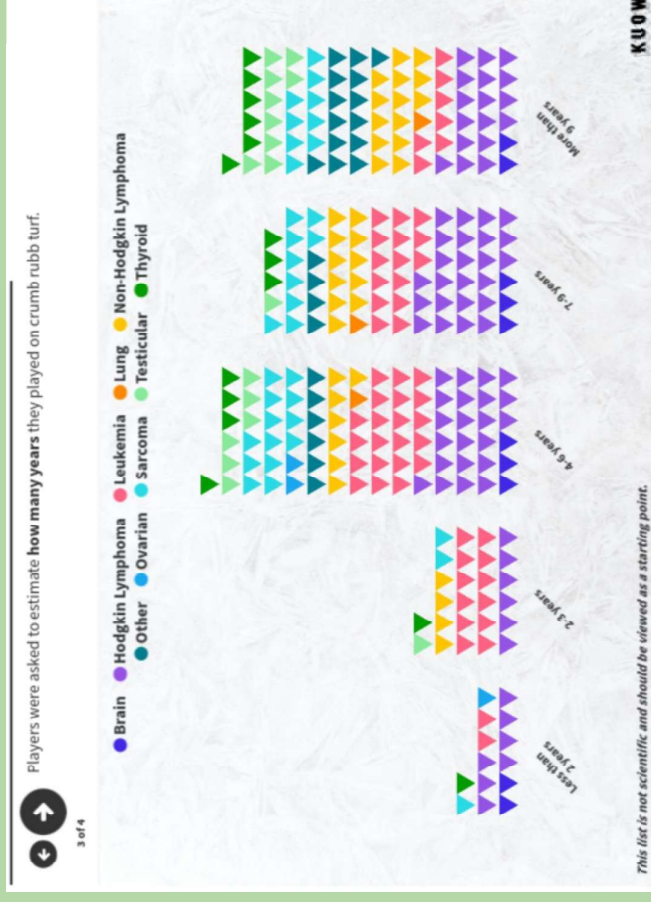
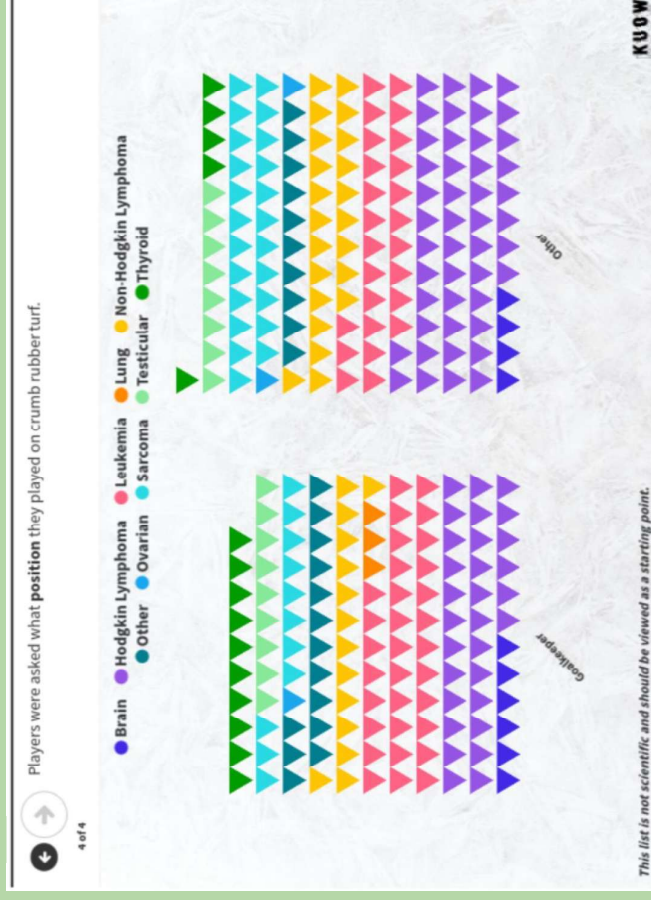
According to the investigative report by *The Philadelphia Inquirer*, the AstroTurf field used at Philadelphia's Veterans Stadium, which was produced by Monsanto, contained 15 different types of former chemicals or PFAS, known to cause a range of health diseases, including cancer. While there are still studies to be conducted and research to be concluded, it is believed that repeated exposure to the AstroTurf could be the cause of glioblastoma, a rare form of brain cancer that took the lives of six former Phillies baseballers in recent years. The reporters found that Phillies players who played at the Vet between 1971 and 2003 were roughly 300% more likely to be diagnosed with brain cancer than the average man of the same age and health.

The investigators obtained samples of the AstroTurf through a promotional auction and sent them to Eurofins Lancaster Laboratories Environmental Testing. Separate researchers at the University of Notre Dame also obtained samples and ran their own lab tests. Both tests found high levels of PFAS "forever chemicals" in the AstroTurf samples.



<https://www.nrlawyers.com/blog/2023/march/monsanto-made-astroturf-linked-to-fatal-brain-cancer/>

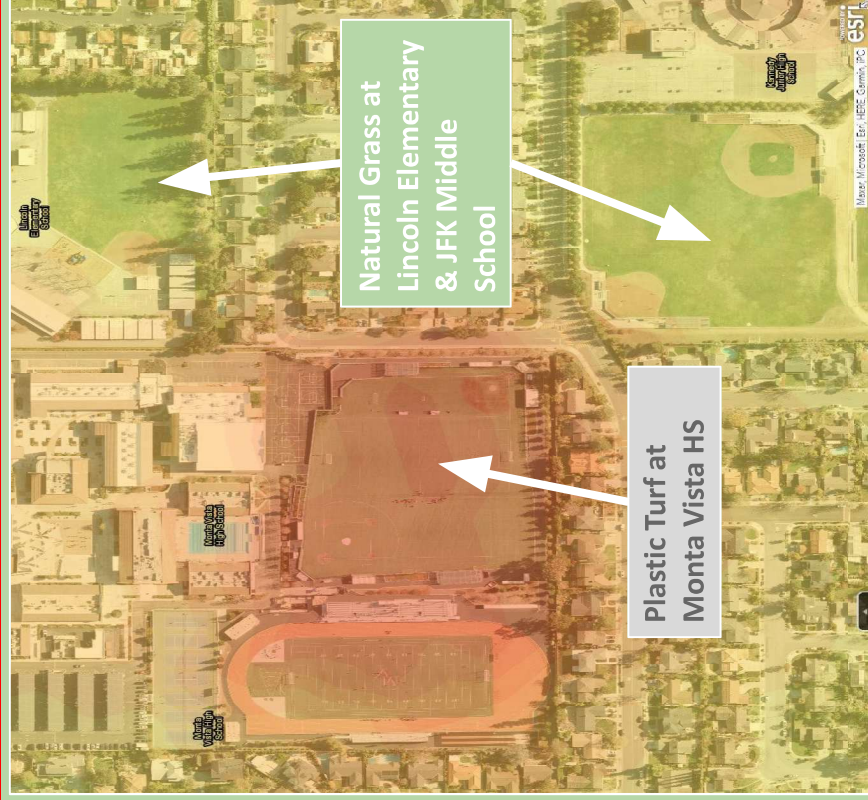
Professional soccer player, now coach, Amy Griffin has a List - Almost 300 players with cancer who played on plastic turf.



Source & Image credit: <https://www.kuow.org/stories/does-playing-soccer-on-artificial-turf-increase-cancer-risk-especially-in-kids>

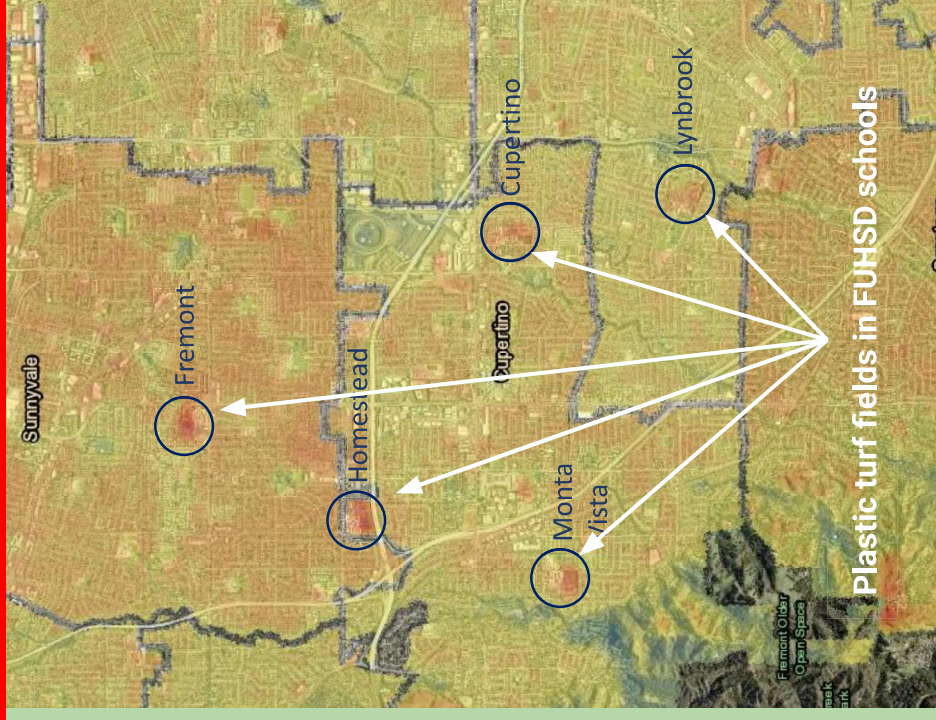
Correlation does not prove causation, but why is this not enough cause for concern to prompt some official entity to properly investigate?

Heat Island Effect of Plastic Turf - Infrared thermal images of FUHSD schools



Images created using the tool at:

[Fairland & Briggs Chaney Master Plan Heat Island Effect Viewer \(arcgis.com\)](http://arcgis.com)



Plastic Turf can get dangerously hot - regardless of infill type AND with no infill.

Possible adverse effects of heat:

- Burns and blisters
- Dehydration
- Heat Cramps
- Heat exhaustion
- Heat stroke
- Death

S.C. football players' punishment causes 3rd-degree burns, blisters



By Staff
Published Aug. 28, 2024 at 10:47 AM PDT | Updated Aug. 28, 2024 at 10:52 AM PDT
The athletes suffered the injuries during a weightlifting class. (Source: WRDW)

Source: [WRDW](#)

Image credit: [WSCO TV](#)

Palo Alto Sports Park
on a cool morning.



July 10, 2024 afternoon at Fair Oaks Park (Sunnyvale),
a new artificial turf field with plant-based infill

Temperature Readings for Plastic Turf Fields in Santa Clara County, CA (°F)				
Location	Infill Type	Air Temp	Turf (real)	Plastic Turf
Palo Alto Sports Park May 17 (11 a.m.), 2024	TPE (polymer)	65	86.3	129.5
San Jose High School April 9, 2024	tire crumb?	75	75	130
San Jose Middle School April 8, 2022	cork	88	87.6	157.2
Sunnyvale Sports Park	cork	89	91.2	151.5
Los Gatos Elementary Oct 7, 2023	no infill	97	104.7	154
Los Gatos Sports Park July 3, 2024	tire crumb	105	112.8	200.3
				153.1

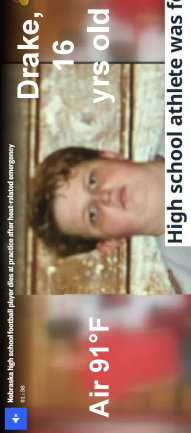
How hot can plastic turf fields get?

Plastic turf (often hotter than asphalt) is typically 40 to 70°F hotter than grass on clear, sunny days with temperatures even exceeding **200°F**. Do these higher temperatures increase the risk of heat illness?

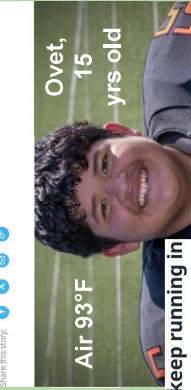
(Cell phone overheated and shut down while taking temperatures on this plastic field.)

When excessive heat causes our kids to overheat and shutdown, that's a much bigger problem!

Nebraska football player dies after heat-related medical emergency at practice
The temperature was 91 degrees with a heat index of 105 when 16-year-old Drake Geiger collapsed.



SM Northwest football player died of heat stroke, autopsy says



High school athlete was forced to keep running in sweltering heat and died, lawsuit says

By Julia Martin
Updated January 19, 2024 4:58 PM | ☐



July 3, 2024, 2:14 pm
Creekside Sports Park, Los Gatos

Are Heat Illness Prevention Measures Adequate for Plastic Turf?

According to the CA Department of Public Health ([CDPH](#)), heat related illness is the leading cause of death in teen athletes. Heat stroke is 100% preventable, and yet, nationally at least [58 footballers have died](#) between 1992 and 2024 (some resulting in lawsuits) with thousands more suffering heat illness each year.

[Guidelines](#) for assessing heat risk can be complicated. Some institutions have created heat protocols using the Wet Bulb Globe Temperature ([NSAA example](#) to the right). But:

- Does this adequately account for elevated temperatures on plastic turf which have been observed up to 88°F HIGHER than natural turf in Santa Clara County (SCC)?
- Are coaches adequately trained to assess risk, maintain equipment and follow any protocols?
- Are any/all protocols actually followed?

Santa Clara County is in [Region 1](#) so according to these guidelines activities should be suspended if temps are over 86.1°F ([WBGT](#)). **Is this adequate for plastic turf fields in SCC which can easily reach upwards of 150°F?**

Note: Football players have been observed practicing on plastic turf at a high school in Santa Clara county in **105°F** ambient temp!

↓ Nebraska's new measures [after Drake Geiger](#), 16, died of heat illness after football practice.

NSAA Wet Bulb Globe Thermometer (WBGT) Heat Modification Guidelines

The NSAA Board of Directors approved the Wet Bulb Globe Thermometer (WBGT) as the recommended measurement practice and device for measuring acceptable heat / humidity levels for practices and contests. The use of WBGT is recommended throughout the calendar year when the ambient temperature is above 80 degrees.

Region 2		Activity Guidelines	
Region 1	Region 2	NORMAL ACTIVITIES	
< 76.1	< 79.7	3 SEPARATE - 3 TO 5 MINUTE REST / WATER BREAKS PER HOUR	
76.2 - 81	79.8 - 84.6	USE DISCRETION FOR INTENSE / PROLONGED PRACTICE 3 SEPARATE - 4 TO 6 MINUTE REST / WATER BREAKS PER HOUR MONITOR AT-RISK ATHLETES CLOSELY COLD WATER IMMERSION AVAILABLE	
81.1 - 84	84.7 - 87.6	MAXIMUM PRACTICE TIME IS 2 HOURS HELMETS AND SHOULDER PADS ONLY REMOVE HELMETS AND SHOULDER PADS IF CONDITIONING 4 SEPARATE - 4 TO 6 MINUTE REST / WATER BREAKS PER HOUR MONITOR AT-RISK ATHLETES CLOSELY COLD WATER IMMERSION AVAILABLE CONTESTS: PER NFHS RULES, IMPLEMENT ADDITIONAL/EXTENDED TIMEOUTS FOR REST / WATER BREAKS	
84.1 - 86.1	87.7 - 89.7	MAXIMUM PRACTICE TIME IS 1 HOUR HELMETS AND SHOULDER PADS PROHIBITED NO CONDITIONING 4 SEPARATE - 5 TO 7 MINUTE REST / WATER BREAKS PER HOUR MONITOR AT-RISK ATHLETES CLOSELY COLD WATER IMMERSION AVAILABLE CONTESTS: PER NFHS RULES, IMPLEMENT ADDITIONAL/EXTENDED TIMEOUTS FOR REST / WATER BREAKS CONTESTS: CONSIDER DELAYING / POSTPONING START TIMES	
> 86.1	> 89.7	NO OUTDOOR ACTIVITIES CANCEL OR DELAY OUTDOOR PRACTICES / CONTESTS UNTIL LOWER WBGT IS RECORDED	

Additional Information:
 PARTICIPANTS SHOULD ALWAYS HAVE UNRESTRICTED ACCESS TO WATER / FLUIDS
 WBGT SHOULD BE MEASURED EVERY 30 MINUTES
 INDIVIDUAL REACTIONS TO HEAT WILL VARY PER ATHLETE
 SCHOOLS SHOULD HAVE AN EXERCUTION HEAT ILLNESS EMERGENCY ACTION PLAN
 AT RISK ATHLETES SHOULD ALWAYS BE MONITORED CLOSELY

WBGT is an all-inclusive measure of the heat stress in direct sunlight, which takes into account: ambient temperature, humidity, sun angle, wind speed, cloud cover (solar radiation)

Plastic Turf Burn

Perhaps the most notorious injury associated with plastic turf is plastic turf burn. In addition, this can lead to infections. Because public plastic fields are typically not cleaned, does this increase the risk of infection? Senator Maldonado once said of plastic turf "[playing on these fields is like playing on a giant used band aid](https://www.healthline.com/health/turf-burn#gallery-open)".



Images credit: <https://www.healthline.com/health/turf-burn#gallery-open>

Are antimicrobials (biocides), which are sometimes infused into or applied to plastic turf, a viable solution to bacteria given they too are generally chemicals?



Rugby players needed antibiotics and missed matches due to plastic turf burn.

Source and image credit: [Daily Mail](#)

Concussion Risk

Some plastic field surfaces can get very hard - this is an invisible risk. There are no regulations for surface hardness, only recommendations, so hardness testing is seldom done on public fields. How safe is your local plastic turf field?



Image credit: Sports Turf Solutions Report

Gmax (field hardness) upper limit recommendations:
Synthetic Turf Council (STC) -165
American Society for Testing and Materials (ASTM) -200

“According to ASTM Standards, a value greater than 200 Gmax qualifies for the expectation that life threatening head injuries may occur.” (Reference: [STIMA](#))

Location	Drop #	Vo (m/s)	h (m)	g-max	HIC
Test Point 1 Penalty kick line, End A, on center line (CL)	1 2 3 Avg 2&3	3.48 3.48 3.48 3.48	0.62 0.62 0.62 0.62	174 191 195 193	544 636 647 642
Test Point 2 P-box corner, down End A & mid field, Side C	1 2 3 Avg 2&3	3.47 3.47 3.47 3.47	0.61 0.61 0.61 0.61	188 203 210 207	636 723 759 741
Test Point 3 75' from mid-field to End A, 40' from CL to Side C	1 2 3 Avg 2&3	3.46 3.47 3.47 3.47	0.61 0.61 0.61 0.61	181 197 200 199	617 714 733 724
Test Point 4 Center of the field	1 2 3 Avg 2&3	3.49 3.49 3.49 3.49	0.62 0.62 0.62 0.62	180 187 187 187	561 578 577 578
Test Point 5 75' from mid-field to end B, 63' from CL to Side D	1 2 3 Avg 2&3	3.47 3.47 3.47 3.47	0.61 0.61 0.61 0.61	166 181 187 184	522 596 613 605
Test Point 6 6' from top of R-Arc to top of P-Box, End B, on CL	1 2 3 Avg 2&3	3.47 3.47 3.48 3.48	0.61 0.61 0.62 0.62	180 196 199 198	600 683 697 690
Test Point 7 50' from mid-field to End B, 50' from Side C to C	1 2 3 Avg 2&3	3.47 3.47 3.47 3.47	0.61 0.61 0.61 0.61	146 158 161 160	434 507 522 515
Test Point 8 Center of the field at End A and Side D	1 2 3 Avg 2&3	3.46 3.47 3.47 3.47	0.61 0.61 0.61 0.61	183 197 200 199	618 697 707 702
Test Point 9 3' in front of Goal Line, End A, on CL	1 2 3 Avg 2&3	3.46 3.47 3.47 3.47	0.61 0.61 0.61 0.61	211 226 225 226	696 767 755 761
Test Point 10 15' in front of Goal Line, End B, on CL	1 2 3 Avg 2&3	3.47 3.48 3.48 3.48	0.61 0.62 0.62 0.62	190 211 218 215	653 783 813 798

Gmax readings for 9 year old Creekside Artificial Field.

List of Federal and CA State Laws Regulating Plastic Turf?



Intentionally blank because...



There are **NO** federal or California state level laws regulating plastic turf to protect the environment (and by extension human health).

In contrast, there was a CA law protecting the plastic turf industry because up until October, 2023 Assembly Bill 1164 prohibited the banning of plastic grass as it was thought to “save” water in drought.

So, even if cities & counties wanted to ban plastic turf, they couldn’t.

BUT, in October 2023 Senate Bill 676 was passed which established that plastic turf was no longer a viable solution for drought because of **human health and environmental concerns** arising from the chemicals in plastic turf which could actually pollute water. Hence “saving” water extends to not polluting water. SB 676 essentially “undid” AB 1164 and returned the right to ban plastic turf to cities and counties.



Be wary of claims like “PFAS Free”, “no PFAS”, “Free of...”, etc.

Because plastic turf products are **NOT** regulated by any federal or California laws, marketing claims can be misleading. For example, when a manufacturer claims a product is “PFAS free”, has “no PFAS”, etc., the manufacturer is defining the criteria. Ask them exactly what that criteria is. None of the criteria from the list below prove zero PFAS are in the final product.

- **Testing for a much smaller number of PFAS than the 70 that basic targeted testing is currently available for**
- **Testing at concentrations that won’t detect PFAS** (parts per million or billion rather than parts per trillion)
- **Allowing under 100 parts per million PFAS content** (which equates to allowing under 100,000,000 parts per trillion)
- **Not testing for Total Organic Fluorine** (a test which indicates if any of the around 15,000 PFAS are present without being able to identify which specific PFAS they are).
- **Not doing the Synthetic Precipitation Leaching Procedure** (a technique to determine what compounds will be released from a solid compound over time as the product degrades with exposure to the elements, UV light, abrasion from use, etc.)
- **Not doing TOP Assay testing to establish if there are any PFAS precursors**
- **Only using CA Proposition 65 compliance** (this presently only accounts for 3 PFAS)
- **Claiming there are no “intentionally” added PFAS** (even if/when PFAS are intentionally added to the manufacturing process of carpet blades)
- **Claiming PVDF HFP** (a PFAS sometimes used in manufacturing) **is not a PFAS according to the EPA** (it is)
- **Not testing for PVDF HFP** (some suppliers do not test for substances they claim are not “intentionally” added)
- **Not testing for any PFAS at all** (again, some suppliers do not test for substances they claim are not “intentionally” added)

The “Precautionary Principle”

... advises taking preventive action to
avoid harm to human health and the environment
when there is scientific uncertainty.





🚩 When it comes to plastic turf, there is scientific uncertainty.



Our kids should not be filters for any microplastics, chemicals, heavy metals or plastic-amplified-heat, **especially** when they have no choice where they play. They should not be vectors for, or victims of, pollution.

We need adults & electeds to make the safe, healthy choice for kids and in this case simply provide properly designed, installed and organically managed, natural turf sports fields.

The ripple effects of field choice will extend far into the future. You can make those effects good.

References & resources for turf information (real and plastic):

- Safe Healthy Playing Fields Incorporated (SHPFI) <https://www.safehealthyplayingfields.org/>
- Beyond Pesticides <https://www.beyondpesticides.org/>
- Lowell Center for Sustainable Production <https://www.uml.edu/research/lowell-center/about/team/massey-rachel.aspx>
- UMass Lowell <https://www.uml.edu/search/?query=turf>
- Toxics Use Reduction Institute (TURI) - https://www.turi.org/?s=artificial+turf&order_by=relevance
- AgEnviro Solutions (Mick Battam) <https://agenviro.com/team/mick-battam/>
- Public Employees for Environmental Responsibility (PEER) <https://peer.org/?s=turf>
- The Ecology Center <https://www.ecocenter.org/toxic-forever-chemicals-infest-artificial-turf>
- Santa Clara County Medical Association (SCCMA) - Policy Recommendation <https://www.sccma.org/Portals/19/Artificial%20Turf%20Policy%20Recommendation%20SCCMA%20Final%20%206824%20.pdf>
- Icahn School of Medicine at Mount Sinai <https://mountsinaiexposomics.org/position-statement-on-the-use-of-artificial-turf-surfaces/>
- <http://synturf.org/>
- Sage Journals <https://journals.sagepub.com/doi/10.1177/11786302241306291>
- Science Direct <https://www.sciencedirect.com/science/article/pii/S0269749124018505>
- National Institute of Environmental Health Sciences <https://www.niehs.nih.gov/health/topics/agents/pfc>
- Collaborative for Health and Environment <https://www.healthandenvironment.org/join-us/blog/forever-chemicals-in-artificial-turf-understanding-pfas-testing>



Poster credit: Kari Percival, Malden, MA



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July 21, 2026

Re: Artificial Turf Report by Kimley-Horn - ESD 24-01: Evaluate the Use of Artificial Turf Versus Living Groundcovers - Sunnyvale

Dear Mayor Klein and City Council Members:

It is our understanding that on July 28, 2026 you will be discussing the city-funded 170-page report "Evaluate the Use of Artificial Turf Versus Living Groundcovers" by Kimley-Horn and Associates. The Santa Clara County Medical Association (SCCMA) wrote a letter to you in 2023 recommending natural grass over artificial turf in Sunnyvale. We wish to write this letter regarding our concerns about the Kimley-Horn report and *strongly support* our prior recommendation.

The SCCMA recommends a general ban on new artificial turf, on both public and residential property for protection of health and the environment, and when the useful life of pre-existing artificial turf has ended that it be replaced with natural grass.

The Sunnyvale Kimley-Horn artificial turf report (ESD 24-01 2026) gathered peer-reviewed literature, industry information, as well as community input. However, the study scope is limited by its own admission, as it did not include any sampling or testing of surfaces, a full analysis of recreational playtime demands and field availability, or any modeling or quantification of environmental or health impacts of surface types.

The report notes, "The survey found about 60% of respondents were very or moderately concerned about the environment and health impacts of artificial turf." Forty-three percent felt artificial turf should be restricted, and 20% felt it should be allowed only for specific purposes. It is noted in the staff report that in Sunnyvale there are 52 rentable fields across 9 city parks as well as 15 school sites maintained by Parks staff. The only City synthetic turf fields in parks are in Fair Oaks Park.

Comments on the Kimley-Horn Report 2026

While the report contains much useful information and does examine risks versus benefits of artificial turf versus natural grass, we have some concerns about some of the conclusions, interpretations and omissions.

We note the report:

- 1) Omits important new information about health and environmental risks of artificial turf. (see below)
- 2) Downplays the undeniable truths about artificial turf including microplastic and chemical contamination, heat effects and disposal issues with new information about exposure risks. (see below)

- 3) Inadequately compares environmental impacts of natural grass which could be reduced even further if a more robust analysis is done including use of reclaimed water; examining the true benefits of organic regenerative grass with no pesticide use, deeper root systems and longer playability; use of electric movers powered by the sun (Solar 1,2,3,4); lower overall cost; support of biodiversity; and environmental protection.
- 4) Prioritizes playing time above critical health and environmental considerations such as chemical and microplastic exposures, heat, and disposal and without meaningful analysis of field demand and use in different weather conditions. The report does admit there was no "full analysis of recreational playtime demands and field availability," especially considering a warming climate we are all faced with.
- 5) Bases cost on theoretical maximum hours of use, while ignoring realistic use, climate change with more days of extreme heat, and increased hours of use on organic regenerative grass fields with deeper root systems and half the water use that rival artificial turf.
- 6) Does not examine the true short and long-term environmental and health costs, including often unaccounted indirect healthcare costs, which can occur over years or decades and are difficult to measure in the short term, thus requiring the use of the precautionary approach. The report admits that current health risk assessments test one chemical at a time and not synergistic exposures which can create exponentially more harm.
- 7) Does not consider the unique vulnerability of children's long-term exposure. As we point out in our 2024 recommendation, children "have greater lifetime exposures to- and accumulation of- toxins, and whose immune, cardiovascular, reproductive and neurologic systems are immature, increasing their vulnerability to acute and chronic diseases related to toxic exposures."
- 8) Admits that the use of artificial turf is inconsistent with sustainability goals and climate resilience for Sunnyvale.
- 9) Recommends policy decisions to determine whether or not artificial turf or natural grass could be used with objective goals remaining undefined and rather subjective in interpretation, other than defining high use as over 1,000 hours.

SCCMA Bases Recommendation on Protection of the Environment and Public Health

The SCCMA looked at the risks of artificial turf as well as some irrefutable truths regarding placing synthetic heat trapping materials on natural parks and playing fields in 2024. We have based our recommendation on the protection of public and environmental health, noting that these are undeniably connected, especially for children. Climate change will make artificial turf too hot to play on for more days of record highs each year. It will also increase the temperature of surrounding areas as a new urban heat island, contributing to global warming. The cost issue has also been looked at in older comparisons, and it is evident that natural grass is by far cheaper in the short and long run. Your analysis showed over a 20-year period that for natural grass the cost would be \$2,590,000.00 but for artificial turf the cost would be \$3,681,600.00 without dividing this up with regards to hours of play, which, as noted above, could be a fallacious argument without meaningful comparison data.

A newer study by Cumberbatch (2025) confirms this. *In their study, Artificial Turf Versus Natural Grass: A Case Study of Environmental Effects, Health Risks, Safety, and Cost they note,*

"Specifically, natural grass was found to have a lower environmental impact, more cost-effective in the long term, and have a lower safety risk in the dimensions of heat and chemical exposure. It

was found that a well-maintained natural grass field, even when maintained traditionally with synthetic fertilizers, was found to create much lower levels of pollution. A well-maintained natural grass field was also found to contain fewer compounds that harm the environment and human health and have lower levels of emissions over its lifetime. Safety considerations as a whole also favor natural grass fields. Natural grass does not get as hot as artificial turf, decreasing the risk of heat exhaustion, and it has generally similar or slightly lower injury risks in the categories researched.”

Natural Grass Preferred by Amateur and Professional Athletes

Well-maintained cool natural grass is also the preferred field for soccer players young and old, amateur and professional. The recent 2026 FIFA World Cup, which mandated natural grass playing surfaces in its stadiums, inspired another plea by the NFL Players Union to convert all of the NFL playing fields to natural grass to reduce injuries. George Kittle, San Francisco’s All-Star tight end, said that “93% of NFL players prefer natural grass to artificial turf.” (KCBS radio news, July 20, 2026)

Santa Clara County Medical Association Recommendations on the Use of Artificial Turf on Landscapes, Schools and Playing Fields, June 10, 2024.

The SCCMA carefully deliberated and adopted an unbiased review in 2024 recommending natural grass playing fields and *not* artificial turf for many reasons.

“Taking a precautionary approach for the long-term protection of the children, the environment and public health, we recommend:

1. That artificial turf *not* be used on sports fields, playgrounds, landscaping, residential lawns or in schools, but instead that natural grass turf be used, a choice that will serve to benefit the health and safety of children, athletes and the environment, and
2. If artificial turf *is* in place, that at the end of its useful life it be replaced with natural grass and *not* artificial turf.

The California Medical Association Recommends Natural Grass Fields over Artificial Turf

We note that the California Medical Association has also looked at this issue and in 2024 adopted Resolution 101-24 on artificial turf.

“RESOLVED: That, due to artificial turf’s harmful impacts on human and environmental health, CMA recommends replacing artificial turf with natural, drought-tolerant and hardiness zone appropriate turfgrass in parks, sports fields and lawns when it is to be replaced; and be it further

RESOLVED: That CMA supports natural, drought-tolerant and hardiness zone appropriate turfgrass as the preferred choice on sports fields or lawns, in all public and private schools and colleges, as well as in city parks;”

Omission of Important New Information

No Complete Assessment of Health Harms of Artificial Turf has Been Done

The California Office of Environmental Health and Hazard Assessment (OEHHA) of Synthetic Fields Study 2026 that was referenced addresses crumb rubber infill only, not the plastic components. While the study did detect 119 organic chemicals in the air at on-field locations it is not a complete assessment of the environmental and health impacts of artificial turf as it looks

only at crumb rubber infill, not the plastic blades or backing comprising a complex mix of plastic, latex and chemical additives which degrade and disperse in the environment with resulting exposure to players of microplastics and other hazardous materials. The study also did not consider the synergistic long-term harm from exposures to multiple toxins, nor vulnerable populations such as children and pregnant women.

Microplastics Are Chemicals of Concern

Microplastics, as in artificial turf, currently pose a serious threat to aquatic and terrestrial ecosystems as well as humans. The California Department of Toxic Substances Control (DTSC) lists Microplastics on its Candidate List of Chemicals of Concern. On June 18, 2026, the Department of Toxic Substances Control (DTSC) finalized a rulemaking that adds microplastics to the Candidate Chemicals List due to concerns about widespread exposures and potential for adverse impacts. Artificial turf blades are made of plastic that breaks down into microplastics and nano plastics that enter and bioaccumulate in the soil, water and food chain as forever substances. (Hua 2024)

Microplastics and nano plastics (<100nm) have been shown to 1) act as a toxin to biological systems with a wide range of metabolic harm to organ systems, 2) enter and accumulate in humans through ingestion, inhalation in the lungs and olfactory (nose) systems, 3) enter and accumulate in plants via absorption through root systems with translocation to stems, leaves and edible parts with further contamination of the food chain (Jadhav 2024). It has been found that microplastics can alter plant gene expression, suppress plant defense mechanisms, disrupt photosynthesis and nutrient uptake. (Chaudhary 2025) Microplastics are now considered micropollutants and have been found to harm some species of earthworms, a critical part of the soil food web that is key to soil metabolic productivity. (Klimasz 2025)

PFAS is not the only Chemical to Consider Hazardous

The report highlights PFAS; however, PFAS is only one of many toxic chemicals added to plastic blades that needs to be considered. One should *not* base the safety of artificial turf on a PFAS-free report or product. A PFAS-free product would require including total fluorine to make sure this is accurate. Even if there is no PFAS in the blades, there may be colorants, flame retardants, softeners such as phthalates, UV stabilizers and light stabilizers that are added, among others, added to the plastic to extend the product life. There may be a substitute for PFAS or other chemicals that could be added as well, and that may be considered proprietary. For example, we know that BPA is highly carcinogenic. We also know that labels that say “BPA free” may not have BPA but can have a replacement, BPS or BPF, endocrine disruptors that are similarly toxic. This is called regrettable substitution of toxic chemicals. It takes many years or decades to learn that these new chemicals and their degradation byproducts are toxic, and whether they persist and bioaccumulate in the environment. (Edaes 2022)

Undeniable Truths: Microplastic, Chemical Contamination and Heat Effects

While the report states that “Science is still evolving regarding what the direct health impacts are,” there is enough science to understand that artificial turf poses real risks to human and environmental health. Once placed, artificial turf will continue to contaminate soil, air and water, causing a decline in ecosystem health as it degrades into microplastics.

Microplastics are Toxic

Microplastics are a novel class of environmental pollutants, a significant global pollution concern, cause biological toxicity across organ systems, and species and are now on the Department of Toxic Substances Control list of emerging contaminants. Artificial turf is made of plastic materials (polyethylene and polypropylene), and due to its propensity to degrade with UV light, “stabilizers” are added to the mix in the manufacturing process to reduce breakdown. These plastic blades do breakdown slowly into smaller and smaller “microplastics” (less than 5mm), and then into “nanoplastics” (less than 1000 nanometers) which contaminate clothing, shoes and homes; and

1. Contaminate the environment with specific artificial turf fibers and particles that can be specifically identified, especially in water. (deHaan 2023)
2. Expose children and adults via ingestion, inhalation, dermal absorption and now evidence that nanoplastics may enter the brain through the olfactory bulb (nose). (Amato-Lorenco 2024)
3. Have been identified throughout the body in blood, urine, brain, lungs, kidney, liver, gut, breast tissue, testicular tissue, thrombi, placenta and even in atherosclerotic plaque found in 58% of carotid artery specimens. The study showed vascular inflammation and an increase risk of cardiovascular disease-related mortality. (Marfella 2024). Another ongoing study demonstrated preferential absorption in brain compared to other tissues with a 7-30 times higher concentration found in brain, especially in those with dementia; (Nihart 2025)
4. Microplastics and nanosized plastic particles can penetrate the blood brain barrier, the placenta and other tissues, triggering a range of biologic and toxicologic effects including oxidative stress, DNA damage, inflammation, cell damage, organ dysfunction, metabolic disorder, immune dysfunction, neurotoxicity, reproductive and developmental toxicity as well as affecting local blood circulation. (Chartres 2024; Huang2025; Li 2023; Wei 2022) In a study on fish, nanoplastics reduced swimming activity and hunting (predatory) performance. 2022 (Huang 2022) A study of mice exposed for 8 weeks led to learning and memory deficits, lower levels of synaptic proteins, and neuroinflammation. (Lee 2022)
5. Bioaccumulate in living organisms throughout their life. Microplastics are now found in most species studied, especially birds and fish. Quail have been found to have microplastic accumulation in their organs causing toxic oxidative stress in liver, brain, intestine, and gizzard. (deSouza 2022) All 16 raptors studied in the Central Coast of California in 2021 had microplastics in their GI tracts. This included three red-tailed hawks, four red-shouldered hawks two great horned owls and seven barn owls. (Leviner 2023)
6. Microplastics in artificial turf contain other chemicals that are added but not always accounted for including flame retardants, colorants, endocrine-disrupting plastic softeners called phthalates which are developmental toxins and on the DTSC Candidate List. Light stabilizers, antioxidants, and UV stabilizers as mentioned before are also added to prevent plastic breakdown.
7. PFAS is also found in microplastics and added to prevent sticking to machinery during the production process, preventing surface defects. This chemical class is also on the DTSC Candidate List as and its degradation products are both toxic and very persistent in the environment. PFAS chemicals are linked to immune dysfunction, cancer, infertility and developmental delays. If PFAS free artificial turf is marketed, then it should be tested properly for total fluorine and not for just a few of the compounds in a class of over 15,000 chemicals in order for this to be accurate. (Lowell 2024)
8. Contamination continues for a lifetime as the plastic product degrades whether it is on a field, rolled up on a farm or storage facility, or reused for another purpose.

Heat Risks: Too Hot for Turf

“Heat ranks amongst the deadliest of all climate-driven hazards in California, and heat waves in cities are projected to cause two to three times more heat related deaths by mid-century.”

California Extreme Heat Action Plan 2022

Another inconvenient truth is that artificial turf is much hotter than natural grass, creates real health risks and reduces playability compared to natural grass. Efforts to use coolants either as infill or irrigation under the artificial turf cannot cool the turf as much as natural grass, creates more plastic waste that enters the waterways, adds chemicals which may be potentially harmful to the environment and humans, and increases water use and waste.

A Hotter World

OEHHHA. Human driven climate change is producing a warmer world. In California according to the Office of Environmental Health Hazard Assessment, (OEHHHA 2025) “Statewide annual mean [air] temperatures have increased by about 2.5 degrees Fahrenheit (°F) since 1895. Warming has accelerated, and nine of the ten warmest years on record have occurred since 2014.” They also note that “extreme heat, poor air quality, droughts, and other severe impacts of warming temperatures disproportionately fall on underserved communities.”

The California Department of Public Health (CDPH) notes, “In California, annual average maximum daily temperatures are expected to increase by 5.6°F (with moderate changes to greenhouse gas emissions) to 8.8°F (with no changes in emissions) by the end of the century.¹ Minimum nighttime temperatures are also projected to increase.

The State of California produced a guide for cities, Protecting Californians From Extreme Heat: A State Action Plan to Build Community Resilience, in April 2022. Recommendations to mitigate extreme heat include, “TRACK D - GOAL 1, E3: Utilize nature-based solutions as part of cooling strategies in public and private spaces, including through planting trees, expanding greenspace, restoring urban streams, and increasing public awareness of best practices to green urban residential areas.” Increasing tree canopy is also recommended. Artificial turf can harm surrounding trees by increasing air and surface temperatures. It alters soil microbiome and soil health. It can harm, not enhance local bird and ecosystem habitat. Preserving and enhancing existing green spaces rather than adding synthetic turf seems the sensible option for climate resilience.

The City of Missoula looked at artificial turf and noted that it contradicts local health, safety and climate goals. They have experienced an increase in days per year above 90 degrees over the years. Stay Cool Missoula measured temperatures on existing artificial turf and natural grass fields on an 84-degree day at a high school and a regional park noting that the artificial turf field was 25 and 32 degrees hotter than natural grass. Those temperatures would be unplayable.

Playing Hours on Organic Regenerative Natural Grass

In the 2024 SCCMA Recommendation on Artificial Turf we highlighted a few examples of natural organic grass fields that had increased play (TURI 2018 & 2021). These are for smaller communities. Playability may increase even more. The Sierra Club notes in a letter to Palo Alto City Council that in Gilbert, Arizona, Parks Superintendent Sean Carlin has reported that their natural sports fields host 2,000 hours or more of play each. (Sierra Club 2025)

Examples of healthy safe natural grass turfs:

- Marblehead, MA: In 1998 the Marblehead Board of Health adopted a policy to reduce pesticides for the health and safety of children and families. Since 2002 all of Marblehead's playing fields have been managed organically, using integrated pest management (IPM) techniques. It was noted that in the past they have only closed the field for high rainfall, however, in 2018 "the fields were closed five times due to rain and twice due to extreme heat. Each was a one-day closure. The heat-related closures were the first that the town has experienced."
Start Date: 2002
Acres: 20 acres
Hours of Use: 1360 hours
Maintenance Cost: \$4,250 - \$4,500 per acre
Cancellations: 7 times
- Springfield, MA. In 2014 Springfield received support through a grant to implement organic land care and grass turf management practices on municipal and school properties. The city started with six test pilot cases and grew to 12 organically managed sites by 2019, including multiuse or single use fields. One of the multiuse sports parks, Forest Park Baseball and Soccer Complex, which is open 7 days a week, tallied 3,300 hours per year of use. For strictly soccer use Treetop Park Full-Sized Soccer Field there was 1,051 hours per year of use.
Start date: 2014
Acres: 67 acres
Hours of use: 3,300 for multipurpose and 1,051 for soccer
Total Annual Maintenance Cost: \$98,080 for 12 fields
Cost per acre: \$1,460.

Specific Comments on Kimley-Horn Report 2026 General Recommendations

1. Based on a review of requests for athletic events, park system conditions, and community values in the City of Sunnyvale, it is recommended that the City continue to pursue a balanced and context sensitive approach to the use of artificial turf within City parks. This approach should increase access to City Parks where demand exceeds available capacity, while preserving natural grass parks and minimizing potential environmental and public health impacts
Disagree: We recommend banning artificial turf. Agree that "This approach should increase access to City Parks where demand exceeds available capacity, while preserving natural grass parks and minimizing potential environmental and public health impacts."
2. The City should formally adopt a surface policy that supports the continued use of both natural grass and artificial turf within the Sunnyvale parks system. Natural grass should remain the preferred surface for City Parks that serve a broad range of recreational and environmental functions. Artificial turf should be treated as a specialized surface, considered only where its functional benefits are clearly demonstrated
Disagree: We recommend banning artificial turf.
3. Consider funding an organic turf management (OTM) natural grass project, using limited, clearly defined areas, established performance metrics, and comparison to conventionally managed natural grass to evaluate local feasibility, maintenance needs, performance, and community acceptance before broader application
Agree
4. Prioritize artificial turf for athletic facilities with sustained high levels of programmed use that cannot be reliably supported by natural grass alone (e.g. multiuse rectangular fields, tournament level facilities, and sites with limited opportunities for limited rotation or rest) to increase total hours of play, reduce closures and improve scheduling reliability,
Disagree: Natural grass fields should be prioritized for safety and health concerns

5. Prioritize artificial turf in adaptive reuse locations where natural grass is not feasible.
Disagree: Other surfaces can work well and should be explored such as non-toxic engineered wood fiber that is ADA compliant.
6. Where artificial turf is proposed on City-owned property, the City should require compliance with clearly defined health, environmental, and performance standards to be outlined in City's Park Design Guidelines as well as any manufacturer specifications. These standards should address material composition, heat mitigation, stormwater management, and end-of-life disposal or recycling, and should be periodically updated as regulatory guidance and product standards evolve."
Disagree: Advise no further park space to be converted to artificial turf. True health and environmental standards are vague at this time and do not account for direct or indirect and long-term harm to the environment and public health.
7. Before converting any natural grass field to artificial turf, require a lifecycle evaluation comparing long-term costs, maintenance requirements, water use, and environmental considerations for both surface types to support transparent decision making. For City initiated projects and projects that require discretionary approval from the City, specific performance standards for recyclable materials and waste reduction measures should be included in bid documents or as conditions of approval to ensure City goals or policies are being implemented with regards to the use of artificial turf fields.
Disagree: Advise no further installation of artificial turf however agree with full evaluation of current artificial turf and disposal methods.
8. The City should consider establishing a regulatory framework for the installation of artificial turf on private residential and commercial property. Any such framework should recognize that regional water district policies do not currently identify artificial turf as a preferred or credited water-saving measure, and that the water conservation benefits of turf may be context-dependent. Regulations could focus on drought-resistant landscaping performance standards, preferred plant species, permeability, and stormwater management rather than promoting artificial turf as a conservation substitute for living landscapes.
Disagree: Artificial turf should not be used on residential properties as long-term issues remain of which homeowners may not be aware. It also raises the ambient temperature of the City and creates more impervious surface increasing runoff. There are many xeriscaping and California native plant alternatives.
Agree: People "should recognize that regional water district policies do not currently identify artificial turf as a preferred or credited water-saving measure, and that the water conservation benefits of turf may be context-dependent." Reclaimed water can be used on natural grass fields but not on artificial turf that requires pure water to prevent breakdown from salts.
9. In developing regulations for private property, acknowledge enforcement challenges and prioritize clear, objective, installation time standards (e.g., via permitting and plan review) over ongoing compliance monitoring, and coordinate with local water districts to align land use regulations and water conservation messaging.
Disagree: Recommend no further installation of artificial turf.
10. Commit to ongoing community engagement and transparency related to artificial turf policies on both public and private property, including regular reporting on turf installations, natural grass preservation, field usage, and unmet demand so policies can evolve as conditions, technology, and community priorities change.
Agree: It is important to have ongoing community engagement and education on this issue with particular focus on climate and health benefits of natural grass and greenscapes in general.

In summary

We recommend a ban on any new artificial turf fields on public or residential property, and that pre-existing artificial turf should be replaced with natural grass fields at the end of their useful life as an easier, less costly and sustainable approach for the City in the long run.

There has been no proof of safety for artificial turf fields. Science is showing the opposite. The evidence only grows for environmental and public health harm, as well as safety risks of artificial turf which outweigh the benefits. Artificial turf is not sustainable. The only way to reduce risk and prevent human and environmental harms from artificial turf is to take a precautionary approach banning all further artificial turf in parks and throughout the city, and reject the Kimley-Horn report that proposes to increase the use of artificial turf. This will prevent *“the loss of critical nature-based health and well-being benefits afforded by natural turfgrass greenspaces.”* (Barnes 2023)

Industrialization has caused a steady and accelerating deterioration in the natural state of the environment. The Anthropocene has been a force of change, creating the fossil fuel age, the nuclear age and now the “plastic age,” which some call the Plastocene. Harms of the plastic age are becoming more evident daily and contribute to biodiversity loss, climate instability and unhealthy communities. Local governments, such as yours in the City of Sunnyvale, can reverse this trend by careful and steady deliberations prioritizing the environment, biodiversity and human health keeping humanity within “a safe operating space” for your community and future generations.

Sincerely,

A handwritten signature in dark ink, appearing to read 'M. Chow', with a long, sweeping horizontal stroke extending to the right.

Marc Chow, MS
Chief Executive Officer
Santa Clara County Medical Association

On behalf of the Santa Clara County Medical Association

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From: Cynthia Fan
To: [PPW Comment](#)
Cc: [Rob Moore](#); [Maria Ristow](#); [Mary Badame](#); [Rob Rennie](#); [Matthew Hudes](#)
Subject: Direct staff to gather data for the Creekside renovation decision - Parks & Sustainability Commission, August 3 meeting
Date: Friday, July 31, 2026 11:00:11 AM
Attachments: [202607311044 - Comments on Los Gatos Parks and Sustainability Commission August 3 2026 Meeting.pdf](#)

[EXTERNAL SENDER]

Commissioners,

The attached PDF finishes the comments I began on June 1.

The short version: you have the opportunity to make a recommendation to Council, but staff have not given you the data a recommendation needs, and the cost study's numbers need correcting first. Every direction and question I hope you will put to staff appears in a numbered Question Box with language you can read off, and the appendix has one-breath answers to the claims you are most likely to hear from the audience.

Thank you for the care you have already shown with this.

-Cynthia Fan

To: Los Gatos Parks and Sustainability Commission
Email: PPWcomment@losgatosca.gov

CC: rmoore@losgatosca.gov, mristow@losgatosca.gov, mbadame@losgatosca.gov,
rrennie@losgatosca.gov, mhudes@losgatosca.gov, clerk@losgatosca.gov

Date: July 31, 2026

Re: Direct staff to gather data for the Creekside renovation decision — Parks & Sustainability Commission, August 3 meeting

Dear Commissioners,

This letter is about Monday's agenda item evaluating natural grass versus artificial turf for Creekside Park. When I wrote to you on June 1 about the artificial turf study, I said I had a lot more to say about its specific findings and hoped that evening was part one of a larger conversation. This is part two, and my June 1 letter should be in your packet for the Monday item, so the two go together. That first letter has its own small story. Staff published the consultant's hundred-plus page turf study the Friday before your Monday meeting, written comments were due Monday at 11:00 a.m., and while racing feverishly against that clock, my email reached staff at 11:01, exactly one minute past the cutoff. That was my own fault, and staff were right to follow the protocol of withholding late input from you. I mention it only to explain why you are receiving that letter now for the first time, and to share my gratitude for your requesting the continuance that granted this turf conversation more time for you and me to review the consultant's work.

All the feedback in this second letter is still based on the June 1 agenda item 2 materials¹. As of 10:40 a.m. today, Friday July 31, the agenda and materials for the Monday, August 3 meeting have not been published, so with today's 11:00 a.m. comment cutoff I have had no opportunity to review them or write anything about them. Anything I submit between 11:00 a.m. today and 11:00 a.m. Monday is, per Director Burnham, expected to be shared with you by about 4:00 p.m. Monday. So if the August 3 agenda item differs from the June 1 agenda item in a meaningful way, I may find reason to submit additional comments. I hope you are able to block out some time between 4:00 p.m. Monday and the 6:00 p.m. meeting to review them.

Before anything else, one framing fact. In February 2024, Council directed staff to evaluate converting this field to natural grass rather than replacing the artificial turf; that direction is quoted in the Town's own capital budget.² So a fair question hangs over Monday: has the decision to replace Creekside's artificial turf with more artificial turf already been made? It is

¹June 1, 2026 Parks and Sustainability Commission agenda item 2 materials, including the consultant study commented on throughout this letter:

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet029e2953f9c144029081b35fa76ae063/ITEM-Attachments-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

²Town of Los Gatos, Proposed Capital Improvement Program budget, FY 2025-26, Creekside Turf Replacement, pages D-16 to D-17 (PDF viewer pages 153-154). Records \$37,135 in FY 2024-25 actuals, Tier 2 unappropriated estimates of \$1,262,865 shown in FY 2029-30, and a project timeline in which design is "TBD, contingent on future funding." The FY 2026-27 volume (PDF viewer pages 152-153) carries the same project at a Total Project cost of \$1,300,000, being the sum of the \$37,135 spent and the \$1,262,865 unappropriated, remains Tier 2, states that "This project is not currently fully funded," records that "In February 2024, Council directed staff to evaluate converting this field to natural grass rather than replacing the artificial turf," and states that there are no operating budget impacts for this project in FY 2026-27. FY 2025-26 volume: <https://www.losgatosca.gov/DocumentCenter/View/43385/FY-2025-2026-Capital-Budget>. FY 2026-27 volume: <https://www.losgatosca.gov/DocumentCenter/View/45617/Proposed-CIP-2026-27-Budget>

worth noticing that the June 1 agenda item was titled "Creekside Park Turf Repair,"³ not something like "Evaluate Natural Grass Versus Artificial Turf for Creekside Park." You have the opportunity to make a recommendation to Town Council. But staff have not provided you with the data you need to make that recommendation. Step one is to direct staff to get that data.

Here is the whole request in one paragraph. Data-informed decision-making requires complete and accurate data, and right now the record before you has neither: the cost study contains significant errors, including one number that is wrong by a factor of twenty, several of them visible on the face of its own tables, and the data that would show whether the Town even needs this field converted, how many hours the community actually plays across all of its fields rather than at Creekside alone, on which fields, against what capacity, has never been gathered at all. The study should not reach Council until staff have corrected it and gathered the missing data, and this Commission's recommendation is the lever that makes that happen. This is an overwhelming amount of information, so to make it easy for you, every direction and question I would like you to put to staff appears in a shaded, numbered Question Box right where it comes up, with language you can read off, so you do not have to hunt for details or paraphrase directions and questions on the fly; each box has a checkbox to mark once you or a colleague has raised it. And when an answer is "we will look into it," the reply that turns a promise into a deliverable is a date: in writing, to this Commission, by its next regular meeting. You do not have to agree with me about grass, plastic turf, or anything else to adopt the corrections in Section 2. After that, Sections 3 through 7 walk through why the need for a plastic turf field has not been shown, why natural grass deserves the evaluation Council asked for, what happened to the environmental promises this park was built on, and how the Town plans to pay for a recurring purchase; Section 8 lists the contract conditions for the case where you recommend plastic turf anyway, and Section 9 collects the commonly cited reasons for tolerating plastic turf, wherever they come from, each paired with the evidence that natural grass remains the better choice.

The short version, before the sections, because the June 1 staff report's conclusion told you that converting to natural grass "will be more costly both in terms of construction and long-term maintenance" and will "significantly reduce" play time. Both claims are contradicted by the study's own tables. On construction: Table 3 puts grass at \$1,770,575 against \$1,174,071 to \$1,343,511 for the plastic turf options. Of that difference, \$122,862 is a design contingency charged to the grass estimate and to none of the plastic turf estimates, an asymmetry the study never explains, and about \$295,925 is the cost of digging out the drain rock, compacted subgrade and treated soil that the 2012 plastic turf installation left in the ground. That removal cost is real, but it was created by the earlier plastic turf decision rather than by grass. Set those two aside and the remaining gap is roughly \$178,000, about ten percent.⁴ On the twenty-year total: the study's \$7.1 million grass figure is built almost entirely on rebuilding the field for \$885,600 every four years, a figure that comes from dividing Table 4's \$4,428,000 refurbishment line across the five rebuilds it schedules. That schedule is contradicted by the

³June 1, 2026 Parks and Sustainability Commission agenda:

<https://meetings.municode.com/adaHtmlDocument/index?cc=LOSGATOS&me=029e2953f9c144029081b35fa76ae063&ip=True>

⁴Study Tables 3 and 4. Installation totals: natural grass \$1,770,575; crumb rubber \$1,174,071; cork \$1,301,151; BrockFill \$1,343,511; PIVOT \$1,216,431. The natural grass estimate alone carries a \$122,862 design contingency and about \$295,925 to remove the drain rock, compacted subgrade and lime-treated soil installed for the 2012 artificial turf. Twenty-year totals: natural grass \$7,116,337 (five refurbishments at \$885,600); crumb rubber \$2,535,407, including an \$836,536 carpet replacement at year 12 and \$524,800 of twenty-year maintenance.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

study's own text, by its own cost table, by the source it cites for grass overhaul intervals,⁵ and by an expert named in the appendix this study relies on.⁶ At the same consultant team's own 2024 price for refurbishing this very field, \$95,000,⁷ the corrected grass total lands in the range of \$2.6 to \$3.2 million, while the plastic turf total rises past \$3.4 million once the second replacement Council asked about and the missing end-of-life cost are added. On play time: the City of Palo Alto's final turf study records nineteen of its native-soil grass fields used more than 600 hours a year, twelve of them near or above 1,000 hours and seven above 1,300,⁸ while its key findings report only several fields near or above sustainable capacity; City of Sunnyvale staff report ordinary grass fields logging over 1,000 hours,⁹ and a rebuilt Australian field carries 49 hours a week.¹⁰ And on the question the study never asks, what it costs to own and operate a grass field year after year, the very appendix this study leans on found that in its Parks scenario the cool-season native soil field had the lowest cost per hour of every field type considered, including an artificial turf field.¹¹ That appendix compares field types in ongoing operation rather than conversion projects, so it answers the long-term maintenance half of the staff report's conclusion rather than the construction half, and it is precisely why the hours and maintenance assumptions in front of you decide the outcome. The sections that follow document every piece of this. Correct the two factors staff called decisive, cost and hours, and the conclusion reverses: on the study's own numbers, corrected, natural grass costs less over

⁵The study's own cited source, San Francisco Recreation and Parks, holds that a grass field typically requires a major overhaul every ten years, maximum; the study's text then adopts replacement every five years on the strength of an unattributed "based on our experience," with no author or credential identified, its cost table charges every four, and its Table 6 says every two to three.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

⁶May 2024 webinar hosted by a District of Columbia elected official with seven national experts: Jerad Minnick, Sports Turf Manager at the Maryland SoccerPlex, and Sun Roesselain, recent president of the international Sports Field Management Association, explained that a grass field can last more than 20 years without renovation. Recording:

<https://youtu.be/E3FEQ7vmuCE>; synopsis: https://drive.google.com/file/d/1uWtXGbeR_msSRBuTBMkG0LzII_VQ29P/view

⁷City of Sunnyvale, Artificial Turf Policy Study (Kimley-Horn, July 2026 final), Attachment 1 to the 28 July 2026 Council study session, PDF viewer page 94: "Case Study Town of Los Gatos Creekside Sports Park Turf Operations Assessment Completed 2024," stating "The consultant completing this study is the same consultant working on the Sunnyvale study." The page reports an initial field cost of \$750,000 "verified by Town of Los Gatos staff"; grass refurbishment at \$95,000 per event at years 4, 8, 12, 16 and 20; average annual synthetic maintenance of \$30,770; \$45,000 for removal and recycling of infill and turf within a \$975,000 year-12 carpet replacement; synthetic use of 40 weeks and 2,000 hours per year with 1,000 hours deducted for replacement-year closure; and natural grass at 544 hours per year (640 minus 15 percent for rain).

<https://sunnyvaleca.legistar.com/View.ashx?M=F&ID=15709600&GUID=6BB1AD11-85F0-451E-9B3F-5538480E791E>

⁸City of Palo Alto, Athletic Field Turf Study, final report (2025), page 59: nineteen of the City's native-soil natural grass fields are used more than 600 hours a year, twelve of them near or above 1,000 hours, and seven of those more than 1,300 hours. The report defines sustainable carrying capacity as the amount of use a field can sustain before its condition declines below an acceptable level for safe or quality play (page 5), and its key findings state that only several of the City's native-soil grass fields are operating near or above sustainable capacity.

<https://www.paloalto.gov/files/assets/public/v/1/community-services/staff-report-contracts/open-space-parks-and-golf/turf-study-report/2025-city-of-palo-alto-turf-study-report.pdf>

⁹City of Sunnyvale Council study session, 28 July 2026, staff presentation: Sunnyvale's actual logged hours on natural grass fields range from 23 to over 1,000 hours per year against an industry rule of thumb of 600 to 800; the report's ten recommendations begin with prioritizing and conserving natural grass and include an organic field management pilot; and on end of life, staff stated that artificial turf cannot fully be recycled and very few recycling facilities exist. Consultants identified as Kimley-Horn and CHA. Video: <https://www.youtube.com/live/ssWCK0W58Bc?t=2923>

¹⁰ABC News Australia (2022), video report on the reconstruction of Middle Head Oval, Mosman, New South Wales: a natural grass field that had been targeted for synthetic conversion, rebuilt with best-practice soil amendment by Dr. Mick Battam, now carrying 49 hours per week of play, more games than any other ground in Mosman. <https://youtu.be/YBzcZbSyqIQ>

¹¹Study Appendix A (the 2011 Montgomery County report), findings: "For fields that would be dedicated for Parks' use, the cool season native soil field has the lowest net cost and cost per hour of each of the fields considered (including a Parks artificial turf field)." The appendix names Mr. Jerad Minnick, Sports Turf Manager at the Maryland SoccerPlex, among the experts consulted.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

twenty years than any plastic turf option, and well-built grass carries the hours this community actually plays.

1. This field may have needed to close, possibly for good, back in 2022

Here is this section's conclusion up front. The record suggests this field crossed into unsafe territory in March 2022, more than four years ago, at a hardness associated with the risk of life-threatening head injury, and it stayed open. And the deeper problem the record exposes is this: no one has ever established how long the plastic turf system at Creekside could safely stay in service, and nothing in the study establishes that for any system the Town might buy next.

To see why, start with what the safety test actually measures. GMax is a standardized measure of how hard a surface is on impact: the higher the number, the harder the landing, and the greater the potential for head injury. And the two numbers in play are not interchangeable. The industry's own trade association recommends staying below 165.¹² The 200 figure is where the testing standard fails a field outright, an upper injury criterion rather than an operating target, so a program that waits until a field approaches 200 has already spent the margin the 165 guideline exists to preserve.¹³ On an infilled plastic turf field, the cushioning comes largely from the infill layer, though some systems place a shock pad beneath it instead, and play, wind and rain gradually push that layer out of the busiest zones, the goal mouths and midfield, leaving localized hard spots. Because the infill sits buried in the plastic blades, none of this is visible. Natural grass shows its wear; plastic turf stays uniformly green while the cushioning underneath it thins, so a hazardous field looks exactly like a safe one.¹⁴

Two numbers give the scale meaning. The first is 200: it is the level at which the ASTM standard used for these tests fails a field outright, and a consumer product presenting that hazard meets the federal definition of a substantial product hazard, one posing unreasonable risk of serious injury or death.¹⁵ The second is the industry's own comfort threshold, 165: the

¹²Synthetic Turf Council, Guidelines for Synthetic Turf Performance (December 2011), Performance Guidelines table: ASTM F1936 impact attenuation (g-max) "Below 165" for both community fields and stadium fields. The Synthetic Turf Council is the artificial turf industry's trade association, founded in 2003 to promote the industry. The same document states that its guidelines are voluntary, are not standards, and are not safety standards.

https://cdn.ymaws.com/staging-stc.site-ym.com/resource/resmgr/guidelines/STC_Guidelines_for_Synthetic.pdf

¹³Sports Field Management Association, "Field Hardness Testing": "The American Society for Testing and Materials (ASTM) standard (F1936) uses the F355 device to test surface hardness on natural and synthetic fields and sets an upper limit of 200 Gmax. According to ASTM Standards, a value greater than 200 Gmax qualifies for the expectation that life threatening head injuries may occur." The same document reports that the Synthetic Turf Council recommends Gmax not exceed 164 using the F355 device, and states that testing once per year "is not likely to hold up in a liability court case."

https://www.sportsfieldmanagement.org/wp-content/uploads/2017/11/Field_Hardness-FINAL-2.pdf. See also 16 C.F.R. sec. 1115.6 (substantial product hazard): <https://www.law.cornell.edu/cfr/text/16/1115.6>

¹⁴Cynthia Fan, comments to the Los Gatos Town Council on agenda item 6, 5 May 2026: source of the GMax explanation, the ASTM F1936 and federal substantial-product-hazard framing, the settling-time request, and the seasonal-testing request. https://losgatos-ca.municodemeetings.com/sites/losgatos-ca.municodemeetings.com/files/fileattachments/town_council/meeting/7890/item_6_desk_item.pdf

¹⁵Cynthia Fan, comments to the Los Gatos Town Council on agenda item 6, 5 May 2026: source of the GMax explanation, the ASTM F1936 and federal substantial-product-hazard framing, the settling-time request, and the seasonal-testing request. https://losgatos-ca.municodemeetings.com/sites/losgatos-ca.municodemeetings.com/files/fileattachments/town_council/meeting/7890/item_6_desk_item.pdf

Synthetic Turf Council's figure sits at 164,¹⁶ the field managers' association guide at 165,¹⁷ and AstroTurf, the company whose product is on this field,¹⁸ says anything above that level must be "remediated or replaced."¹⁹ Between those two numbers a field is not safe; it is a field that has outlived the industry's standard and is aging toward the life-threatening line.

Now put this field's history against that scale. It was tested in 2013 and 2014, and then not again for almost eight years; the 2022 test happened only because I emailed the Town in January 2022 asking what the field's GMax numbers were, and the Superintendent had to ask the manufacturer whether anyone had ever tested it.²⁰ That March 2022 test, at nine and a half years old, averaged 196, above the industry threshold, with three spots already over 200,²¹ past the life-threatening line. I told Council this in September 2024: the field's life had not ended that month, it had ended years earlier,²² when it hardened past the point of being safe. The field was not closed. It stayed open four more years.

What followed shows how much the numbers depend on who tests, and when. A May 2025 test commissioned by the manufacturer averaged 140 and became the basis for a year of reassurance.²³ On May 5 of this year, Council approved a five-year maintenance contract whose staff report said the work would ensure safety for all users²⁴ and keep the aging field

¹⁶Synthetic Turf Council, Guidelines for Synthetic Turf Performance (December 2011), Performance Guidelines table: ASTM F1936 impact attenuation (g-max) "Below 165" for both community fields and stadium fields. The Synthetic Turf Council is the artificial turf industry's trade association, founded in 2003 to promote the industry. The same document states that its guidelines are voluntary, are not standards, and are not safety standards.

https://cdn.ymaws.com/staging-stc.site-ym.com/resource/resmgr/guidelines/STC_Guidelines_for_Synthetic.pdf

¹⁷Sports Field Management Association, "Surface Hardness and Synthetic Turf" (guide). Reports the Synthetic Turf Council recommendation that GMax, measured by ASTM F355, not exceed 165, and ASTM F1936's maximum of 200; also reports research from the Penn State Center for Sports Surface Research that approximately 10 to 15 percent of concussions in football and soccer result from head contact with the playing surface. (The NFL uses a different device, the Clegg tester, with a different threshold; the two standards are not interchangeable.)

<https://www.sportsfieldmanagement.org/wp-content/uploads/2017/11/Surface-Hardness-Synthetic-Turf-Guide2-1.pdf>

¹⁸The quoted sentence is the opening line of the consultant study itself (Attachment 1 to the June 1, 2026 staff report): "The Town of Los Gatos (Town) has used artificial turf from AstroTurf at Creekside Sports Park since 2013." The same statement appears in the Council Agenda Report for the 17 September 2024 meeting. Study:

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>. September 2024 report:

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-f26ca8eac13d48878327bf1b32f4b24b/ITEM-Attachment-009-776db24382174e27878edfcedc5b2af7.pdf>

¹⁹AstroTurf, "The AstroAdvantage Field Replacement Program": "A well-maintained natural grass field is 90-100G's. New turf fields are usually 100-125G's, and the Synthetic Turf Council (STC) has a top line threshold of 165G's. Anything above that level, needs to be remediated or replaced." (wording as in the original). <https://astroturf.com/field-replacement-program/>

²⁰Email chain, Town of Los Gatos and AstroTurf Corporation, 19 January to 20 April 2022, obtained by public records request. Cynthia Fan to Matt Morley, 19 January 2022, requesting the field's most recent GMax measurements and the Town's threshold; Jim Harbin, Superintendent, to Jose Padilla of AstroTurf, 8 February 2022, asking whether AstroTurf held any record of a past GMax threshold at Creekside; Padilla, 9 February 2022, replying that he did not believe a GMax test had been performed on the field in recent years; Padilla, 4 February 2022, offering to set up a GMax test right after the next maintenance visit. The prior tests referenced in the 2022 report are dated 5 February 2013 and 15 September 2014. Available at: <https://drive.google.com/file/d/1zoEXPJeHNoOnaMeLh9XwCKSqiRb8PxVg/view>

²¹Sports Turf Solutions, GMax test report, job 22-010, Creekside Sports Park, 28 March 2022. Client: Town of Los Gatos. Average 196, range 160 to 226; points 2, 9 and 10 failed ASTM at 207, 226 and 215. Obtained by public records request; copy on file with the Town. Available at: https://drive.google.com/file/d/1Q1OIKJWJs9PlvS9UG4d2U_kJ-43gknlv/view

²²Cynthia Fan, "Creekside Scope of Services Amendments," written comments to the Los Gatos Town Council, Item 8, meeting of 17 September 2024. Fourteen requested amendments to the Scope of Services. Copy on file with the Town. Available at: https://drive.google.com/file/d/1iUj3iUG_95ti-CoeUIIA3s2LhOKeDUDW/view

²³Sports Labs LLC, GMax test report 96899-9090, Creekside Sports Park, 30 May 2025. Client: AstroTurf. Average 140, range 133 to 150; testing in the morning at a recorded surface temperature of 75 degrees Fahrenheit. Obtained by public records request; copy on file with the Town. Available at:

https://drive.google.com/file/d/1eTqBeGF5GZjDSdzZdTUP-f9TREF0_eb2g/view

²⁴Town of Los Gatos, Council Agenda Report, Item 6, meeting of 5 May 2026, "Creekside Sports Park Artificial Turf Maintenance Agreement," prepared by Tyler Thomas, Superintendent. States that the proposed work ensures safety for all users.

safe until money could be found to replace it,²⁵ and the Director of Parks and Public Works told Council: "If it tests over 200, which we're very far away from, to be clear, very far away, but if we were to test at 200 or more, we would recommend closing the field immediately."²⁶ She said "we actually do think the field condition will continue to at least stay the same if not improve a little bit,"²⁷ and, about adding extra safety measures: "We did not recommend it. We don't necessarily think that it's needed at this time."²⁸ Nine weeks later the field took its once-a-year test, failed, and the Town closed it on July 18.^{29,30}

Why would a field test 140 one year and fail the next? Part of the answer is that everyone agrees maintenance temporarily softens the surface; that was the whole point of the May 5 contract, and the manufacturer's own care guide says GMax values improve with grooming, top-dressing and decompaction.³¹ A field tested right after servicing shows its freshly groomed best, not the surface kids will be playing on later in the season, which is why my May 5 letter asked that testing be done only after adequate settling time following maintenance.³² It matters to the record: in 2022 the manufacturer proposed, in writing, running the test "right after our next maintenance visit,"³³ while the Town's failing 2022 test happened to run five months after the last service, on a field in ordinary condition.

A caution about the July 2026 GMax measurements, because the failing report disagrees with itself: its summary says the field averaged 259 while its own point-by-point table works out to 219, with two points as low as 187. Both cannot be right, though the conclusion is not in doubt: the field failed and is closed. And step back to the pattern: tested twice in its first nine years,

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-3744f4da1cc54d5bb6ac8bdea3608087/ITEM-Attachment-018-8e58f5a144404f6289457ef99f4990a1.pdf>

²⁵Town of Los Gatos, Council Agenda Report, Item 6, meeting of 5 May 2026. States that the turf requires more intensive maintenance to keep the field in safe playing condition until such time as funding is available to replace the artificial turf.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-3744f4da1cc54d5bb6ac8bdea3608087/ITEM-Attachment-018-8e58f5a144404f6289457ef99f4990a1.pdf>

²⁶Town Council, meeting of 5 May 2026, Item 6. Statement of Nicolle Burnham, Director of Parks and Public Works, in response to Council Member Rennie, at 46:38 of the meeting video. Quotation verified against the recording.

<https://www.youtube.com/live/padVmiW3GYw?t=2798>

²⁷Town Council, meeting of 5 May 2026, Item 6. Statement of Director Burnham at 47:53 of the meeting video. Quotation verified against the recording.

<https://www.youtube.com/live/padVmiW3GYw?t=2873>

²⁸Town Council, meeting of 5 May 2026, Item 6. Statement of Director Burnham at 48:09 of the meeting video. Quotation verified against the recording; words repeated in the spoken delivery are omitted.

<https://www.youtube.com/live/padVmiW3GYw?t=2889>

²⁹Sports Labs LLC, GMax test report 10544-3144, Creekside Sports Park, testing date 8 July 2026, issued 14 July 2026.

Client: AstroTurf. Concludes that test points failed the ASTM F1936-19 requirement. Obtained by public records request; copy on file with the Town. Available at: https://drive.google.com/file/d/1ydpO-yLNinQaVEq_pcnZd-i3sOdT4Kck/view

³⁰Town of Los Gatos, "Creekside Sports Park Field Update," public notice posted 18 July 2026 to the Town's official Facebook page. Text verified in full.

<https://www.facebook.com/100064771354014/posts/pfbid0zYwgKVuMGYPJNLbHtJrkQ8AENTJQBLtaUkZj8Hkae8r1Kz9wPE6M8rGTjcrmaGl/>

³¹AstroTurf Corporation, "How To Proactively Care for AstroTurf and Artificial Turf: A Comprehensive Guide." States that GMax values can be improved through grooming, infill top-dressing, and decompaction procedures, and reports Penn State research suggesting aggressive decompaction two to three times annually for heavily used fields.

<https://astroturf.com/how-to-proactively-care-for-astroturf-and-artificial-turf-a-comprehensive-guide/>

³²Cynthia Fan, comments to the Los Gatos Town Council on agenda item 6, 5 May 2026: source of the GMax explanation, the ASTM F1936 and federal substantial-product-hazard framing, the settling-time request, and the seasonal-testing request.

https://losgatos-ca.municipalmeetings.com/sites/losgatos-ca.municipalmeetings.com/files/fileattachments/town_council/meeting/7890/item_6_desk_item.pdf

³³Email chain, Town of Los Gatos and AstroTurf Corporation, 19 January to 20 April 2022, obtained by public records request. Cynthia Fan to Matt Morley, 19 January 2022, requesting the field's most recent GMax measurements and the Town's threshold; Jim Harbin, Superintendent, to Jose Padilla of AstroTurf, 8 February 2022, asking whether AstroTurf held any record of a past GMax threshold at Creekside; Padilla, 9 February 2022, replying that he did not believe a GMax test had been performed on the field in recent years; Padilla, 4 February 2022, offering to set up a GMax test right after the next maintenance visit. The prior tests referenced in the 2022 report are dated 5 February 2013 and 15 September 2014. Available at: <https://drive.google.com/file/d/1zoEXPJeHNoOnaMeLh9XwCKSgiRb8PxVg/view>

over the industry threshold by year nine at the latest and possibly years earlier with nobody looking, reassuring under one tester and failing under the next, done at year fourteen against a warranty of eight and lifespan claims of eight to twelve. The field managers' own guidance says testing once per year "is not likely to hold up in a liability court case" and that managers should test throughout the season.³⁴ This is what I mean by the section's conclusion: nobody knew this field's true safe lifespan while it was alive, and nothing in front of you establishes one for the next system either.

[] Q1. "Please have the testing company reconcile the July report's 259 average against its own table's 219 before anyone quotes a number from it."

Both figures are in the same report. Whichever is right, decisions and public statements should not repeat a number the report itself contradicts.

[] Q2. "Please bring this Commission, in writing by our next regular meeting, this field's full maintenance and testing history, including the total spent each year and any vendor payments outside the Town's work-order system: what maintenance was performed each year since 2013 against the manufacturer's recommended schedule, what maintenance was performed in the sixty days before the May 2025 test, and every GMax test ever run."

AstroTurf's own maintenance manual classifies a field at this level of use as extreme use and calls for weekly sweeping and twice-monthly grooming; FieldTurf, the contractor now maintaining the field, publishes a looser standard of brushing every four to six weeks;³⁵ my May 5 letter asked whether the Town's actual practice ever met either one. The record shows tests in 2013, 2014, then nothing until my email in 2022; the field failed the first test in eight years and stayed open four more. The Commission should know whether the maintenance the study's cost model assumes ever actually happened here.

³⁴Sports Turf Managers Association, Field Hardness Testing guidance: testing once per year "is not likely to hold up in a liability court case"; sports turf managers at all facility levels are advised to test throughout the season.

<https://www.stma.org/wp-content/uploads/2019/09/Field-Hardness-Testing-STMAInstitute-logo.pdf>

³⁵FieldTurf Maintenance Guidelines (April 2017), page 4: routine brushing every 4 to 6 weeks.

https://fieldturf.com/workspace/uploads/files/fieldturf_brochure_maintenance-guidelines_apr2017_006.pdf

2. Fix the study's numbers before this goes to Council

Council should not make a million dollar decision on numbers known to be wrong, and whatever you eventually recommend for Creekside, it would be dangerous for these numbers to be used as a basis for decisions about the Fisher Middle School field or anywhere else in town. The errors below are significant, and each one can be verified against the study's own pages. Each has a letter so you can walk the list with staff on Monday and confirm, one by one, that it will appear in a published errata sheet.

A short note on how to read this study, because the framing does as much work as the numbers. Watch the labels: the only grass scenario is stamped "Quality: Poor"³⁶ while being billed for reconstruction every four years, and both cannot be true. Watch the denominators: cost per use and per-hour emissions shrink or grow with whatever usage number the author assumes, and this study uses three different usage numbers for the same field.³⁷ And watch what never reaches the summary tables: the study gives four paragraphs to color and appearance, concluding plastic turf's consistent green is more aesthetically pleasing on the strength of research about natural greenery, while PFAS gets two sentences,³⁸ end-of-life cost gets no line at all, and no local hour of play on grass was ever measured.

2a. Cost off by a factor of 20.

The summary table says natural grass costs \$101 per square foot per year, versus \$36 or \$37 for plastic turf.³⁹ Those are not annual numbers. Divide each option's twenty-year total by the field's 70,600 square feet and you get exactly those figures: they are twenty-year totals mislabeled as annual costs. The real annual numbers are about \$5 for grass and \$1.80 for crumb rubber. The comparison between options is unchanged, but the headline table Council will see overstates every number in the row twenty times over.

³⁶Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. Table 5 labels the single natural grass scenario "Quality: Poor."

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³⁷Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. The memorandum estimates annual use of the field at 2,120 hours for soccer and lacrosse, while Table 4 models 2,500 hours per year and Table 5 assumes 1,600. The cost per use formula printed beneath each column of Table 4 divides total maintenance and capital by total permitted hours in the twenty-year cycle.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachme nt-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

³⁸Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. The materials discussion states that artificial grass carpet and backing is typically made with per- and polyfluoroalkyl substances and may contain plastic fibers that may leak out microplastics.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachme nt-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

³⁹Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. Staff report Table 1 and memorandum Table 4 label the row "Annual Cost per square foot of field."

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachme nt-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

2b. What maintaining an artificial turf field actually costs, and what the study assumed.

The study models plastic turf maintenance at \$16,400 a year to start.⁴⁰ The Town's actual maintenance contract for this exact field runs up to \$27,690 in the first year of the maintenance agreement the Town signed with FieldTurf in May 2026.⁴¹ Staff may fairly say the \$27,690 reflects extra care for a worn-out field. Fine: then the study should say what maintenance standard its \$16,400 buys, because the only real-world price for maintaining this field is \$27,690 for the Rhino Pro program, the branded maintenance service the Town buys under that agreement, and the study's twenty-year average never reaches it. And even that is not the whole cost: staff told Council on May 5 that they do unpriced in-house work on top, fill-in sweeping every other week or monthly, storm drain cleaning, and the filter installation, none of which appears in any of the three numbers.⁴² The history question in Q2 belongs here too: if the Town's past practice never met the manufacturer's recommended schedule, then the study is pricing a level of care this field has never actually received.

And now the Town's own records can be laid beside the two price tags. The manufacturer's manual sets the required care, and its testing guidance alone calls for annual GMax testing by an independent tester at \$750 to \$1,000;⁴³ Q2 asks staff to bring the manual's full schedule alongside the record below.

⁴⁰Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. Table 4 states first year annual maintenance for artificial turf of \$16,400 and a twenty-year average of \$26,240.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachme nt-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

⁴¹Town of Los Gatos and FieldTurf USA, Inc., Agreement for Services (5 May 2026). Year one cost not to exceed \$27,690.00 for FY 2026-27, being \$19,690 of routine maintenance plus an \$8,000 allowance, CPI-adjusted thereafter.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-3744f4da1cc54d5bb6ac8bdea3608087/ITEM-Attachme nt-006-f259f70a2fc74557bd0b18f5a70d1ec9.pdf>

⁴²Los Gatos Town Council, meeting of 5 May 2026, agenda item 6. Video: <https://www.youtube.com/live/padVmiW3GYw?t=2684>

⁴³Same page: AstroTurf advises calling an independent field tester with the proper equipment to test under the ASTM F355 protocols, at \$750 to \$1,000 for an independent test. <https://astroturf.com/field-replacement-program/>

The table below sets four things side by side: what proper care requires, drawn from AstroTurf's own operation and maintenance manual, the Synthetic Turf Council's maintenance guidelines and the Sports Field Management Association's hardness guidance;^{44,45,46} what the Town's own records show was actually done, from the work-order export, the 2021 scope, the GMax reports and vendor invoices;^{47,48,49,50} the model used in the study's cost analysis;⁵¹ and the 2026 FieldTurf contract.⁵²

Table A. What proper care requires, what the study assumed, what the contract buys, and what the Town did.

Task	What proper care requires	The Town's actual record of Creekside maintenance	The model used in the study's cost analysis, \$16,400	The 2026 contract, \$27,690
Sweeping and cleaning	AstroTurf: weekly for extreme use. STC: keep the surface clean, with a daily walk of the field.	The 2021 scope lists "cleaning"; nothing logged after 2022.	One contractor visit a year.	Twice yearly, plus unpriced staff fill-ins.
Grooming and brushing	AstroTurf: twice monthly for extreme use. STC: regular brushing, frequency tied to intensity of use.	"Combing of the infill" in 2021; nothing logged after 2022.	Staff "dragging," frequency unstated.	Vacuuming and inspection, twice yearly.

⁴⁴Same page: AstroTurf advises calling an independent field tester with the proper equipment to test under the ASTM F355 protocols, at \$750 to \$1,000 for an independent test. <https://astroturf.com/field-replacement-program/>

⁴⁵Synthetic Turf Council, Guidelines for Maintenance of Infilled Synthetic Turf Sports Fields (January 2013): "Plan to perform the maintenance recommended by your field builder. In terms of time, you should budget one hour of inspection and maintenance for every 10 hours of playing time." The same guidelines call for a maintenance person to walk the field daily, for comprehensive maintenance semi-annually to annually including decompaction and deep cleaning, for field rejuvenation when GMax readings exceed desired levels, and for a maintenance and activity log that warranties often require. <https://drive.google.com/file/d/1JrtpYLBEOTfVXC8iK1BrBeQTH1v6JvID/view>

⁴⁶Sports Field Management Association, "Field Hardness Testing": "The American Society for Testing and Materials (ASTM) standard (F1936) uses the F355 device to test surface hardness on natural and synthetic fields and sets an upper limit of 200 Gmax. According to ASTM Standards, a value greater than 200 Gmax qualifies for the expectation that life threatening head injuries may occur." The same document reports that the Synthetic Turf Council recommends Gmax not exceed 164 using the F355 device, and states that testing once per year "is not likely to hold up in a liability court case." https://www.sportsfieldmanagement.org/wp-content/uploads/2017/11/Field_Hardness-FINAL-2.pdf. See also 16 C.F.R. sec. 1115.6 (substantial product hazard): <https://www.law.cornell.edu/cfr/text/16/1115.6>

⁴⁷Town of Los Gatos asset work-order export for Creekside Sports Park, produced 30 July 2026 in response to a Public Records Act request: 3,050 task records, 2018 through 2026. The activity "Maintenance - Turf" appears twelve times, totaling \$6,378.98, most recently in 2022; 2023 through 2026 contain no turf-maintenance entries. <https://drive.google.com/file/d/1U2l6qew6wugM2YTQt-qLqAUKqhCf1j0B/view>

⁴⁸Town of Los Gatos, Council Agenda Report, Item 8, meeting of 7 September 2021, "Creekside Sports Park: Approve Ongoing Seasonal Field Lighting and Provide Feedback on Capital Maintenance Funding Needs," prepared by Jim Harbin, Superintendent. States a design life of approximately 10 years, and that the field is uneven in high use areas with issues with ponding due to compacted areas of the sub-base material. <https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-6045d301c30348348b854970c5f9c924/ITEM-Attachment-008-a3656293dd944b8eaa70ba2d3b11f52.pdf>

⁴⁹Sports Turf Solutions, invoice for GMax testing at Creekside Sports Park, test date 28 March 2022, \$850, noting "Test requested by Jim Harbin." <https://drive.google.com/file/d/17vrvKoS5lVqzcnNZUYmqrRSIH6Dt5XWV/view>

⁵⁰AstroTurf Corporation invoice M21-1011-40 to the Town of Los Gatos, 31 October 2021, for Creekside Sports Park: "Maintenance & Repairs," \$6,700.00. Obtained by public records request. https://drive.google.com/file/d/1-kk0YjCSPihv_Bw6xi5hvcWMkCG_ZGNJ/view

⁵¹Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. Table 4 states first year annual maintenance for artificial turf of \$16,400 and a twenty-year average of \$26,240. <https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

⁵²Town of Los Gatos and FieldTurf USA, Inc., Agreement for Services (5 May 2026). Year one cost not to exceed \$27,690.00 for FY 2026-27, being \$19,690 of routine maintenance plus an \$8,000 allowance, CPI-adjusted thereafter. <https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-3744f4da1cc54d5bb6ac8bdea3608087/ITEM-Attachment-006-f259f70a2fc74557bd0b18f5a70d1ec9.pdf>

Task	What proper care requires	The Town's actual record of Creekside maintenance	The model used in the study's cost analysis, \$16,400	The 2026 contract, \$27,690
Infill depth and decompaction	STC: check and maintain infill levels; comprehensive decompaction semi-annually to annually.	Unrecorded.	Absent.	Absent.
Seam repair	STC: inspect regularly; open joints repaired immediately.	Unrecorded.	Annual, minor.	Twice yearly, minor.
Striping	Per field builder.	In the 2021 scope; nothing logged after 2022.	Not itemized.	Twice yearly.
GMax testing	SFMA: at least annually, and throughout the season to hold up in a liability case. STC: rejuvenate when readings exceed desired levels.	2013, 2014, then none until 2022 (\$850); 2025; failed 2026.	Absent.	Annual.
Sanitizing	STC: treat organic growth; approved anti-bacterial treatments.	Not in any earlier scope.	Absent.	Included.
Total per year	STC: budget one hour of inspection and maintenance for every ten hours of play, which is 200 to 250 hours a year at this field's modeled use.	Twelve logged tasks, \$6,378.98 in eight years, none after 2022, under \$800 a year; plus a \$6,700 AstroTurf invoice in 2021.	\$16,400.	\$27,690 plus escalation.

Set against that, the industry's own maintenance guidelines say to budget one hour of inspection and maintenance for every ten hours of play. At the 2,000 to 2,500 hours this study models, that is 200 to 250 hours of care every year.⁵³ Neither price tag in the table describes anything like that. Three price tags for one field, and the smallest by a factor of twenty is the one describing what the Town actually spent: by the Town's own work-order log, this field has received essentially no logged turf maintenance for the last four years of its life, which is itself relevant to why it just failed.⁵⁴ If vendor-contract payments exist outside the work-order system, Q2 asks for them. And the lesson runs forward, not just back: whatever surface this Commission recommends, the Town should budget the real cost of proper care, the contract plus the unpriced staff labor plus the testing the manufacturer's own manual requires,⁵⁵ so that it gets its money's worth from a million-plus-dollar asset, does not shut it down early, does not put kids at greater risk of concussion, and pollutes less. That number, not \$16,400, is the number that belongs in any cost comparison.

⁵³Synthetic Turf Council, Guidelines for Maintenance of Infilled Synthetic Turf Sports Fields (January 2013): "Plan to perform the maintenance recommended by your field builder. In terms of time, you should budget one hour of inspection and maintenance for every 10 hours of playing time." The same guidelines call for a maintenance person to walk the field daily, for comprehensive maintenance semi-annually to annually including decompaction and deep cleaning, for field rejuvenation when GMax readings exceed desired levels, and for a maintenance and activity log that warranties often require.

<https://drive.google.com/file/d/1JrtpYLBEOtfVXC8iK1BrBeQTH1v6JvID/view>

⁵⁴Town of Los Gatos asset work-order export for Creekside Sports Park, produced 30 July 2026 in response to a Public Records Act request: 3,050 task records, 2018 through 2026. The activity "Maintenance - Turf" appears twelve times, totaling \$6,378.98, most recently in 2022; 2023 through 2026 contain no turf-maintenance entries.

<https://drive.google.com/file/d/1U2l6gew6wugM2YTQt-qLgAUKghCf1j0B/view>

⁵⁵Same page: AstroTurf advises calling an independent field tester with the proper equipment to test under the ASTM F355 protocols, at \$750 to \$1,000 for an independent test. <https://astroturf.com/field-replacement-program/>

2c. The grass replacement schedule.

The study's text says, at PDF viewer page 12, that a grass field is replaced every five years; its cost table charges for replacement every four years, at \$885,600 each time; and a third spot in the same study says every two to three years.⁵⁶ One document, three schedules. Vice Chair Vrijen caught this on June 1: every five years over twenty years is four replacements, the table charges for five, and the difference is \$885,600. That makes four schedules in one record, because the study's own cited source, San Francisco Recreation and Parks, says a grass field typically needs a major overhaul every ten years, maximum.⁵⁷ And notice the incoherence Table 5 adds: the grass scenario is billed for this four-year reconstruction cycle and simultaneously labeled "Quality: Poor."⁵⁸ Both cannot be true: either \$885,600 every four years buys a quality field and the label is wrong, or the scenario is genuinely poor and the price is indefensible. Meanwhile the experts say the whole cycle is fiction: Jerad Minnick, whom the study's own Appendix A consulted, and Sun Roesselain have explained publicly that a grass field can last more than twenty years without renovation.⁵⁹ Correcting the counting error alone cuts the grass total by twelve percent; correcting the schedule collapses it. Staff agreed on June 1 that the counting needs correcting, so hold them to it. And hold it next to 2h below: the same consultant team's 2024 version of this same field prices grass refurbishment at \$95,000 per event, not \$885,600.

2d. The contingency and the demolition charge.

The construction comparison is also uneven. The grass estimate carries a \$122,862 design contingency that none of the four plastic turf options carry,⁶⁰ with no explanation. And the grass estimate pays about \$312,750 to demolish things that are only there because plastic turf was installed in 2012: the drain rock, the compacted subgrade, the treated soil. The plastic turf options inherit that same base at no charge, which is reasonable in itself, but it means the

⁵⁶Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. Table 4 states a refurbishing cost of \$4,428,000 for natural grass at years 4, 8, 12, 16 and 20; the memorandum text states, at PDF viewer page 12, that natural grass fields are removed from service and replaced every five years; Table 6 states renovation or replacement every two to three years.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

⁵⁷The study's own cited source, San Francisco Recreation and Parks, holds that a grass field typically requires a major overhaul every ten years, maximum; the study's text then adopts replacement every five years on the strength of an unattributed "based on our experience," with no author or credential identified, its cost table charges every four, and its Table 6 says every two to three.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

⁵⁸Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. Table 5 labels the single natural grass scenario "Quality: Poor."

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

⁵⁹May 2024 webinar hosted by a District of Columbia elected official with seven national experts: Jerad Minnick, Sports Turf Manager at the Maryland SoccerPlex, and Sun Roesselain, recent president of the international Sports Field Management Association, explained that a grass field can last more than 20 years without renovation. Recording:

<https://youtu.be/E3FEO7vmuCE>; synopsis: https://drive.google.com/file/d/1uWtXGbeR_msSRBuTBMkG0L0LzILVQ29P/view

⁶⁰Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. Table 3, natural grass column: subtotal \$1,352,618, design contingency \$122,862, project subtotal \$1,475,479, contingency at 20 percent \$295,096, total \$1,770,575. No design contingency line appears in any artificial turf column.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

grass estimate alone carries the cost of undoing the 2012 decision.⁶¹ Vice Mayor Ristow saw this coming back in February 2024, when she pointed out that the Town had basically stripped the ground bare to put turf in and asked what it would cost to go back to real grass.⁶² The answer turns out to be about a quarter million dollars of demolition before a single blade is planted. Together, those two items are most of the gap between the grass and plastic construction bids.

2e. The missing drainage cost.

A cost the Town says is real appears in neither plastic turf column. The consultant was allowed to assume the field's drainage base is fine, and geotechnical work was excluded from the contract.⁶³ But the Town told Council in 2021 that the field is uneven with ponding from a compacted sub-base,⁶⁴ and both of the Town's current capital budgets say drainage issues will be addressed as part of replacement.⁶⁵ Three Town documents say there is a drainage problem; the study charges grass to dig it out and charges plastic turf nothing to fix it. Even the manufacturer disagrees with the assumption: AstroTurf's own field replacement program says it highly recommends the existing base be evaluated for drainage issues, weak or vulnerable spots and settling before any replacement.⁶⁶

2f. The weather math.

Grass is modeled at 32 playable weeks, and then docked another fifteen percent for rain, even though picking 32 weeks already removed the rainy season once. Plastic is modeled at 50 weeks with no deduction at all, even though the same study says extreme heat can limit its

⁶¹Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. Table 3 charges the natural grass option \$131,000 to remove the artificial turf drain rock section and \$129,625 to remove the compacted subgrade; the four artificial turf columns carry neither line.
<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

⁶²Town Council, meeting of 6 February 2024. Council Member Maria Ristow observes that the Town had basically stripped the ground bare to put turf in about ten years earlier, and asks what it would cost to revert to real grass.
<https://www.youtube.com/live/NiejWYHRdGE?t=16143>

⁶³Town of Los Gatos and Kimley-Horn and Associates, Inc., Agreement for Consultant Services (17 September 2024), Exhibit A. Additional Services, being work not included, lists geotechnical studies, survey, and CEQA and environmental studies other than the limited assessment scope noted in the agreement. Copy on file with the Town. Available at:
<https://drive.google.com/file/d/1SoQW-n0K8wFzZzgY8BzXlk257IT3-k1K/view>

⁶⁴Town of Los Gatos, Council Agenda Report, Item 8, meeting of 7 September 2021, "Creekside Sports Park: Approve Ongoing Seasonal Field Lighting and Provide Feedback on Capital Maintenance Funding Needs," prepared by Jim Harbin, Superintendent. States a design life of approximately 10 years, and that the field is uneven in high use areas with issues with ponding due to compacted areas of the sub-base material.
<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-6045d301c30348348b854970c5f9c924/ITEM-Attachment-008-a3656293dd944b8eaf70ba2d3b11f52.pdf>

⁶⁵Town of Los Gatos, Proposed Capital Improvement Program budgets, FY 2025-26 and FY 2026-27, Creekside Turf Replacement (Project 831-4404, renumbered 8413), pages D-16 to D-17 (PDF viewer pages 153-154 of the FY 2025-26 volume; PDF viewer pages 152-153 of the FY 2026-27 volume). Both state that new artificial turf and infill, along with drainage issues, will be addressed. FY 2025-26 volume:
<https://www.losgatosca.gov/DocumentCenter/View/43385/FY-2025-2026-Capital-Budget>. FY 2026-27 volume:
<https://www.losgatosca.gov/DocumentCenter/View/45617/Proposed-CIP-2026-27-Budget>

⁶⁶AstroTurf, "The AstroAdvantage Field Replacement Program": before a field is replaced, "we highly recommend that your existing base be evaluated for drainage issues, weak or vulnerable spots, settling, and any other problems that could compromise your field." <https://astroturf.com/field-replacement-program/>

use⁶⁷ and the Town reported in 2021 that the infill gets very hot in summer.⁶⁸ The correction is simple: a field already closed for the winter cannot also lose 15 percent of its year to rain, and if extreme heat limits summer use, as this study says it does, plastic turf's hours must be docked too. One set of rules for both surfaces.

2g. The spreadsheet and its assumptions.

The study's replacement prices have no stated source, and one of them, the \$1,460,640 Table 4 charges to replace a cork-infill carpet, is seventy-five percent higher than the crumb rubber version for reasons the study never explains. A table whose printed totals cannot be derived from its own stated assumptions should not carry a capital decision. Ask for the working spreadsheet, and for the vendor quotes or price sources behind the replacement figures; neither costs staff anything to produce. Two more lines are missing outright. Organic and specialty infills decompose, compact and migrate and need periodic replenishment; the City of Palo Alto's study says plainly that its natural infills need replenishing every one to two years and that its own maintenance figure leaves that cost out.⁶⁹ No replenishment line appears anywhere in this study's twenty-year model, even for the cork option whose year-12 carpet replacement is already priced seventy-five percent above crumb rubber. And water: Table 4 assigns every plastic turf option an annual water budget of 126,092 gallons, \$3,783 a year, while Table 6 tells you plastic turf "does not consume water";⁷⁰ the study never says what that water is for, or whether it covers summer cooling of a surface the Town itself reported gets very hot. Note too that the one district that bought a "cooler" infill and tested it found it no different from the ordinary kind.⁷¹

One more reason the corrections matter beyond this field. A rider of corrections needs to travel with this report, because its content will not stay in this room. Local school districts are not going to spend tens of thousands of dollars to commission studies of their own; they are going to look at the Town's. The artificial turf question at Fisher Middle School is coming up soon. If

⁶⁷Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. Table 4 reduces natural grass hours by 15 percent for rain dates and applies no comparable deduction to artificial turf; Table 6 of the same document states that extreme heat can limit use of artificial turf.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

⁶⁸Town of Los Gatos, Council Agenda Report, Item 8, meeting of 7 September 2021. States that the rubber asphalt-based infill is no longer desirable as it is very hot in the summer and produces a strong asphalt odor, and that it tracks and splashes and becomes difficult to contain in the synthetic turf.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-6045d301c30348348b854970c5f9c924/ITEM-Attachment-008-a3656293dd944b8eaaf70ba2d3b11f52.pdf>

⁶⁹City of Palo Alto, Athletic Field Turf Study, final report (2025): page 41 states that annual or biennial replenishment is required for the natural infill products the City has transitioned to, and page 68 acknowledges that its maintenance figure does not account for major infill replenishment.

<https://www.paloalto.gov/files/assets/public/v/1/community-services/staff-report-contracts/open-space-parks-and-golf/turf-study-report/2025-city-of-palo-alto-turf-study-report.pdf>

⁷⁰Study Table 4 assigns every artificial turf option an annual water budget of 126,092 gallons per year, \$3,783 per year, while Table 6 states the artificial turf field "does not consume water."

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

⁷¹The Post and Courier (Columbia, South Carolina), report of 16 August 2024 on the Richland School District Two turf lawsuit and settlement: the district paid a premium for T-Cool infill marketed as keeping fields 35 to 50 degrees cooler; the district's suit stated that independent testing found the infill no different from ordinary infill; the July 2024 settlement requires Geosurfaces Southeast, described in the report as part of the turf company TenCate, to pay the full cost of installing irrigation systems in the four fields, with no admission of fault.

https://www.postandcourier.com/columbia/education/richland-two-high-school-turf-lawsuit-columbia/article_588bd9c8-4e94-11ef-aeb2-279eb6233972.html

this report goes forward uncorrected, it can misdirect millions of dollars of public money well beyond Creekside.

One more fact bears on whether these corrections can still be made. The Town's agreement with Kimley-Horn ran from September 17, 2024 through June 30, 2025, and a first amendment extended it only to December 31, 2025.⁷² The report was delivered to staff on July 27, 2025. The public and this Commission first saw it on June 1, 2026, five months after the consultant's contract had already expired. There is no live agreement under which the Town can require the consultant to answer this Commission's questions or correct the report. That is a reason to insist on the errata now, not a reason to let it go.

2h. A different set of Creekside numbers our consultant gave another client.

The City of Sunnyvale is deciding the same question right now, whether its public sports fields should be plastic turf or grass. The Sunnyvale study, prepared by the same consultant team, contains a case study of our field, titled "Town of Los Gatos Creekside Sports Park Turf Operations Assessment, Completed 2024." Its numbers do not match the study in front of you.

Table B. A different set of Creekside numbers our consultant gave another client.

Item	The Creekside analysis our consultant gave the City of Sunnyvale	The Creekside analysis our consultant gave the Town of Los Gatos
Initial field cost	\$750,000, "verified by Town of Los Gatos staff." ⁷³	Not stated.
Artificial turf maintenance	Itemized task by task to \$30,770 a year.	\$16,400 a year modeled.
Grass refurbishment	\$95,000 every four years.	\$885,600 every four years.
End of life	\$45,000 for removal and recycling of the old carpet.	No end-of-life cost at all, by its own enumerated list of lifecycle cost elements. ⁷⁴
Hours	40 weeks, 2,000 hours a year, with 1,000 hours deducted for the replacement year.	50 weeks, 2,500 hours a year; twenty-year totals read 39,000 to 40,000, so confirm the same deduction is in there. ⁷⁵

⁷²First Amendment to Agreement for Consultant Services between the Town of Los Gatos and Kimley-Horn and Associates, Inc., dated 17 June 2025: "This contract will remain in effect from September 17, 2024 and extend to December 31, 2025." The underlying Agreement, dated 17 September 2024, ran through 30 June 2025.

https://drive.google.com/file/d/1sE-2pjWRP35OZa86C1sr_pENgkrmesK/view

⁷³City of Sunnyvale, Artificial Turf Policy Study (Kimley-Horn, July 2026 final), Attachment 1 to the 28 July 2026 Council study session, PDF viewer page 94: "Case Study Town of Los Gatos Creekside Sports Park Turf Operations Assessment Completed 2024," stating "The consultant completing this study is the same consultant working on the Sunnyvale study." The page reports an initial field cost of \$750,000 "verified by Town of Los Gatos staff"; grass refurbishment at \$95,000 per event at years 4, 8, 12, 16 and 20; average annual synthetic maintenance of \$30,770; \$45,000 for removal and recycling of infill and turf within a \$975,000 year-12 carpet replacement; synthetic use of 40 weeks and 2,000 hours per year with 1,000 hours deducted for replacement-year closure; and natural grass at 544 hours per year (640 minus 15 percent for rain).

<https://sunnyvaleca.legistar.com/View.ashx?M=F&ID=15709600&GUID=6BB1AD11-85F0-451E-9B3F-5538480E791E>

⁷⁴The study memo enumerates the elements of its 20-year lifecycle comparison (initial construction, refurbishing and rest costs, annual and refurbishment maintenance, 20-year totals, usage hours, and cost per use); no end-of-life, removal, disposal or recycling element appears in the list, and the Material Renewability section discusses recycling without pricing it. The memo states the 20-year artificial turf hours as 39,000 to 40,000.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

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Item	The Creekside analysis our consultant gave the City of Sunnyvale	The Creekside analysis our consultant gave the Town of Los Gatos
Subsurface	Not addressed.	Table 6: replace top surface every 8 to 10 years, subsurface every 16 to 20. This field's subsurface is at year fourteen, and the study charges plastic turf nothing for it. ^{76,77}

The takeaway is not that one set of numbers is right. It is that the same consultants produced two accounts of the same field inside a year, and every difference runs the same direction. The errata should reconcile all five figures on the record: initial cost, annual maintenance, grass refurbishment, end of life, and hours.

[] Q3. "I move that we recommend staff correct the cost study, items 2a through 2h in the July 31 comment letter, publish the corrections as an errata sheet that travels with the report wherever it goes, and reconcile the study against the consultant team's own 2024 Los Gatos assessment, before this item goes to Council."

This is the single corrective motion, and nothing about it picks a surface; it just declines to send Council numbers that are wrong. Two practical questions travel with it: is the consultant still available under its contract, given that the staff report's own background shows the report was submitted on July 27, 2025 and reached this Commission ten months later;⁷⁸ and where is the 2024 Operations Assessment that Sunnyvale's study drew on? And if the corrections cannot be delivered before this item advances, the motion has a natural fallback: continue the item and withhold the Commission's recommendation until the errata and the data return.

[] Q4. "Please deliver the spreadsheet behind the cost table, and the vendor quotes or other source documents behind the replacement prices, so the replacement prices and the 32-week grass season can be checked."

The replacement prices have no stated source, and the 32-week season is asserted without one.

⁷⁶Same document, PDF viewer pages 95 to 96: itemized Los Gatos natural grass maintenance of \$57,360 per year and itemized synthetic maintenance of \$30,770 per year including contractor grooming visits, with a water line item in the synthetic itemization; and a considerations table stating "replace top surface every 8-10 years, replace subsurface every 16-20 years."

<https://sunnyvaleca.legistar.com/View.ashx?M=F&ID=15709600&GUID=6BB1AD11-85F0-451E-9B3F-5538480E791E>

⁷⁷Study memo, Table 6, life expectancy rows: "Replace top surface every 8 to 10 years. replace subsurface every 16 to 20 years." The same table gives natural grass "renovation/replacement very two to three years" (wording as in the original), the third grass schedule noted in item 2c.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

⁷⁸June 1, 2026 staff report, Background: "On July 27, 2025 Kimley-Horn submitted their report to staff." The report's first public review was June 1, 2026.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

3. Hold the study to the questions the Town already asked it

How does a \$37,135 study end up with a headline cost figure overstated by a factor of twenty, four different grass replacement schedules in one document, and no end-of-life cost at all? Part of the answer is in the scope the Town bought. Before any work was done, the consultant's own proposal listed nine issues raised by decision makers and the public, among them toxicity of turf and infill materials, water quality and drainage controls, heat generation, material renewability and lifecycle, and pathogens, and then said: "In our experience many of these issues are likely to be insignificant based on the results of available studies and continuous improvements to turf products." The conclusion was written into the proposal before the research began. The same scope states that there are no known issues or concerns with the underdrainage, assumes the underdrain system is in good condition and needs no repairs, and excludes geotechnical studies, survey and CEQA review as additional services. It also includes exactly one round of revisions; anything further is billed hourly.⁷⁹ And the rest of the answer is that the problems were predicted, in writing, before the contract was signed, and the predictions were never dealt with. In February 2024, Vice Mayor Ristow asked for something very specific: a twenty-year comparison that assumes the plastic turf is replaced twice,⁸⁰ since it lasts maybe ten years. The delivered study replaces it once, at year twelve, and never again,⁸¹ even though the Town's own budgets, the 2021 staff report, and the study's own product table all say eight to ten years.⁸² Loading in the second replacement Council asked for adds roughly \$840,000 to \$885,000 to the plastic turf side. Her request was not exotic. When Palo Alto's consultant presented that city's turf study last fall, he described the ordinary shape of the exercise: a twenty-year lifecycle program includes replacing the synthetic turf twice.⁸³ And she was not alone that night: Vice Mayor Hudes framed the same request as the total cost of ownership of the alternatives over twenty years.⁸⁴

Then, before Council approved the contract in September 2024, fourteen questions arrived in writing. Pam Bond sent eight. She asked whether the existing filtration system actually

⁷⁹Kimley-Horn and Associates, Inc., Task Order Proposal for the Artificial Turf Replacement Assessment at Creekside Sports Park, 14 August 2024, incorporated as Exhibit A to the Agreement for Consultant Services dated 17 September 2024. Scope of Services, Task 1: lists nine issues raised by decision makers and the public, then states "In our experience many of these issues are likely to be insignificant based on the results of available studies and continuous improvements to turf products"; states "At present there are no known issues or concerns with the underdrainage"; assumes "The underdrain system of existing artificial turf is in good condition and no repairs are needed" and that "Construction of either option would occur in 2025"; lists Geotechnical Studies, Survey, and CEQA and Environmental Studies among Additional Services; and includes one round of revisions per task. https://drive.google.com/file/d/1sE-2piWRP35OZa86C1Isr_pENgkrmesK/view

⁸⁰Town Council, meeting of 6 February 2024, Capital Improvement Program funding discussion. Council Member Maria Ristow asks for a twenty-year cost comparison assuming the plastic turf surface is replaced twice. <https://www.youtube.com/live/NiejWYHRdGE?t=16174>

⁸¹Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. Table 4 models one carpet replacement at year 12, which is the only useful-life figure in the record that exceeds ten years. <https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

⁸²Town of Los Gatos, Proposed Capital Improvement Program budgets, FY 2025-26 and FY 2026-27, Creekside Turf Replacement, pages D-16 to D-17 (PDF viewer pages 153-154 and 152-153 respectively). Both state that the artificial turf was installed with a useful life expectancy of 8 to 10 years. FY 2025-26 volume: <https://www.losgatosca.gov/DocumentCenter/View/43385/FY-2025-2026-Capital-Budget>. FY 2026-27 volume: <https://www.losgatosca.gov/DocumentCenter/View/45617/Proposed-CIP-2026-27-Budget>

⁸³City of Palo Alto Parks and Recreation Commission, 23 September 2025: Anthony Stevenson of Lloyd Consulting Group, presenting the lifecycle cost approach, stated that synthetic turf warranties typically expire between 8 and 10 years, that turf life is generally 8 to 12 years, and that a 20-year lifecycle program covers essentially two replacements of synthetic turf; asked directly, he confirmed the El Camino model contains two replacements in 20 years.

⁸⁴Los Gatos Town Council, February 2024 meeting, capital program discussion: Vice Mayor Hudes described the Creekside question as the total cost of ownership of the alternatives over a 20-year horizon. Video: <https://www.youtube.com/live/NiejWYHRdGE>

removes PFAS and said the report should state its details. She asked for an assessment of fiber migration beyond the field. She asked that the study use the field's actual hours rather than reserved hours. She asked whether other Los Gatos grass fields could be improved so the usage could be spread out. She asked that any claim that newer turf is safer rest on proof independent of the manufacturer, noting that TenCate's no-PFAS evidence came from its own laboratory and tested only to parts per million when the relevant limits are parts per trillion.⁸⁵ And she asked whether the scope had already decided the answer, which, reading the proposal now, it had. A Council Member sent six questions, and staff committed in writing to share them with the consultant team.⁸⁶ And I sent fourteen specific amendments to the scope of work.⁸⁷ Council approved the contract as written.⁸⁸ The questions did not go away just because nobody ordered them answered. Here is what I asked for, next to what the study did.

Table C. The fourteen questions submitted in writing in September 2024, and what the report did with each.

Question submitted before the contract was approved	What the report does with it
Council: How often must an artificial turf field be rinsed or watered to remove bacteria and other contaminants?	Table 6 gives one line, a minimum of once-per-year sterilization. The same table says the field does not consume water, while Table 4 budgets it 126,092 gallons a year.
Council: What is the environmental impact of artificial turf on groundwater?	Not addressed.
Council: What contamination reaches groundwater from fertilizer used on natural turf?	Not addressed.
Council: Is there natural grass that decreases water and fertilizer usage?	Not addressed. The single priced grass scenario names no cultivar and no soil program.
Council: What contaminants are known to enter groundwater from artificial turf?	Not addressed. PFAS receives two sentences and no analysis.
Council: What are the cost comparisons over 20 years?	Addressed, in Table 4, and the subject of items 2a through 2h of this letter.
Bond: Is the current filtration system effective at removing PFAS, and what are its details?	Not addressed. Question Box Q12 asks it again.
Bond: Can the migration of plastic fibers beyond the field be assessed?	Not addressed. The fibers are now photographed on the ground beyond the fence.
Bond: Should the environmental assessment include the manufacture of the turf and infill?	Not addressed.
Bond: Will the public have time to review the assessment, and has the scope already decided the answer?	The report reached staff on 27 July 2025 and the public on 1 June 2026. The scope had already said many of these issues are likely to be insignificant.

⁸⁵Town of Los Gatos, Desk Item, Item 8, meeting of 17 September 2024, Attachment 2: letter of Pamela Bond dated 16 September 2024, containing eight questions, including whether the existing filtration system removes PFAS, an assessment of fiber migration beyond the field, use of actual rather than reserved hours, whether other Los Gatos grass fields could be improved to spread usage, and that claims of improved safety rest on proof independent of manufacturers, noting that TenCate's no-PFAS evidence came from its own laboratory and tested only to parts per million rather than parts per trillion. The same Desk Item records six questions from a Council Member.

https://losgatos-ca.municodemeetings.com/sites/losgatos-ca.municodemeetings.com/files/fileattachments/town_council/meeting/7008/desk_item.item_8_-_kimely-horn.pdf

⁸⁶Town of Los Gatos, Desk Item, Item 8, meeting of 17 September 2024. Records six questions from a Council Member and attaches the 16 September 2024 letter of Pamela Bond containing eight further questions.

https://losgatos-ca.municodemeetings.com/sites/losgatos-ca.municodemeetings.com/files/fileattachments/town_council/meeting/7008/desk_item.item_8_-_kimely-horn.pdf

⁸⁷Cynthia Fan, "Creekside Scope of Services Amendments," written comments to the Los Gatos Town Council, Item 8, meeting of 17 September 2024. Fourteen requested amendments to the Scope of Services. Copy on file with the Town. Available at: https://drive.google.com/file/d/1jUj3iUG_95ti-CoeUjIA3s2LhQKeDUDW/view

⁸⁸Town of Los Gatos, draft minutes of the Town Council meeting of 17 September 2024, appearing at Item 2 of the 1 October 2024 agenda packet. Records five members of the public speaking on Item 8 and unanimous approval.

<https://mccmeetings.blob.core.usgovcloudapi.net/losgatos-pubu/MEET-Packet-4f6d651d80244ee4bfcfc1f571bf38aa.pdf>

Question submitted before the contract was approved	What the report does with it
Bond: Use the field's actual usage rather than reserved hours.	Not followed. The study uses permitted hours.
Bond: Consider whether other Los Gatos grass fields could be improved to spread the usage.	Not addressed. Question Boxes Q6 and Q8 ask for the inventory.
Bond: Include newer natural grass technology such as electric and robotic mowers.	Not addressed.
Bond: Any claim that newer turf is safer should rest on proof independent of the manufacturer, noting that TenCate's no-PFAS evidence came from its own laboratory and tested only to parts per million.	Not addressed. Section 8, condition (h), asks for the substantiation California law already requires manufacturers to keep.

One question of the fourteen is squarely answered. Two more are touched. The rest were submitted in writing, before the contract was signed, and the report simply does not reach them.

Table D. The fourteen amendments requested in September 2024, and what the study did with each.

What I asked for in September 2024	What the study did
1. Compare modern artificial turf against what is feasible for natural grass with modern cultivars, soil and pest management, equipment and sports field management practice.	One grass scenario was priced. Table 5 labels its quality "Poor."
2. Provide proper citation of all referenced data.	The 1.7 to 7.7 times use multiplier, and the resulting "seven or more" grass fields figure, are attributed to the consultant's 40 years of experience.
3. Circulate a draft for about 30 days of public comment and require the assessor to address each point raised.	No draft was circulated.
4. Include at least one replacement of each artificial turf system component, including the carpet and the shock pad.	Table 4 shows one carpet replacement, at year 12, and no shock pad replacement line.
5. Choose a period that ends with both fields in safe condition and at least 10 years from the next significant capital expense.	The twenty-year window ends immediately after a grass replacement and before the next artificial turf replacement.
6. Factor in rising plastic costs.	Not addressed.
7. Estimate the additional cost to the Town or its taxpayers if the drinking water supplier must perform advanced filtration or procure alternate water.	Not addressed.
8. Provide evidence of non-polluting recycling at scale, with six specific evidentiary requirements including named facilities and mass in versus mass sold into new products.	Two sentences on a single recycling company.
9. Base grass operating costs on case studies of economically managed fields sustaining comparable use, and distinguish actual use from reserved use.	Cost per use is expressly computed from total permitted hours.
10. Identify which design and management approaches the grass estimates rest on: cultivars, soil specification, amendments, aeration, sand-capped or native design, minimum offline period, and irrigation volume for the Los Gatos climate.	None is stated. A single sand-based build is priced, with no cultivar, no soil specification and no management program.
11. Provide operating cost estimates both with and without modern equipment such as robotic mowers and battery equipment.	Not addressed.

What I asked for in September 2024	What the study did
12. Exclude from artificial turf usage estimates the hours the field is projected to be unsafely hot for youth exertion.	Table 4 deducts 15 percent from grass for rain and nothing from artificial turf for heat.
13. Base lifespan on the time the system is proven to remain in safe condition, not the time an underfunded agency leaves it open for play.	Table 4 divides capital and maintenance by permitted hours across an assumed life.
14. Include sub-base remediation if needed, given the 2021 finding of ponding due to compacted sub-base.	The scope of work states that there are no known issues or concerns with the underdrainage, and expressly excludes geotechnical studies.

The 2024 letter also asked that the work be split among real subject-matter experts, and the Town Manager said the Town would come back if outside expertise was needed. The only change ever made to the contract was a deadline extension.⁸⁹ Two of your colleagues arrived at the same place on June 1 without ever reading that letter: one said the grass option in the report was not what the Town would realistically do, and another said we should be comparing the best we would do with grass against the best we would do with plastic turf. That is exactly what was asked for in 2024. When commissioners and residents keep independently finding the same holes, the holes are real.

[] Q5. "Please provide written answers to the six Council questions and Pam Bond's eight questions from September 2024, and tell us what the consultant team sent back when staff shared those questions with them."

Staff committed in writing in 2024 to share the Council questions with the consultant team. A recommendation should not go forward while the Town's own questions about the study sit unanswered.

⁸⁹First Amendment to the Agreement for Consultant Services between the Town of Los Gatos and Kimley-Horn and Associates, Inc., dated for identification 17 June 2025. Extends the term to 31 December 2025 and makes no change to scope or compensation. Copy on file with the Town. Available at: https://drive.google.com/file/d/1sE-2pjWRP35OZa86C1lsr_pENgkrmesK/view

4. Ask whether we actually need a plastic turf field to meet the demand

The whole case for plastic turf rests on one premise: that a plastic turf field carries so much more play than grass that Los Gatos would need as many as seven grass fields to replace this one. The study attributes its 1.7-to-7.7 multiplier to the consultant's forty years of experience.⁹⁰ But the identical range sits in the study's own Appendix A, which turns out to be a 2011 report by a county staff work group in Montgomery County, Maryland, describing Maryland fields fifteen years ago.⁹¹ Vice Chair Vrijen noticed on June 1 that some of the study's material dated from 2011; this is that material, and it is quietly driving the whole comparison. A fifteen-year-old Maryland estimate is not a measurement of Los Gatos.

What can well-built, well-run grass actually carry? The study answers 544 hours a year: 32 weeks, minus 15 percent for rain. Yet Palo Alto's consultant, presenting that city's study, confirmed to its council that a warm-season grass field can offer about 1,500 hours a year, three times a cool-season native-soil field's 500.⁹² In Mosman, Australia, a grass field that had been slated for plastic turf conversion was instead rebuilt with best-practice soil work and now carries a documented 49 hours of play a week, more games than any other ground in town, which annualizes past 2,000 hours.⁹³ And when the Australian turf industry itself commissioned a study of 1,157 sporting fields across 24 councils, the finding was that many councils were justifying synthetic conversions on flawed usage data.⁹⁴ The gap between 544 and those numbers is not botany; it is construction, management, and measurement.

One more measured example before the local numbers: Hopkins Field in Marblehead, Massachusetts, an organically managed grass football field, recorded about 1,680 hours of scheduled practice and play in a single year, with five rain-related and two heat-related one-day closures across the whole season.⁹⁵ Those examples are not local, which is exactly why both the City of Palo Alto and the City of Sunnyvale are exploring grass pilots rather than arguing from other people's fields. But the local numbers point the same way, and they show

⁹⁰Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. Attachment 1 to Item 2 of the 1 June 2026 Commission agenda.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

⁹¹Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. Appendix A is "A Review of Benefits and Issues Associated with Natural Grass and Artificial Turf Rectangular Stadium Fields," a final report dated 14 September 2011 prepared by a staff work group of Montgomery County, Maryland. It contains the identical 1.7 to 7.7 range.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

⁹²City of Palo Alto City Council, meeting of 17 November 2025, turf study presentation, at approximately 1:44:44: a council member states "your estimate is 1500 versus 500" and the consultant confirms that a warm season grass field generates roughly three times the hours of a cool season native soil field. Video: <https://www.youtube.com/live/6GiHOHMQrg?t=6294>

⁹³ABC News Australia (2022), video report on the reconstruction of Middle Head Oval, Mosman, New South Wales: a natural grass field that had been targeted for synthetic conversion, rebuilt with best-practice soil amendment by Dr. Mick Battam, now carrying 49 hours per week of play, more games than any other ground in Mosman. <https://youtu.be/YBzcZbSyqIQ>

⁹⁴Battam, M. (February 2022), "Winter usage, wear and carrying capacity of sporting fields in the Sydney Basin," AgEnviro Solutions / Turf NSW / Turf Australia; peer reviewed. A study of 1,157 sporting fields across 24 councils, commissioned by the turf industry, finding that many councils were justifying synthetic field installation based on flawed usage data. Summary: <https://sportsturfsw.com.au/news/winter-usage-wear-and-carrying-capacity-of-sporting-fields-in-the-sydney-basin/>

⁹⁵Toxics Use Reduction Institute, University of Massachusetts Lowell, Natural Grass Playing Field Case Study: Marblehead, Massachusetts (July 2019, revised November 2020). Hopkins Field, an organically managed grass football field, recorded about 1,680 hours of scheduled practice and play in 2018, with five rain-related and two heat-related one-day closures across the year. https://www.turi.org/TURI_Publications/Case_Studies/Organic_Grass_Playing_Fields/Natural_Grass_Playing_Field_Case_Study_Marblehead_MA/

544 is a serious lowball. City of Sunnyvale staff told their council that some of their ordinary grass fields log more than 1,000 hours a year.⁹⁶ The City of Palo Alto's final study records nineteen native-soil grass fields used more than 600 hours a year, twelve of them near or above 1,000 and seven above 1,300, while its key findings report only several fields near or above sustainable capacity.⁹⁷ Those are neighboring cities' own fields, on native soil, in this climate, carrying roughly twice what this study says ours can.

And that reframes the displacement question. Between Town parks, Fisher Middle School and the four LGUSD elementary schools, this community has quite a few grass fields. If improved sports field management raised even a few of them from something like 544 hours toward something like 1,000, the added capacity would absorb the hours displaced by converting Creekside back to grass, without building anything anywhere. That is a maintenance decision rather than a construction project, and it is one the Town could share with LGUSD: the same soil testing, the same aeration schedule, the same agronomic advice, applied across both sets of fields. It is also how capacity actually works on grass, since rotating play and moving goals and nets keeps wear from concentrating in the same worn stripes.⁹⁸ Q6 and Q8 ask for the inventory that would let you test this arithmetic rather than assume it away.

[] Q6. "Please gather the logged hours on the school district's newest natural grass fields, and compare them to the 544-hour grass assumption in this study's cost lineage."

And nobody has measured Los Gatos. The study itself cannot settle on how much this field is even used: it says 2,120 hours a year in one place, models 2,500 in another, and assumes 1,600 in a third,⁹⁹ then computes cost-per-use from the biggest number. These numbers move

⁹⁶City of Sunnyvale Council study session, 28 July 2026, staff presentation: Sunnyvale's actual logged hours on natural grass fields range from 23 to over 1,000 hours per year against an industry rule of thumb of 600 to 800; the report's ten recommendations begin with prioritizing and conserving natural grass and include an organic field management pilot; and on end of life, staff stated that artificial turf cannot fully be recycled and very few recycling facilities exist. Consultants identified as Kimley-Horn and CHA. Video: <https://www.youtube.com/live/ssWCK0W58Bc?t=2923>

⁹⁷City of Palo Alto, Athletic Field Turf Study, final report (2025), page 59: nineteen of the City's native-soil natural grass fields are used more than 600 hours a year, twelve of them near or above 1,000 hours, and seven of those more than 1,300 hours. The report defines sustainable carrying capacity as the amount of use a field can sustain before its condition declines below an acceptable level for safe or quality play (page 5), and its key findings state that only several of the City's native-soil grass fields are operating near or above sustainable capacity.
<https://www.paloalto.gov/files/assets/public/v/1/community-services/staff-report-contracts/open-space-parks-and-golf/turf-study-report/2025-city-of-palo-alto-turf-study-report.pdf>

⁹⁸Toxics Use Reduction Institute, University of Massachusetts Lowell, "Building an Organic Maintenance Program for Athletic Fields: Guidance from Experts and Experienced Communities" (April 2021), drawing on TURI case studies of organically managed grass athletic fields in Springfield, Marblehead and Martha's Vineyard, Massachusetts, with contributions from Jerad Minnick and others. Springfield aerates its fields about four times a year and soil tests every two to three years; the Field Fund rebuilt a 2.75-acre school field complex at Oak Bluffs, Martha's Vineyard, beginning planning on 27 June 2018 with both fields open for the school year on 4 September 2018 and playable three weeks after seeding; and the guidance advises moving goals, nets and other equipment periodically so that heavy use does not concentrate in the same areas.
<https://www.turi.org/publications/building-an-organic-maintenance-program-for-athletic-fields-guidance-from-experts-and-experienced-communities-2/>

⁹⁹Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. The memorandum estimates annual use of the field at 2,120 hours for soccer and lacrosse, while Table 4 models 2,500 hours per year and Table 5 assumes 1,600. The cost per use formula printed beneath each column of Table 4 divides total maintenance and capital by total permitted hours in the twenty-year cycle.
<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

when someone checks them: in Palo Alto's study, the flagship field's hours turned out to be overstated by nearly double, and when the public did the addition, the consultant conceded the correction at a public meeting and the claimed grass-replacement ratio fell from as high as seven to one to about three and a half.¹⁰⁰

There is also a fairness question hiding inside "demand," and it comes from your own Council. On May 5, Mayor Moore pulled the field schedule off the Town website and told his colleagues what he found: two leagues book the field from morning to night every Saturday and Sunday and most weekday evenings, residents outside those leagues have essentially no weekend access at all, the leagues pay roughly what the maintenance contract costs, and they pay none of the capital.¹⁰¹ So when the study divides costs by hours, ask whose hours those are. A need argument built on maximum league bookings is not the same as a need argument about the community's children having somewhere to play.

Meanwhile, no one has ever counted the playable hours our community actually has across all owners: the Town's grass fields at Balzer and Baggerly, the grass fields at Fisher Middle School and the four LGUSD elementary schools, and the four plastic turf fields at the high school, and the rest. On June 1, staff's own regional explanation of why grass works in Morgan Hill was that play can rotate across their eight or nine grass fields; rotation across a community's fields is exactly the thing nobody has studied here. And notice what Sunnyvale did with this same question: it budgeted \$150,000 and told its consultant to also study improving its natural grass fields and building new ones.¹⁰² Los Gatos spent \$37,135 with a single bidder¹⁰³ and scoped no grass improvement at all. The point is not the price difference alone; it is what the two towns thought was worth asking.

[] Q7. "Which usage number is the Town's: 2,120, 2,500 or 1,600 hours a year? And will cost-per-use be computed on the hours each field is actually used, rather than the hours it is merely booked?"

The study uses all three numbers and computes cost-per-use from the biggest. This field just spent part of its booked hours closed for hardness.

¹⁰⁰City of Palo Alto Parks and Recreation Commission, 23 September 2025: the consultant stated that the reported hours at El Camino Park were overstated, approximately 4,300 in the report against an actual 2,700, or slightly under 2,000 counting half-field use as half, and that the corrected figure equates to a grass-replacement ratio of about 3 to 4, or 3.5 as the Santa Clara County study suggested, against figures as high as 6 to 8 fields elsewhere in the draft. The concession followed public comment doing the arithmetic from the report's own appendix.

¹⁰¹Los Gatos Town Council, meeting of 5 May 2026, at approximately 0:49: Mayor Moore read the Creekside reservation schedule into the record, stating that residents outside the two leagues have essentially no weekend access, that the leagues pay roughly what the maintenance contract costs, and, asked whether they pay any portion of the capital cost, that they do not. Video: <https://www.youtube.com/live/padVmiW3GYw?t=2940>

¹⁰²City of Sunnyvale, "Artificial Turf Study" project page. Records that on 10 September 2024 the City Council increased the study budget to \$150,000 and expanded the scope to research ways to improve the quality and use of the City's natural grass fields and to explore options for building new natural grass fields. Sunnyvale's study is a citywide policy study rather than a single-field alternatives analysis.

<https://www.sunnyvale.ca.gov/business-and-development/projects-in-sunnyvale/infrastructure-projects/artificial-turf-study>

¹⁰³Town of Los Gatos, Council Agenda Report, Item 8, meeting of 17 September 2024. Authorizes an agreement with Kimley-Horn and Associates, Inc. in the amount of \$37,135, and states that staff sought proposals from three firms on the on-call consultant list and that Kimley-Horn was the only respondent. <https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-f26ca8eac13d48878327bf1b32f4b24b/ITEM-Attachments-009-776db24382174e27878edfcdcd5b2af7.pdf>

[] Q8. "Please approach the school districts about a joint field-capacity assessment, and bring back actual logged hours against capacity for the high school district's four artificial fields, the elementary school fields, Balzer and Baggerly."

Whether the community's other fields could absorb Creekside's play is an empirical question nobody has tested. "The other fields are at capacity" is a claim that data can confirm or refute; right now it is an assumption.

5. Give natural grass the evaluation Council actually asked for

Dr. Mick Battam, whose thousand-field study underlies much of the usage evidence in this letter, states the standard plainly: it is incumbent on decision makers to base sports strategies and expenditure of public funds on sound science rather than marketing material and unsubstantiated rules of thumb.¹⁰⁴

Here is a sentence from the Town's own current capital budget, in the Creekside project entry: "In February 2024, Council directed staff to evaluate converting this field to natural grass rather than replacing the artificial turf."¹⁰⁵ Evaluating grass is the assignment. And the assignment got one priced grass scenario, a sand-based build, priced with a nine-inch sand base and a four-inch drain rock layer, that the study itself labels "Quality: Poor,"¹⁰⁶ with no native-soil option, no named cultivars or soil program, no case studies of real fields carrying real play, and no professional grass management anywhere in it. That is not an evaluation of converting to grass; it is a placeholder standing in for one. A capacity finding is also only as good as the people who checked it: published best-practice guidance calls for a certified agronomist specializing in sports turf and a certified irrigation specialist, and the Sports Field Management Association certifies sports field managers.¹⁰⁷ The City of Palo Alto's own study says the same in its own words, that its grass pilot would require engagement of a qualified agronomist experienced with integrated pest management and organic or low-input maintenance practices.¹⁰⁸

The fourteen amendments I asked Council to add to the study's scope in September 2024 laid out what a real evaluation looks like: modern cultivars and soil work, case studies of fields

¹⁰⁴Dr. Mick Battam, quoted in "New study claims flaws in processes used to justify artificial turf sports fields," Australasian Leisure Management: "It is incumbent on decision makers to base sports strategies and expenditure of public funds on sound science as opposed to marketing material and unsubstantiated rules of thumb."
<https://sustainablesportsnews.ausleisure.com.au/news/new-study-claims-flaws-in-processes-used-to-justify-artificial-turf-sports-fields/>

¹⁰⁵Town of Los Gatos, Proposed Capital Improvement Program budget, FY 2025-26, Creekside Turf Replacement, pages D-16 to D-17 (PDF viewer pages 153-154). Records \$37,135 in FY 2024-25 actuals, Tier 2 unappropriated estimates of \$1,262,865 shown in FY 2029-30, and a project timeline in which design is "TBD, contingent on future funding." The FY 2026-27 volume (PDF viewer pages 152-153) carries the same project at a Total Project cost of \$1,300,000, being the sum of the \$37,135 spent and the \$1,262,865 unappropriated, remains Tier 2, states that "This project is not currently fully funded," records that "In February 2024, Council directed staff to evaluate converting this field to natural grass rather than replacing the artificial turf," and states that there are no operating budget impacts for this project in FY 2026-27. FY 2025-26 volume: <https://www.losgatosca.gov/DocumentCenter/View/43385/FY-2025-2026-Capital-Budget>. FY 2026-27 volume: <https://www.losgatosca.gov/DocumentCenter/View/45617/Proposed-CIP-2026-27-Budget>

¹⁰⁶Kimley-Horn and Associates, Inc., memorandum to Nicole Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. Table 5 labels the single natural grass scenario "Quality: Poor."
<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

¹⁰⁷Best Practice Sporting Fields (2022), page 170, on engaging a certified agronomist specializing in sports turf, and Best-practice guidelines for sporting fields (January 2025), page 41, on a certified irrigation specialist; the guidelines are published by Hunter Water and partner councils at <https://www.hunterwater.com.au/business/best-practice-guidelines>. The page numbers above refer to the collated copy at <https://drive.google.com/file/d/1GeNPm1dkwc2qiqk64NjD4uefxVnAzBkr/view>. On certified sports field managers, see the Sports Field Management Association's Certified Sports Field Manager program: <https://www.sportsfieldmanagement.org/csfp-program/>

¹⁰⁸City of Palo Alto, Athletic Field Turf Study, final report (2025), page 7, describing the natural grass pilot: "The intent of the pilot would be to maintain and potentially increase current levels of field availability and playability, presenting opportunities to make adjustments to the City's field surface types and inventory. Implementation would require engagement of a qualified agronomist experienced with integrated pest management (IPM) and organic or low-input maintenance practices consistent with City policy."
<https://www.paloalto.gov/files/assets/public/v/1/community-services/staff-report-contracts/open-space-parks-and-golf/turf-study-report/2025-city-of-palo-alto-turf-study-report.pdf>

economically kept safe at forty-five to fifty hours a week, labor in hours and materials in volumes so the Town can check the math, and site-specific advice for this field and this climate. And it should be built by the three professionals whose disciplines these actually are: a Certified Professional Soil Scientist, a Certified Irrigation Agronomist,¹⁰⁹ and a Certified Sports Field Manager, the athletic field industry's primary credential.¹¹⁰ Three different disciplines; competence in one does not establish competence in the others.

There is a question hiding inside "always available." A 2024 American Academy of Pediatrics report ties overuse injuries and overtraining to burnout in young athletes; a researcher who studies youth sports describes a push to specialize earlier and earlier, with burnout arriving sooner from injuries, overuse and mental fatigue; the share of school-age children playing sports fell from 58.4 percent in 2017 to 53.8 percent in 2022; and up to 70 percent of adolescent athletes drop out by age 13.¹¹¹ A surface that never closes does not by itself put more children on the field. It removes the off-season, and the off-season is what pediatric medicine keeps recommending. The study treats round-the-clock, year-round play as pure upside, and staff's recommendation leans on "24/7/365 playability."¹¹² Pediatric sports medicine does not see it that way. A UCSF orthopedic surgeon reports ACL tears now showing up in ten-year-olds, up twelve percent in a decade, and that a child playing more weekly hours than their age multiplies injury risk seven-fold; his first prevention advice is time off between seasons.¹¹³ The study's own conclusion concedes that overall injury risk may be lower on natural grass.¹¹⁴ A winter when the field rests is not a defect. It might be the feature.

It is also worth knowing what Palo Alto just did with the same decision you are making, whether to replace a plastic turf field or convert it back to grass. Its council received a full citywide turf study in November and acted in January, deciding to replace the plastic turf at its one lighted field using natural cork infill, which staff said removes the vast majority of plastic from the infill; add filter membranes in the storm drain catch basins; start a natural grass pilot project; and explore converting the Cubberley artificial turf system to grass over time, with

¹⁰⁹Hunter Water Corporation, AgEnviro Solutions and Peak Water Consulting (August 2022), Best Practice Sporting Fields: A Guide for Turf Surfaces in the Lower Hunter, Books 1 to 7; authors Dr. Mick Battam and Dr. Paul Lample; peer reviewed; co-funded by the NSW Environment Protection Authority. The lead author holds both the Certified Professional Soil Scientist and Certified Irrigation Agronomist credentials, specializing in sports turf.

<https://www.hunterwater.com.au/business/best-practice-guidelines>

¹¹⁰The Certified Sports Field Manager (CSFM) credential is awarded by the Sports Field Management Association to sports turf managers who have demonstrated mastery of agronomic science, field maintenance, pest management and sports-specific field operations; it is the primary professional credential in the athletic field management industry.

<https://www.sportsfieldmanagement.org/csrm-program/>

¹¹¹Ken Belson, "As Youth Sports Professionalize, Kids Are Burning Out Fast," New York Times, 29 December 2025, reporting a 2024 American Academy of Pediatrics report linking overuse injuries and overtraining to burnout; Professor Meredith Whitley of Adelphi University on the push to specialize earlier; National Survey of Children's Health data showing school-age sports participation falling from 58.4 percent in 2017 to 53.8 percent in 2022; and that up to 70 percent of adolescent athletes drop out by age 13. <https://www.nytimes.com/2025/12/29/business/youth-sports-stress.html>

¹¹²Town of Los Gatos, Parks and Sustainability Commission Agenda Report, Item 2, meeting of 1 June 2026, prepared by Nicolle Burnham, Director of Parks and Public Works. States that staff recommends the PIVOT or BrockFill material, which would reduce potential environmental impact associated with use of crumb rubber while providing long term durability and 24/7/365 playability. <https://www.losgatosca.gov/AgendaCenter/Parks-Commission-6>

¹¹³UCSF, "For Children Specializing in One Sport, More Harm Than Good?" interview with Nirav Pandya, MD, orthopedic surgeon, UCSF Benioff Children's Hospitals, 30 April 2024. States that the rate of ACL injuries in children as young as 10 has risen 12 percent over the last decade, and that playing more weekly hours of sport than a child's age increases injury risk seven-fold. <https://www.ucsf.edu/news/2024/04/427421/children-specializing-one-sport-more-harm-than-good>

¹¹⁴Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. The closure states that overall injury risks may be lower with natural grasses and that further research is needed to confirm the public health effects related to artificial turf. <https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

Councilmember Keith Reckdahl describing it on the record as the last field the city would surface in plastic turf, and Councilmember Greer Stone later describing the adopted motion as carrying an implicit promise that it was the last synthetic turf field the council would approve.¹¹⁵ Palo Alto also priced recycling the old carpet, about a dollar a square foot, roughly eighty thousand dollars a field, with a chain of custody.¹¹⁶ Cork appears in the Los Gatos study as one of four priced plastic turf options. What does not appear anywhere in it is a grass pilot, a recycling cost, or any end-of-life line at all. And Palo Alto is not alone. the City of Sunnyvale's parallel study, released this month and prepared with Kimley-Horn involved, the same firm behind this study, opens its recommendations by prioritizing and conserving natural grass, recommends an organic field management pilot, and in its own case study of this very field puts twenty years of natural grass more than a million dollars below artificial turf,¹¹⁷ and was received by its council two days ago with one member reading it as already leaning toward natural turf and calling organic management the future.¹¹⁸ Two neighboring cities have just walked the road this Commission is standing at, in the same direction.

[] Q9. "Please price at least one realistic natural grass option, on native soil, designed by a Certified Professional Soil Scientist, a Certified Irrigation Agronomist and a Certified Sports Field Manager."

The current study prices exactly one grass scenario and labels it Poor. The Town's own capital budget says the February 2024 direction was to evaluate converting to natural grass. This is that evaluation, finally done properly.

¹¹⁵City of Palo Alto City Council, meetings of 17 November 2025 (presentation of the citywide turf study by the Division Manager for Open Space, Parks and Golf and Lloyd Consulting, with council discussion) and 12 January 2026 (action on the study recommendations: natural cork infill replacement at El Camino Park, storm drain filtration, a natural grass pilot project, and exploration of converting the Cubberley artificial turf system to natural grass over time). Videos: <https://www.youtube.com/live/6GiHOHMQrg> and <https://www.youtube.com/live/fGtryj2gX9A>

¹¹⁶City of Palo Alto City Council, meeting of 17 November 2025: staff, asked the cost of recycling a synthetic turf carpet, answered approximately one dollar per square foot, about \$80,000 for an 80,000 square foot field, and described the removed Mayfield turf as repurposed with a chain of custody. Video: <https://www.youtube.com/live/6GiHOHMQrg>

¹¹⁷City of Sunnyvale, Artificial Turf Policy Study (July 2026), whose Creekside case study puts twenty years of natural grass at about \$2,590,000 against about \$3,681,600 for the same field surfaced with artificial turf (PDF pp. 27 and 61). <https://sunnyvaleca.legistar.com/View.ashx?M=F&ID=15709600&GUID=6BB1AD11-85F0-451E-9B3F-5538480E791E>

¹¹⁸City of Sunnyvale Council study session, 28 July 2026: the staff report's first recommendation is to prioritize and conserve natural grass, and it recommends an organic field management pilot; in council discussion a councilmember described the report as leaning toward natural turf and called organic field management the future. No motion was taken; an information-only report to Council is to follow. Video: <https://www.youtube.com/live/ssWCK0W58Bc?t=8717>

6. The environmental case: what was promised in 2011, what is known now, and what the Town's own policies require

When the Town approved this park in 2011, its environmental review made a specific promise. The review found that infill chemicals soaking into groundwater was a potentially significant impact,¹¹⁹ and it said the risk was acceptable only because of a commitment called Mitigation Measure HYD-1: before buying turf, the Town would set limits on metals and certain chemicals and require certified lab results from the vendor.¹²⁰ In plain terms, the Town promised to test the turf's chemistry before purchase. That promise matters because of where this field sits: it was designed to drain by soaking water straight down through its base, groundwater is thirteen to twenty-three feet below, and Los Gatos Creek runs along the property line.¹²¹

By the artificial turf industry's own figures, an average athletic field holds 400,000 pounds of infill and 40,000 pounds of carpet, and research reports that an average field loses between 2,000 and 3,000 pounds of microplastic fibers every year. The science on what plastic turf fields shed has moved a long way since 2011. A 2026 peer-reviewed review, free to read, finds that sunlight, temperature swings, rain and mechanical wear all fragment turf fibers and infill, that maintenance itself, brushing, power brushing and vacuuming, releases particles, and that how fast a given field degrades is still an open research question.¹²² A separate field study collected turf fibers from the drainage ditches around a plastic turf sports field, torn and split by play.¹²³ The study in front of you concedes that turf backing is typically made with PFAS and that fields can shed microplastics,¹²⁴ and then analyzes none of it: no loss estimate, no pathway, no fate. That gap is exactly why the baseline sampling, drain filtration and fiber accounting conditions at the end of this letter exist. I have photographed fibers and crumb rubber outside this field's fences, on the creek side, this May, and some of the drains there are labeled as emptying into Los Gatos Creek.¹²⁵

¹¹⁹2011 Mitigated Negative Declaration: "Manufacturers of synthetic turf indicate that current products are 100 percent recyclable," alongside the concessions that "old fields are generally not recyclable because of the backing materials" and "One company has recycled about 13 fields." https://drive.google.com/file/d/1tWYJSm5KhfdIG_nOtnjl-Vdul94oRgic/view

¹²⁰Town of Los Gatos, Community Development Department, "Environmental Impact Review, Mitigated Negative Declaration," 930 University Avenue, Los Gatos Creekside Sports Park; Conditional Use Permit U-11-008, Architecture and Site Application S-11-039, Mitigated Negative Declaration ND-11-006 (2011). Mitigation Measure HYD-1. Copy on file with the Town. Available at: https://drive.google.com/file/d/1tWYJSm5KhfdIG_nOtnjl-Vdul94oRgic/view

¹²¹Ibid. Mitigated Negative Declaration ND-11-006 (2011). States that the Town designed the synthetic turf sports field to be self-treating, relying on storage in the field section together with the infiltration rate of the subgrade, and that depth to groundwater at the site is approximately 13 to 23 feet. Copy on file with the Town. Available at: https://drive.google.com/file/d/1tWYJSm5KhfdIG_nOtnjl-Vdul94oRgic/view

¹²²Sharmin, Bhat, Martin-Fabiani and Radu, "Microplastic emissions and degradation mechanisms in artificial turf systems: a critical review," *Environmental Science: Advances*, vol. 5, pp. 1252-1272 (2026), open access. Finds that ultraviolet radiation, temperature fluctuations, rain and mechanical wear all contribute to fragmentation of synthetic fibres and infills; that maintenance activities including brushing, power brushing and vacuuming can release particles; and that determining degradation rates of artificial turf remains an identified research gap. <https://pubs.rsc.org/en/content/articlehtml/2026/va/d5va00416k>

¹²³Kanoko Takahashi, Ryosuke Fujinuma, Tomoyasu Yoshitomi, Yasuo Shimizu and Makito Kobayashi, "Migration of Artificial Turf Fibers from Artificial Turf Sports Field and Their Ingestion by Goldfish," *Environments*, vol. 10, no. 12, article 222 (2023). Peer-reviewed, open access. Fibers collected from the drainage ditches surrounding an artificial turf sports field had a mean width of 0.62 mm. <https://doi.org/10.3390/environments10120222>

¹²⁴Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. The materials discussion states that artificial grass carpet and backing is typically made with per- and polyfluoroalkyl substances and may contain plastic fibers that may leak out microplastics. <https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

¹²⁵Cynthia Fan, photographic and video documentation of detached fibers and crumb rubber beyond the fenced perimeter of the artificial turf system at Creekside Sports Park, 1 May 2026. <https://sites.google.com/view/creeksideplasticpollution5126/home>

Two of 2011's other assumptions have aged badly. The 2011 review leaned on manufacturers' claim that turf is 100 percent recyclable,¹²⁶ even while conceding that old fields were generally not recyclable and that one company had recycled about thirteen fields;¹²⁷ the 2026 review concludes that complete recycling remains unfeasible today and the carpet is the least recovered part.¹²⁸ And in 2011 nobody had heard of PFAS in turf; since then California's toxics agency has published three documents on artificial turf: a background document on candidate chemicals in artificial turf, a background document on microplastics in consumer products that names artificial turf infill among the categories under evaluation, and a technical document on PFAS in artificial turf.^{129,130,131} That agency is now moving to add microplastics to its Candidate Chemicals List, and its work plan names reducing microplastic releases and protecting California's water resources among its policy priorities.¹³² Neither PFAS nor microplastics was in the study's scope, and CEQA review was specifically excluded from its contract.¹³³ What this letter asks is simply that staff say, on the record, what the Town will study and disclose before it commits: the environmental effects of each option, the measures that would reduce them, and the alternatives considered. That is the information decision makers need in order to choose well, and a decision that binds this site for a decade or more deserves it.

The June 1 staff report leans on one document for reassurance, and that document does not carry the weight placed on it. The staff report relies on the March 2026 State study of turf's health implications. That study evaluated crumb rubber infill only. It did not examine fibers, backing, PFAS, microplastics, or environmental contamination pathways. It sampled 35 fields from a database of 907, all of them CalRecycle-funded, and it was contracted by CalRecycle, an agency whose statutory mandate includes finding markets for recycled tire material, with no conflict-of-interest disclosure in the study. A member of the study's own independent scientific review panel, UC Berkeley environmental health scientist Amy Kyle, says a Berkeley laboratory found more than 400 chemicals in the infill and could identify only about 180, and

¹²⁶Ibid. Mitigated Negative Declaration ND-11-006 (2011). Records that manufacturers of synthetic turf indicate that current products are 100 percent recyclable. Copy on file with the Town. Available at:

https://drive.google.com/file/d/1tWYJSm5KhfdIG_nOtnjl-Vdul94oRgic/view

¹²⁷2011 Mitigated Negative Declaration: "Manufacturers of synthetic turf indicate that current products are 100 percent recyclable," alongside the concessions that "old fields are generally not recyclable because of the backing materials" and "One company has recycled about 13 fields." https://drive.google.com/file/d/1tWYJSm5KhfdIG_nOtnjl-Vdul94oRgic/view

¹²⁸Anna Lena Seibel and others, "End-of-life management of artificial turf: State of the art and future challenges," Journal of Environmental Management, vol. 406 (2026), article 129822. Peer-reviewed review article, openly licensed. Concludes that complete recycling remains unfeasible today and that truly closed-loop solutions remain the exception.

<https://doi.org/10.1016/j.jenvman.2026.129822>

¹²⁹California Department of Toxic Substances Control, Safer Consumer Products Program, "Background Document on Candidate Chemicals in Artificial Turf" (August 2024).

<https://dtsc.ca.gov/wp-content/uploads/sites/31/2024/07/Background-Documents-on-Candidate-Chemicals-in-Artificial-Turf.pdf>

¹³⁰California Department of Toxic Substances Control, Safer Consumer Products Program, "Background Document on DTSC's Microplastics in Consumer Products Research" (November 2025). Artificial turf infill is among the product categories on which DTSC sought public comment.

<https://dtsc.ca.gov/wp-content/uploads/sites/31/2025/11/Background-Documents-on-DTSCs-Microplastics-in-Consumer-Products-Research.pdf>

¹³¹California Department of Toxic Substances Control, "Technical Document for Artificial Turf Containing PFASs" (February 2026). https://dtsc.ca.gov/wp-content/uploads/sites/31/2026/02/TechnicalDocument_PFASs-in-Artificial-Turf_accessible.pdf

¹³²California Department of Toxic Substances Control, Safer Consumer Products, Microplastics in Consumer Products: DTSC states it is in the process of adding microplastics to its Candidate Chemical List and conducting preliminary research, and its 2024-2026 Priority Product Work Plan names reducing the release of microplastics across a product's life cycle and protecting California's water resources and aquatic ecosystems among its policy priorities.

<https://dtsc.ca.gov/scp/microplastics-in-consumer-products/>

¹³³Town of Los Gatos and Kimley-Horn and Associates, Inc., Agreement for Consultant Services (17 September 2024), Exhibit A. Additional Services, being work not included, lists geotechnical studies, survey, and CEQA and environmental studies other than the limited assessment scope noted in the agreement. Copy on file with the Town. Available at:

<https://drive.google.com/file/d/1SoQW-n0K8wFzZzgY8BzXlk257IT3-k1K/view>

that the finding “fell out of the final report.” Her advice to the panel: “if I were advising my friend on the school board about this, I would say I would try not to use this stuff.” A fellow panelist, a UC San Francisco professor of medicine, added that he was glad his own child mostly played on grass. And the State’s own staff toxicologist said the report looked only at the tire infill, did not examine the blades where PFAS have been detected, and “should not be seen as an official California endorsement of synthetic turf.”¹³⁴ PFAS were not among the chemicals it tested;¹³⁵ and the City of Sunnyvale’s study, by this same consultant team, says so plainly, quoting a New Jersey Institute of Technology report on the problem of studying a single component.¹³⁶ And there is a deeper problem with leaning on it here. Infill is not where the PFAS problem sits. PFAS has been found in the grass fibers and in the backing, components every system carries whether it is filled with crumb rubber, cork, wood, or nothing at all; this study concedes as much when it says turf backing is typically made with PFAS.¹³⁷ Removing crumb rubber does not remove PFAS, and a crumb rubber study cannot vouch for PIVOT, BrockFill, or any other product proposed here.

Last, a word about uncertainty, because it frames every environmental question above. Turf products are sold as safe, recyclable and manageable, but the long-term evidence is still being written, and absence of evidence is not evidence of absence. Once microplastics and persistent chemicals get into soil and water, cleanup is difficult, expensive and sometimes impossible. When the science is unsettled and the mistake is irreversible, the burden of proof belongs on the product, not on the neighbors. Where well-managed natural grass can meet the community’s needs, that is the side caution picks.

¹³⁴Susanne Rust, “As California installs more artificial turf, health and environmental concerns multiply,” Los Angeles Times, 17 September 2025. Amy Kyle, a UC Berkeley environmental health scientist and one of the independent scientific advisers on the review panel, states that a UC Berkeley laboratory found more than 400 chemicals in the infill and could identify only about 180, and that “that fell out of the final report ... Those results, they kind of left that all out”; she told the agency and her fellow advisers, “if I were advising my friend on the school board about this, I would say I would try not to use this stuff.” John Balmes, professor of medicine at UC San Francisco and a fellow panelist, said “I am glad my kid mostly played on grass.” Jocelyn Claude, a staff toxicologist for the state, said the report looked only at the tire infill and should not be seen as an official California endorsement of synthetic turf, noting that her office did not look at the blades, where PFAS have been detected: “Since we only looked at the crumb rubber, there are limitations in what our results state and how they can be applied.” The article also reports, per the Synthetic Turf Council, that an average athletic field uses 400,000 pounds of infill and 40,000 pounds of carpet, and that research shows an average synthetic turf field loses between 2,000 and 3,000 pounds of microplastic fibers every year. CalRecycle requested the study in 2015 while seeking uses for stockpiled waste tires.

<https://www.latimes.com/science/story/2025-09-17/californias-love-hate-relationship-with-artificial-turf>

¹³⁵California Office of Environmental Health Hazard Assessment, Synthetic Turf Study: Final Report (March 2026), prepared in collaboration with CalRecycle. The study evaluated crumb rubber infill; PFAS were not among the chemicals tested.

<https://oehha.ca.gov/sites/default/files/media/2026-03/oehhaturffinal.pdf>

¹³⁶City of Sunnyvale, Artificial Turf Policy Study (July 2026 final), PDF viewer page 15: summarizes the OEHHA March 2026 report as addressing crumb rubber infill, and quotes a New Jersey Institute of Technology report that existing studies have focused exclusively on a single component, crumb rubber infill, neglecting the complexity of the mixture caused by simultaneous exposure to all components.

<https://sunnyvaleca.legistar.com/View.ashx?M=F&ID=15709600&GUID=6BB1AD11-85F0-451E-9B3F-5538480E791E>

¹³⁷Kimley-Horn and Associates, Inc., memorandum to Nicole Burnham, Director of Parks and Public Works, Town of Los Gatos, “Artificial Turf Replacement Assessment at Creekside Sports Park” (27 July 2025), with subconsultant BerryDunn. The materials discussion states that artificial grass carpet and backing is typically made with per- and polyfluoroalkyl substances and may contain plastic fibers that may leak out microplastics.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachme nt-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

[] Q10. "Please produce the testing records Mitigation Measure HYD-1 required in 2011, the limits the Town set and the vendor's certified laboratory results, or confirm in writing that no such records exist. Please confirm the same testing requirement will apply to any replacement, and state whether this field drains through bio-retention or through its own base."

The 2011 environmental review approved this park only on the promise that turf chemistry would be tested before purchase. On the last question: staff described bio-retention on June 1, while the 2011 review describes a field that treats itself by soaking water through its base, and routes the parking lot and hardscape to two bioswales and Filterra units on the eastern, creek-side perimeter. So bio-retention may describe the parking lot, not the field. Which is it? The answer changes what any filter or sampling plan should look like.

[] Q11. "What environmental review path does the Town intend for the replacement?"

CEQA review was excluded from the study contract, and the products being recommended did not exist in 2011.

[] Q12. "Were the storm drain filters staff promised on May 5 installed, in every catch basin including the parking lot and any drains on the neighboring property that receive material from this site? What are the devices, and what particle size do they actually catch? What does the \$10,000 construction-phase stormwater and non-stormwater pollution control line in every Table 3 estimate actually buy, and what protects the creek during operation? And did staff return to Council with the revised estimates contemplated in the May 5 motion?"

Field research has measured turf fibers in field drainage at about six tenths of a millimeter wide,¹³⁸ far below what typical trash screens catch. A filter that exists but passes the pollution is a checkbox, not a protection. And the 2011 review itself already relays a Connecticut environmental agency recommendation that turf drainage designs demonstrate removal of dissolved zinc.¹³⁹

¹³⁸Kanoko Takahashi, Ryosuke Fujinuma, Tomoyasu Yoshitomi, Yasuo Shimizu and Makito Kobayashi, "Migration of Artificial Turf Fibers from Artificial Turf Sports Field and Their Ingestion by Goldfish," *Environments*, vol. 10, no. 12, article 222 (2023). Peer-reviewed, open access. Fibers collected from the drainage ditches surrounding an artificial turf sports field had a mean width of 0.62 mm. <https://doi.org/10.3390/environments10120222>

¹³⁹2011 Mitigated Negative Declaration, water quality discussion, relaying a Connecticut Department of Environmental Protection report recommendation that stormwater best management practices demonstrating significant removal of dissolved zinc be incorporated into the design of drainage systems for artificial turf fields. https://drive.google.com/file/d/1tWYJSm5KhfdIG_nOtnjl-Vdul94oRgjc/view

[] Q13. "Please confirm that the Town will put this project through environmental review under the California Environmental Quality Act rather than declaring it exempt and skipping the review. And please confirm on the record that the March 2026 State study covered crumb rubber infill only, did not test PFAS, and by its own terms did not evaluate the environmental effects of artificial turf, the migration of microplastics and chemicals from the field into the watershed, so it cannot vouch for PIVOT, BrockFill, or any product proposed here."

The City of Sunnyvale's study, by the same consultant team, concedes exactly this scope limit.

The study's policy review tests only water policies. Table 2 tests the options against four General Plan policies, all drawn from Chapters 6 and 7, and even on that friendly ground the table concedes more than it argues: its own rows record that natural grass shows fewer injuries in NFL data, and that turf's materials and toxicity "would need to be reevaluated."¹⁴⁰ OSPR-7 directs the Town to create and maintain parks that complement and enhance natural habitats. The study scores that policy in favor of plastic turf, on the ground that a plastic turf field is available more often. But availability is not habitat. A plastic carpet laid over drain rock supports no soil life, no insects, no birds and no plants, which is the entire subject of the policy being scored. What the table never opens is Chapter 8, the General Plan's Environment and Sustainability Element: the chapter holding the Town's biological-resources, air-quality, climate-change and greenhouse-gas, and energy policies.¹⁴¹ Nor does it mention the Town's Sustainability Plan, a document with formal legal weight here: the Town adopted it as its CEQA threshold of significance for greenhouse gases, the standard "by which all applicable developments within the town will be reviewed."¹⁴² Measured against that plan, the comparison inverts. The plan's inventory counts all lawn-and-garden equipment townwide, every mower included, at 690 of 381,640 metric tons, less than two tenths of one percent. Its waste chapter explains that making new products from raw materials generates far more emissions than reuse, which is a description of a virgin-plastic carpet purchased every decade. Its Measure EC-9 directs the Town toward heat island mitigation through cool surfaces and shade trees,¹⁴³

¹⁴⁰Study Table 2, General Plan Policy Consistency Analysis: its rows record that natural grass "has been found to have less injuries when comparing NFL injury rates," that turf's "materials and toxicity would need to be reevaluated" for safe reinstallation, and that policy OSPR-7.1 is scored in favor of the artificial option on availability; and the study's greenhouse gas section concedes that natural grass sequesters carbon while artificial turf contributes emissions.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachme nt-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

¹⁴¹Town of Los Gatos 2040 General Plan, Chapter 8, Environment and Sustainability Element, whose sections include 8.3 Biological Resources, 8.4 Air Quality, 8.5 Climate Change/Greenhouse Gas Emissions, and 8.6 Energy. No Chapter 8 policy appears in the study's Table 2. <https://online.encodeplus.com/regs/losgatos-ca/doc-viewer.aspx?secid=168>

¹⁴²Town of Los Gatos Sustainability Plan, adopted October 2012, and adopted as the Town's CEQA threshold of significance for greenhouse gas effects, "by which all applicable developments within the town will be reviewed" (pp. 1-1 to 1-2). Table 2-7 inventories all townwide lawn and garden equipment at 690 MTCO₂e of a 381,640 MTCO₂e total (Table 2-1); the solid waste chapter notes that manufacturing from raw materials is more emissions-intensive than reuse; Measure EC-9 directs a heat island mitigation plan built on cool surfaces and shade trees.

https://www.losgatosca.gov/DocumentCenter/View/8122/LosGatosSustainability-Plan_October-2012

¹⁴³Town of Los Gatos Sustainability Plan, adopted October 2012, and adopted as the Town's CEQA threshold of significance for greenhouse gas effects, "by which all applicable developments within the town will be reviewed" (pp. 1-1 to 1-2). Table 2-7 inventories all townwide lawn and garden equipment at 690 MTCO₂e of a 381,640 MTCO₂e total (Table 2-1); the solid waste chapter notes that manufacturing from raw materials is more emissions-intensive than reuse; Measure EC-9 directs a heat island mitigation plan built on cool surfaces and shade trees.

https://www.losgatosca.gov/DocumentCenter/View/8122/LosGatosSustainability-Plan_October-2012

while the Town's own 2021 report calls this plastic turf field very hot in summer.¹⁴⁴ And the study itself concedes that grass sequesters carbon while plastic turf only emits.¹⁴⁵ A sustainability analysis that never consulted the Town's sustainability policies is not finished, and this Commission is exactly the body to say so.

¹⁴⁴Town of Los Gatos, Council Agenda Report, Item 8, meeting of 7 September 2021. States that the rubber asphalt-based infill is no longer desirable as it is very hot in the summer and produces a strong asphalt odor, and that it tracks and splashes and becomes difficult to contain in the synthetic turf.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-6045d301c30348348b854970c5f9c924/ITEM-Attachment-008-a3656293dd944b8eaaf70ba2d3b11f52.pdf>

¹⁴⁵Study Table 2, General Plan Policy Consistency Analysis: its rows record that natural grass "has been found to have less injuries when comparing NFL injury rates," that turf's "materials and toxicity would need to be reevaluated" for safe reinstallation, and that policy OSPR-7.1 is scored in favor of the artificial option on availability; and the study's greenhouse gas section concedes that natural grass sequesters carbon while artificial turf contributes emissions.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

7. Ask how the Town plans to pay for this, not once but every decade

buying a plastic turf field is not a purchase, it is a subscription. Every eight to twelve years, another million-plus dollars. The honest test of affordability is not whether the Town can find the first payment; it is whether the Town will fund the cycle.

The record on the cycle is not encouraging. The 2021 estimate to replace this field was \$500,000 to \$900,000.¹⁴⁶ The Town's current capital budget says \$1.3 million, still unfunded, with design contingent on future funding.¹⁴⁷ The study's construction number for the cheapest plastic turf option is about \$2.36 million over twenty years. And throughout this spring, as the Town has weighed whether to ask voters for new revenue in November, staff presentations to the Finance Commission in January,¹⁴⁸ to Council in January,¹⁴⁹ and to the joint budget session in March¹⁵⁰ have listed "soccer field turf rehab" at approximately \$2.5 million among the unfunded needs a tax measure might address. Four different prices for the same project, in the Town's own documents, spanning a factor of five. If the money has now been found, the question simply becomes: found for which of those numbers, and taken from what?

And remember how the first field was paid for: the Town sold thirteen acres to the County in 2008 and used part of the \$6 million to buy this land.¹⁵¹ There is no second thirteen acres. In 2021 staff said both leagues were open to contributing capital and asked Council for guidance so fundraising could start;¹⁵² five years on, it is fair to ask what has been raised. The Director

¹⁴⁶Town of Los Gatos, Council Agenda Report, Item 8, meeting of 7 September 2021. Records that both league partners are amenable to capital contributions and asks Council to provide guidance to allow time for fund raising.
<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-6045d301c30348348b854970c5f9c924/ITEM-Attachment-008-a3656293dd944b8eaaf70ba2d3b11f52.pdf>

¹⁴⁷Town of Los Gatos, Proposed Capital Improvement Program budget, FY 2025-26, Creekside Turf Replacement, pages D-16 to D-17 (PDF viewer pages 153-154). Records \$37,135 in FY 2024-25 actuals, Tier 2 unappropriated estimates of \$1,262,865 shown in FY 2029-30, and a project timeline in which design is "TBD, contingent on future funding." The FY 2026-27 volume (PDF viewer pages 152-153) carries the same project at a Total Project cost of \$1,300,000, being the sum of the \$37,135 spent and the \$1,262,865 unappropriated, remains Tier 2, states that "This project is not currently fully funded," records that "In February 2024, Council directed staff to evaluate converting this field to natural grass rather than replacing the artificial turf," and states that there are no operating budget impacts for this project in FY 2026-27. FY 2025-26 volume: <https://www.losgatosca.gov/DocumentCenter/View/43385/FY-2025-2026-Capital-Budget>. FY 2026-27 volume: <https://www.losgatosca.gov/DocumentCenter/View/45617/Proposed-CIP-2026-27-Budget>

¹⁴⁸Town of Los Gatos, Finance Commission, Item 7 Desk Item, meeting of 12 January 2026, with staff presentation attached. Unfunded needs include "Park Rehabilitation: Soccer field turf rehab ~\$2,500,000"; the presentation also records five-year deficits ranging from \$1.1 million to as high as \$5 million, and advises that the November 2026 ballot deadline is early August with a prudent date for Council action of the end of June.
https://losgatos-ca.municodemeetings.com/sites/losgatos-ca.municodemeetings.com/files/fileattachments/finance_commission/meeting/7721/item_7_-_desk_item_-_revenue_measure_with_attachments.pdf

¹⁴⁹Town of Los Gatos, Town Council, Item 18 Desk Item B, meeting of 20 January 2026, staff presentation (Attachment 5). The unfunded needs table lists "SOCCER FILED TURF REHAB" (sic) at approximately \$2.5 million within a total of \$285.7 million to \$307.2 million, and records that the FY 2025-26 budget relies on \$1.1 million in reserves.
https://losgatos-ca.municodemeetings.com/sites/losgatos-ca.municodemeetings.com/files/fileattachments/town_council/meeting/7717/item_18_-_desk_item_b.revenue_measure.pdf

¹⁵⁰Town of Los Gatos, "Tax Revenue Analysis," presentation to the Special Joint Meeting of the Town Council and Finance Commission (Study Session), Item 1, 16 March 2026, at page 3. The unfunded needs table lists "Soccer Filed Turf Rehab" (sic) under Park Rehabilitation at approximately \$2.5 million, within unfunded needs totalling \$285.7 million to \$307.2 million; the accompanying five-year forecast shows use of fund balance in each of FY 2026-27 through FY 2030-31.
<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-086aac6bdb60433781d571125300a563/ITEM-Attachment-002-ac2251628d094e969f8bec474fec170f.pdf>

¹⁵¹Town of Los Gatos, Council Agenda Report, meeting of 6 December 2010, PPW Job No. 10-15. Records that the County of Santa Clara purchased 13 acres from the Town for \$6 million in 2008, that the proceeds were placed in a reserve fund for community and youth sports facilities, and that just over \$3 million was used in 2009 to purchase 930 University Avenue. Copy on file with the Town. Available at: https://drive.google.com/file/d/19es7mpyRozl5BQM2U4fl_bfjLYu6pbBw/view

¹⁵²Town of Los Gatos, Council Agenda Report, Item 8, meeting of 7 September 2021. Records that both league partners are amenable to capital contributions and asks Council to provide guidance to allow time for fund raising.
<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-6045d301c30348348b854970c5f9c924/ITEM-Attachment-008-a3656293dd944b8eaaf70ba2d3b11f52.pdf>

told this Commission on June 1 that the Town keeps no replacement reserve for this field and that putting something like \$50,000 a year aside is a conversation she expects to have with Council. Good. Then have it inside this decision.

[] Q14. "Please restate the cost comparison as an annual cost that includes a funded replacement reserve, in writing, by our next regular meeting."

A funded reserve is the number a town actually budgets, and right now it appears nowhere in the comparison. The Director has already said the reserve conversation is coming; it belongs inside this decision, not after it.

8. If you recommend plastic turf anyway

Then the first decision is which kind of system, because they are not the same product. One kind carries an infill, the loose material spread between the blades, which can be crumb rubber, sand, cork, coconut or wood chips such as BrockFill. The other kind, of which TenCate's PIVOT is the example in front of you, has no infill at all. The trade-offs run in both directions, and the record on the infill-free option is thin.

And if the recommendation is going to ride on PIVOT specifically, ask for its evidence. PIVOT is an infill-free product with roughly three years on the market, being recommended for its "long term durability."¹⁵³ A durability claim needs a track record, and three years is not one. Public comment before this Commission on June 1 also reported a San Jose PIVOT field shedding tufts of fiber within months of installation and running hotter than infilled turf. Before the Town commits to a product, those reports deserve checking, and the vendor deserves the question: on what installations, over what years, does the durability claim rest? Palo Alto asked that question and answered it. First, a word on how infill-free systems work, in the study's own words: PIVOT eliminates the need for infill "through a combination of different polyethylene yarns, of varying textures."¹⁵⁴ The cushioning is not removed; it is replaced with more polyethylene. With no infill to support the blades, the carpet is woven much denser, so an infill-free field is significantly more plastic fiber per square foot than an infilled one. TenCate's representative told Sunnyvale's council this week that removing the infill prevents the fiber friction that causes microplastics;¹⁵⁵ the drainage-ditch fibers in the field research were torn by play, not worn loose by infill.¹⁵⁶ Palo Alto staff, weighing PIVOT for their Mayfield replacement, visited the San Jose installation at Mise Park, talked with the teams that maintain and manage it, and rejected the product: they thought playability would be impacted, it is relatively new to the market, and it is significantly more plastic.¹⁵⁷ The city's consultant, asked about PIVOT at the same meeting, said it has not been on the market long enough for him to call it a good option or not.¹⁵⁸ It is not just critics asking, either. FieldTurf, which sells infill turf and holds this field's maintenance contract, published a piece this May reporting that when California high school coaches were asked, open-ended, to name the least favorite field they played on last season, nearly seventy percent named a field with a non-infill system; that the NFL approved

¹⁵³Town of Los Gatos, Parks and Sustainability Commission Agenda Report, Item 2, meeting of 1 June 2026. States that staff continues to recommend replacement based on the results of the consultant's work and a study published by the State of California in March 2026 on the public health implications associated with artificial turf.

<https://www.losgatosca.gov/AgendaCenter/Parks-Commission-6>

¹⁵⁴Study product description: PIVOT "eliminate[s] the need for infill through a combination of different polyethylene yarns, of varying textures."

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

¹⁵⁵City of Sunnyvale Council study session, 28 July 2026: TenCate's representative, presenting PIVOT, stated the product has been manufactured PFAS free since 2023, contains no performance infill, that the absence of infill prevents the fiber friction that causes microplastics, and that the turf is recyclable at end of life. Video: <https://www.youtube.com/live/ssWCK0W58Bc>

¹⁵⁶Kanoko Takahashi, Ryosuke Fujinuma, Tomoyasu Yoshitomi, Yasuo Shimizu and Makito Kobayashi, "Migration of Artificial Turf Fibers from Artificial Turf Sports Field and Their Ingestion by Goldfish," *Environments*, vol. 10, no. 12, article 222 (2023). Peer-reviewed, open access. Fibers collected from the drainage ditches surrounding an artificial turf sports field had a mean width of 0.62 mm. <https://doi.org/10.3390/environments10120222>

¹⁵⁷City of Palo Alto Parks and Recreation Commission, meeting of 23 September 2025, draft turf study item. Sarah Robustelli, Division Manager for Open Space, Parks and Golf and project manager of the turf study, described the city's evaluation of PIVOT for the Mayfield replacement: a site visit to the San Jose installation, conversations with its maintenance and capital teams, concerns that playability would be impacted, a significantly higher cost estimate, a fairly new product, increased fiber content, and the decision not to use the product. Video (item response near the 3 hour 24 minute mark):

<https://www.youtube.com/watch?v=6fAQyjTE03A>

¹⁵⁸City of Palo Alto Parks and Recreation Commission, 23 September 2025: Anthony Stevenson of Lloyd Consulting Group, the study's consultant, said PIVOT is a fairly new product and has not been around long enough with municipal use for him to say whether it is a great option or not.

twenty-five infill systems for the 2026 season and not one non-fill system; and that FIFA's 2024 manual makes non-filled systems ineligible for its certifications.¹⁵⁹ That is one turf company attacking another's product, so read it with that in mind. It is still a remarkable thing for the industry to be saying about the category the Town is being steered toward.

Then please attach these conditions, because every one of them is nearly impossible to get after a contract is signed, and every one is something this field's own history says the next one needs.

(a) Baseline runoff and soil sampling before installation. Without a before measurement, nobody can ever say whether a later detection came from the field, so every future water result becomes an argument instead of an answer.

(b) Runoff capture designed in, not retrofitted: runoff is the water that leaves the field after rain or watering, carrying with it whatever the surface sheds.

(c) GMax testing every season, not once a year, by a tester with no financial ties to the vendor, with a settling period after maintenance before any test, a written threshold, and an automatic consequence when it is crossed. This field's whole story is what happens when a failure has no automatic effect, and this spring proved that one annual test can leave the Town confidently wrong within nine weeks. The manufacturer's own manual calls anything over 2,000 hours a year extreme use,¹⁶⁰ and the study models this field at 2,500; the field managers' association says an independent or third-party tester should measure hardness at least annually,¹⁶¹ and its own testing guidance says once a year is not likely to hold up in a liability case.¹⁶² An extreme-use field that just failed has earned more than the floor, and a councilmember has already proposed the mechanism: on May 5, Councilmember Rennie suggested escalating the testing frequency after any bad reading, like the weed abatement program;¹⁶³ nine weeks later the field failed its once-a-year test. The manufacturer agrees on independence too: AstroTurf's replacement program tells field owners to hire an independent tester, at \$750 to \$1,000 a test, under the ASTM protocol, with the advice not to guess but to get the test.¹⁶⁴

(d) Results posted at the field entrances, like an elevator certificate, and public notification above the industry threshold, which staff already told Council has merit.

¹⁵⁹FieldTurf, "High School Coaches Vote Non-Infill Fields as Their Least Favorite," 5 May 2026. Reports a third-party survey in which nearly 70 percent of California high school football coaches and administrators, asked an open-text question to name the least favorite artificial turf field they played on last season excluding their home field, named a field with a non-infill system; University of Virginia Center for Applied Biomechanics release-traction measurements of 1.81 for Kentucky bluegrass, 1.86 for a heavyweight infill system, and 1.01 for a dense non-fill system; NFL and NFLPA approval of 25 infill systems and no non-fill systems for the 2026 season; and FIFA's 2024 manual making non-filled systems ineligible for FIFA Quality certification. FieldTurf sells infill systems and holds the Creekside maintenance contract; weigh the source accordingly.

<https://fieldturf.com/en/articles/detail/review-of-non-infill-systems/>

¹⁶⁰AstroTurf Corporation, Operation & Maintenance Manual (2025). Classifies annual field usage of 1,500 to 2,000 hours as heavy use and usage over 2,000 hours as extreme use, and recommends weekly sweeping and twice-monthly grooming for extreme use fields. <https://v2.astroturf.com/wp-content/uploads/2025/02/AstroTurf-Operation-Maintenance-Manual.pdf>

¹⁶¹Sports Field Management Association, Best Management Practices guide (2022): recommends that agencies "use an independent or third-party tester to measure field hardness at least annually."

<https://www.sportsfieldmanagement.org/wp-content/uploads/2022/06/FINAL-BMP-SFMA-reduced.pdf>

¹⁶²Sports Turf Managers Association, Field Hardness Testing guidance: testing once per year "is not likely to hold up in a liability court case"; sports turf managers at all facility levels are advised to test throughout the season.

<https://www.stma.org/wp-content/uploads/2019/09/Field-Hardness-Testing-STMAInstitute-logo.pdf>

¹⁶³Los Gatos Town Council, meeting of 5 May 2026, agenda item 6. Video:

<https://www.youtube.com/live/padVmiW3GYw?t=2684>

¹⁶⁴Same page: AstroTurf advises calling an independent field tester with the proper equipment to test under the ASTM F355 protocols, at \$750 to \$1,000 for an independent test. <https://astroturf.com/field-replacement-program/>

(e) End-of-life proof, meaning a named receiving facility and evidence of what actually happened to the old field, not a brochure claim that the product is recyclable.

(f) Fiber loss accounting: weigh the loose fibers and fragments collected during every maintenance visit, report the totals publicly each year, and investigate and fix it if material shows up beyond the field or the totals climb.

(g) Physical migration barriers designed into the project: perimeter containment at the fence lines, track-out controls at the gates, and capture at every drain, sized to the particles this product actually sheds. My May 5 letter laid out containment amendments in detail,¹⁶⁵ and the field research shows what escapes without them: fibers in the drainage ditches, torn by play.¹⁶⁶

(h) Written substantiation for every environmental claim, produced before purchase: the reasons the manufacturer believes each claim is true, the significant adverse environmental impacts across production, use and disposal, the laboratory, method and detection limit behind any PFAS-free claim, and the documentation behind any recyclability or chasing-arrows claim. California law already requires manufacturers who make environmental marketing claims about consumer goods to keep exactly this documentation and to furnish it to any member of the public on request,¹⁶⁷ so ask for it, and make production a condition of award rather than a favor.

And be clear-eyed about what this list is. Every item on it is a mitigation, not a cure. Filters pass what is smaller than their mesh, barriers do not stop what leaves on shoes, clothes and wind, and the shedding itself never stops, because sunlight, weather and play fragment the fibers continuously and the maintenance that keeps the field playable releases particles of its own.¹⁶⁸ And every replacement cycle starts the meter again with a new carpet of virgin plastic, because recycling the old one remains unfeasible in practice.¹⁶⁹ Conditions can shrink the harm. Only the other choice ends it.

¹⁶⁵Cynthia Fan, comments to the Los Gatos Town Council on agenda item 6, 5 May 2026: source of the GMax explanation, the ASTM F1936 and federal substantial-product-hazard framing, the settling-time request, and the seasonal-testing request. https://losgatos-ca.municodemeetings.com/sites/losgatos-ca.municodemeetings.com/files/fileattachments/town_council/meeting/7890/item_6_desk_item.pdf

¹⁶⁶Kanoko Takahashi, Ryosuke Fujinuma, Tomoyasu Yoshitomi, Yasuo Shimizu and Makito Kobayashi, "Migration of Artificial Turf Fibers from Artificial Turf Sports Field and Their Ingestion by Goldfish," *Environments*, vol. 10, no. 12, article 222 (2023). Peer-reviewed, open access. Fibers collected from the drainage ditches surrounding an artificial turf sports field had a mean width of 0.62 mm. <https://doi.org/10.3390/environments10120222>

¹⁶⁷California Business and Professions Code section 17580: a person representing that a consumer good it manufactures or distributes is not harmful to, or is beneficial to, the natural environment, including by directing a consumer to recycle it, shall maintain in written form the reasons the person believes the representation to be true and any significant adverse environmental impacts associated with production, distribution, use and disposal, among other items; subdivision (b): "Information and documentation maintained pursuant to this section shall be furnished to any member of the public upon request." <https://law.justia.com/codes/california/code-bpc/division-7/part-3/chapter-1/article-7/section-17580/>

¹⁶⁸Sharmin, Bhat, Martin-Fabiani and Radu, "Microplastic emissions and degradation mechanisms in artificial turf systems: a critical review," *Environmental Science: Advances*, vol. 5, pp. 1252-1272 (2026), open access. Finds that ultraviolet radiation, temperature fluctuations, rain and mechanical wear all contribute to fragmentation of synthetic fibres and infills; that maintenance activities including brushing, power brushing and vacuuming can release particles; and that determining degradation rates of artificial turf remains an identified research gap. <https://pubs.rsc.org/en/content/articlehtml/2026/va/d5va00416k>

¹⁶⁹Anna Lena Seibel and others, "End-of-life management of artificial turf: State of the art and future challenges," *Journal of Environmental Management*, vol. 406 (2026), article 129822. Peer-reviewed review article, openly licensed. Concludes that complete recycling remains unfeasible today and that truly closed-loop solutions remain the exception. <https://doi.org/10.1016/j.jenvman.2026.129822>

9. Inadequate justifications for tolerating plastic turf, and the evidence that natural grass remains the better choice

You will hear a familiar set of reasons for accepting plastic turf on Monday, and not only from one side of the room. They come from manufacturers and their lobbyists, from staff reports, from councilmembers and residents, and sometimes from commissioners who favor natural grass but believe some of these points are true and are concessions that must be accepted. Most of them do not survive contact with the record, and each row below pairs the reason with the evidence, citations attached, so any line can be read aloud or checked. The rows are lettered so you can call one out by number in discussion.

Table E. Inadequate justifications for tolerating artificial turf, and the evidence that natural grass remains the better choice.

Inadequate justifications for tolerating artificial turf	The evidence that natural grass remains the better choice
9a. "PFAS-free turf is available."	PFAS-free has no enforceable definition in a purchase contract, and the detection limit is where the claim is won or lost. A resident warned this Council in September 2024 that TenCate's no-PFAS evidence came from its own laboratory and tested only to parts per million, when the limits that matter are parts per trillion. ¹⁷⁰ No standard sets who tests, to what limit, or whether the whole assembled system is tested rather than the fibers alone. This study concedes turf backing is typically made with PFAS, ¹⁷¹ and the Town's own 2011 approval already required certified vendor lab results before purchase, a promise the record does not show was kept. ¹⁷²
9b. "Drain filters will be installed."	Good. What size particle do they catch? Turf fibers measured in field drainage are about six tenths of a millimeter wide, ¹⁷³ far below what typical trash screens catch. Q12 asks for the device specification.

¹⁷⁰Town of Los Gatos, Desk Item, Item 8, meeting of 17 September 2024, Attachment 2: letter of Pamela Bond dated 16 September 2024, containing eight questions, including whether the existing filtration system removes PFAS, an assessment of fiber migration beyond the field, use of actual rather than reserved hours, whether other Los Gatos grass fields could be improved to spread usage, and that claims of improved safety rest on proof independent of manufacturers, noting that TenCate's no-PFAS evidence came from its own laboratory and tested only to parts per million rather than parts per trillion. The same Desk Item records six questions from a Council Member.
https://losgatos-ca.municodemeetings.com/sites/losgatos-ca.municodemeetings.com/files/fileattachments/town_council/meeting/7008/desk_item.item_8_-_kimely-horn.pdf

¹⁷¹Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. The materials discussion states that artificial grass carpet and backing is typically made with per- and polyfluoroalkyl substances and may contain plastic fibers that may leak out microplastics.
<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

¹⁷²Town of Los Gatos, Community Development Department, "Environmental Impact Review, Mitigated Negative Declaration," 930 University Avenue, Los Gatos Creekside Sports Park; Conditional Use Permit U-11-008, Architecture and Site Application S-11-039, Mitigated Negative Declaration ND-11-006 (2011). Mitigation Measure HYD-1. Copy on file with the Town. Available at: https://drive.google.com/file/d/1tWYJSm5KhfdIG_nOtnjI-Vdul94oRgic/view

¹⁷³Kanoko Takahashi, Ryosuke Fujinuma, Tomoyasu Yoshitomi, Yasuo Shimizu and Makito Kobayashi, "Migration of Artificial Turf Fibers from Artificial Turf Sports Field and Their Ingestion by Goldfish," *Environments*, vol. 10, no. 12, article 222 (2023). Peer-reviewed, open access. Fibers collected from the drainage ditches surrounding an artificial turf sports field had a mean width of 0.62 mm. <https://doi.org/10.3390/environments10120222>

Inadequate justifications for tolerating artificial turf	The evidence that natural grass remains the better choice
9c. "Crumb rubber won't be used."	Crumb rubber is not where the PFAS problem lives. PFAS has been found in the grass fibers and the backing, which every system has, infilled or not, and this study concedes that turf backing is typically made with PFAS. ¹⁷⁴ Changing the infill leaves that untouched. Separately, the State study Town staff relied on tested crumb rubber only, never tested PFAS, ¹⁷⁵ and looked at health risks to people on the field rather than at what the field sheds into the creek, so there is no study at all of the product actually proposed. ¹⁷⁶
9d. "Infill-free systems (for example, TenCate PIVOT) solve the problem."	Palo Alto staff visited the San Jose infill-free field and rejected the product due to playability concerns, its newness to the market, and its significantly greater plastic content. ¹⁷⁷ In the industry's own survey, coaches rated non-infill fields their least favorite. ¹⁷⁸

¹⁷⁴Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. The materials discussion states that artificial grass carpet and backing is typically made with per- and polyfluoroalkyl substances and may contain plastic fibers that may leak out microplastics.
<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

¹⁷⁵California Office of Environmental Health Hazard Assessment, Synthetic Turf Study: Final Report (March 2026), prepared in collaboration with CalRecycle. The study evaluated crumb rubber infill; PFAS were not among the chemicals tested.
<https://oehha.ca.gov/sites/default/files/media/2026-03/oehhaturfinal.pdf>

¹⁷⁶City of Sunnyvale, Artificial Turf Policy Study (July 2026 final), PDF viewer page 15: summarizes the OEHHA March 2026 report as addressing crumb rubber infill, and quotes a New Jersey Institute of Technology report that existing studies have focused exclusively on a single component, crumb rubber infill, neglecting the complexity of the mixture caused by simultaneous exposure to all components.

<https://sunnyvaleca.legistar.com/View.ashx?M=F&ID=15709600&GUID=6BB1AD11-85F0-451E-9B3F-5538480E791E>

¹⁷⁷City of Palo Alto Parks and Recreation Commission, meeting of 23 September 2025, draft turf study item. Sarah Robustelli, Division Manager for Open Space, Parks and Golf and project manager of the turf study, described the city's evaluation of PIVOT for the Mayfield replacement: a site visit to the San Jose installation, conversations with its maintenance and capital teams, concerns that playability would be impacted, a significantly higher cost estimate, a fairly new product, increased fiber content, and the decision not to use the product. Video (item response near the 3 hour 24 minute mark):

<https://www.youtube.com/watch?v=6fAOyiTE03A>

¹⁷⁸FieldTurf, "High School Coaches Vote Non-Infill Fields as Their Least Favorite," 5 May 2026. Reports a third-party survey in which nearly 70 percent of California high school football coaches and administrators, asked an open-text question to name the least favorite artificial turf field they played on last season excluding their home field, named a field with a non-infill system; University of Virginia Center for Applied Biomechanics release-traction measurements of 1.81 for Kentucky bluegrass, 1.86 for a heavyweight infill system, and 1.01 for a dense non-fill system; NFL and NFLPA approval of 25 infill systems and no non-fill systems for the 2026 season; and FIFA's 2024 manual making non-filled systems ineligible for FIFA Quality certification. FieldTurf sells infill systems and holds the Creekside maintenance contract; weigh the source accordingly.

<https://fieldturf.com/en/articles/detail/review-of-non-infill-systems/>

Inadequate justifications for tolerating artificial turf	The evidence that natural grass remains the better choice
9e. "New infill products are available to keep turf cool."	Measured, they are not cool. At Union Middle School in San Jose, on a day when the air was 88 degrees, the natural grass field measured 88 and the adjacent field infilled with cork, the product marketed as cooler, measured nearly 160. ¹⁷⁹ A South Carolina district paid a six-figure premium for infill marketed as 35 to 50 degrees cooler; its own testing found it no different, and the settlement has the TenCate-affiliated installer paying to irrigate four plastic fields to cool them. ¹⁸⁰ And removing infill does not solve heat either: TenCate markets PIVOT as up to 50 degrees cooler, the same class of claim, untested here. ¹⁸¹

¹⁷⁹Surface temperature measurements taken at Union Middle School, San Jose, in spring 2022, on a campus with both a natural grass field and an artificial turf field infilled with cork, a product marketed to schools as cooler: air temperature 88 degrees Fahrenheit; natural grass field 88 degrees; adjacent cork-infilled artificial turf field almost 160 degrees. Photographic documentation available on request.

¹⁸⁰The Post and Courier (Columbia, South Carolina), report of 16 August 2024 on the Richland School District Two turf lawsuit and settlement: the district paid a premium for TCool infill marketed as keeping fields 35 to 50 degrees cooler; the district's suit stated that independent testing found the infill no different from ordinary infill; the July 2024 settlement requires Geosurfaces Southeast, described in the report as part of the turf company TenCate, to pay the full cost of installing irrigation systems in the four fields, with no admission of fault.
https://www.postandcourier.com/columbia/education/richland-two-high-school-turf-lawsuit-columbia/article_588bd9c8-4e94-11ef-aeb2-279eb6233972.html

¹⁸¹TenCate Grass Americas, letter to the City of Sunnyvale Parks and Recreation Commission, 9 June 2026: states that PFAS use in manufacturing has been eliminated, that PIVOT requires no sand or crumb rubber infill, that "by removing traditional infill, primary microplastics is eliminated and the surface can be 30-50 degrees cooler," and that turf systems can be recycled.
<https://drive.google.com/file/d/1lxEVNDapOu4r2FF6UsIVOgBl49TOaFdC/view>

Inadequate justifications for tolerating artificial turf	The evidence that natural grass remains the better choice
9f. "Natural grass wastes water."	Sports fields are not where California's water goes: parks, sports fields and golf courses together account for about two percent of statewide water use, and University of California Cooperative Extension horticulturists rank keeping school and park fields watered a top priority even in severe drought, ¹⁸² because of everything those landscapes return. Meanwhile this study's own Table 4 budgets the plastic field 126,092 gallons of water a year while its Table 6 claims plastic does not consume water. ¹⁸³ Heat is why: the study concedes extreme heat can limit use, ¹⁸⁴ and the industry's own remedy for hot plastic is watering it. ¹⁸⁵ Grass returns its water through evapotranspiration: the water it draws up leaves its blades as vapor, and that phase change absorbs heat, cooling the field and the air above it the way sweat cools skin. Plastic just stores the sun and gives it back as heat.
9g. "No winter closures with plastic."	This plastic field is closed right now, in July, after failing its 2026 test, ^{186,187} and the replacement year itself costs a thousand hours of closure in the consultant team's own 2024 model. ¹⁸⁸

¹⁸²Hodel and Pittenger, University of California Cooperative Extension, "9%: Perspective on the California drought and landscape water use" (May 2015): all landscape irrigation is about 9 percent of statewide water use, of which parks, golf courses, sports fields and similar large landscapes are about 2 percent; the authors list ensuring that public parks, school playgrounds and sports fields have sufficient water as a first priority even in severe drought.
<https://ucanr.edu/sites/default/files/2015-07/216568.pdf>

¹⁸³Study Table 4 assigns every artificial turf option an annual water budget of 126,092 gallons per year, \$3,783 per year, while Table 6 states the artificial turf field "does not consume water."
<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

¹⁸⁴Kimley-Horn and Associates, Inc., memorandum to Nicolle Burnham, Director of Parks and Public Works, Town of Los Gatos, "Artificial Turf Replacement Assessment at Creekside Sports Park" (27 July 2025), with subconsultant BerryDunn. Table 4 reduces natural grass hours by 15 percent for rain dates and applies no comparable deduction to artificial turf; Table 6 of the same document states that extreme heat can limit use of artificial turf.
<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

¹⁸⁵The Post and Courier (Columbia, South Carolina), report of 16 August 2024 on the Richland School District Two turf lawsuit and settlement: the district paid a premium for T-Cool infill marketed as keeping fields 35 to 50 degrees cooler; the district's suit stated that independent testing found the infill no different from ordinary infill; the July 2024 settlement requires Geosurfaces Southeast, described in the report as part of the turf company TenCate, to pay the full cost of installing irrigation systems in the four fields, with no admission of fault.
https://www.postandcourier.com/columbia/education/richland-two-high-school-turf-lawsuit-columbia/article_588bd9c8-4e94-11ef-aeb2-279eb6233972.html

¹⁸⁶Sports Labs LLC, GMax test report 10544-3144, Creekside Sports Park, testing date 8 July 2026, issued 14 July 2026. Client: AstroTurf. Concludes that test points failed the ASTM F1936-19 requirement. Obtained by public records request; copy on file with the Town. Available at: https://drive.google.com/file/d/1ydpO-yLNjnQaVEg_pcnZd-i3sOdT4Kck/view

¹⁸⁷Town of Los Gatos, "Creekside Sports Park Field Update," public notice posted 18 July 2026 to the Town's official Facebook page. Text verified in full.
<https://www.facebook.com/100064771354014/posts/pfbid0zYwgKVuMGYPJAjNLbHtJrkQ8AENTJQBLtaUkZj8Hkae8r1Kz9wPE6M8rGTicromaGI/>

¹⁸⁸City of Sunnyvale, Artificial Turf Policy Study (Kimley-Horn, July 2026 final), Attachment 1 to the 28 July 2026 Council study session, PDF viewer page 94: "Case Study Town of Los Gatos Creekside Sports Park Turf Operations Assessment Completed 2024," stating "The consultant completing this study is the same consultant working on the Sunnyvale study." The page reports an initial field cost of \$750,000 "verified by Town of Los Gatos staff"; grass refurbishment at \$95,000 per event at years 4, 8, 12, 16 and 20; average annual synthetic maintenance of \$30,770; \$45,000 for removal and recycling of infill and turf within a \$975,000 year-12 carpet replacement; synthetic use of 40 weeks and 2,000 hours per year with 1,000 hours deducted for replacement-year closure; and natural grass at 544 hours per year (640 minus 15 percent for rain).
<https://sunnyvaleca.legistar.com/View.ashx?M=F&ID=157096000&GUID=6BB1AD11-85F0-451E-9B3F-5538480E791E>

Inadequate justifications for tolerating artificial turf	The evidence that natural grass remains the better choice
9h. "Grass has to be rested three months a year."	That figure appears nowhere in the study. What appears is a 32-week grass season, with no explanation anywhere of where the other twenty weeks went, and then a further 15 percent taken off for rain on top of it. Rest needs depend on construction, species and management: warm-season grass on a properly built profile does not need a fifth of its year idle, and the study never says who told it otherwise. ¹⁸⁹ Ask for the basis in writing, and note that the same table applies no seasonal deduction to plastic turf even though it concedes extreme heat can limit its use.
9h. "No rainouts with plastic."	Mosman's soccer clubs originally lobbied for plastic after wet winters wrecked their grass. The council rebuilt the grass with best-practice soil work instead: the field is now playable within 20 minutes of significant rain, annual downtime fell from two months to two weeks, and the same clubs give it rave reviews. ¹⁹⁰ Nor is Mosman unique: the Sydney Basin study records hundreds of well-constructed grass fields playable within an hour of significant rain, ¹⁹¹ and a well-managed grass football field in Marblehead, Massachusetts lost just five days to rain in a year that carried about 1,680 hours of play. ¹⁹² Rain is a construction problem, not a species problem. And the correction here is simple: a field already closed all winter cannot also lose 15 percent of its year to rain, and if extreme heat limits plastic's summer use, as this study itself says, then plastic's hours must be docked too. One set of rules for both surfaces.

¹⁸⁹City of Palo Alto City Council, meeting of 17 November 2025, turf study presentation, at approximately 1:44:44: a council member states "your estimate is 1500 versus 500" and the consultant confirms that a warm season grass field generates roughly three times the hours of a cool season native soil field. Video: <https://www.youtube.com/live/6GiHOHMQrg?t=6294>

¹⁹⁰ABC News Australia video report on the Middle Head Oval rebuild in Mosman, and Dr. Mick Battam's video on post-rain playability: the sports clubs had originally lobbied for plastic turf; after the best-practice grass rebuild the field is playable within 20 minutes of significant rain; annual downtime fell from two months or more to two weeks; turf cover is 95 percent; and the same clubs give rave reviews. Videos: <https://youtu.be/YBzcZbSyqIQ> and <https://www.turfaustralia.com.au/wp-content/uploads/2024/11/Turf-industry-report-playing-hours-and-carrying-capacity-of-sporting-fields-in-the-Sydney-Basin.pdf>

¹⁹¹Battam and Lamble, study of usage, wear and carrying capacity across more than 1,000 sporting fields, page 23: twelve grass fields handling 40 to 60 or more hours of use per week at high or extreme wear while maintaining acceptable cover with minimal or no patching. The same study reports hundreds of examples in the Sydney Basin of well-constructed natural turf fields that can be played on within an hour after significant rain. <https://www.turfaustralia.com.au/wp-content/uploads/2024/11/Turf-industry-report-playing-hours-and-carrying-capacity-of-sporting-fields-in-the-Sydney-Basin.pdf>

¹⁹²Toxics Use Reduction Institute, University of Massachusetts Lowell, Natural Grass Playing Field Case Study: Marblehead, Massachusetts (July 2019, revised November 2020). Hopkins Field, an organically managed grass football field, recorded about 1,680 hours of scheduled practice and play in 2018, with five rain-related and two heat-related one-day closures across the year. https://www.turi.org/TURI_Publications/Case_Studies/Organic_Grass_Playing_Fields/Natural_Grass_Playing_Field_Case_Study_Marblehead_MA/

Inadequate justifications for tolerating artificial turf	The evidence that natural grass remains the better choice
9i. "Converting back to grass will take years."	It is a one-time transition that serves the Town for decades, and the Town has made exactly this trade before: the environmental review ran in 2011 and the park opened with its plastic field in 2012. ¹⁹³ Nor does a grass build take years: a two and three quarter acre school field complex on Martha's Vineyard was planned in late June and open for the school year in early September, playable three weeks after seeding. The Town waited from the 2011 environmental review to the field's opening in 2012 for the plastic turf it has now, and it can wait again, and the field is closed for its failed test at this very moment; reopen it as plastic turf and the Town pays for a second closure later, convert it now and part of the construction downtime has already been served.

¹⁹³Town of Los Gatos, Council Agenda Report, Item 8, meeting of 7 September 2021, "Creekside Sports Park: Approve Ongoing Seasonal Field Lighting and Provide Feedback on Capital Maintenance Funding Needs," prepared by Jim Harbin, Superintendent. States a design life of approximately 10 years, and that the field is uneven in high use areas with issues with ponding due to compacted areas of the sub-base material.
<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-6045d301c30348348b854970c5f9c924/ITEM-Attachment-008-a3656293dd944b8eaaf70ba2d3b11f52.pdf>

Inadequate justifications for tolerating artificial turf	The evidence that natural grass remains the better choice
9j. "Grass can't support two thousand hours a year."	The City of Palo Alto's final study records nineteen native-soil grass fields used over 600 hours a year, twelve of them near or above 1,000 and seven above 1,300; ¹⁹⁴ its consultant put warm-season grass at three times cool-season hours; ¹⁹⁵ Battam's 1,000-field study profiles twelve grass fields at 40 to 60-plus hours a week; ¹⁹⁶ Mosman's rebuilt field carries a documented 49; ¹⁹⁷ an organically managed grass football field in Marblehead, Massachusetts logged about 1,680 hours in a year; ¹⁹⁸ and City of Sunnyvale staff just told their council some ordinary grass fields log over 1,000 hours. ¹⁹⁹ The study's own appendix found native-soil grass had the lowest cost per hour of every option it considered. ²⁰⁰ And capacity on grass is a network question, not a single-field question: rotating play across several well-managed fields, and moving goals and nets so wear does not concentrate, raises what a set of fields can carry together. ²⁰¹

¹⁹⁴City of Palo Alto, Athletic Field Turf Study, final report (2025), page 59: nineteen of the City's native-soil natural grass fields are used more than 600 hours a year, twelve of them near or above 1,000 hours, and seven of those more than 1,300 hours. The report defines sustainable carrying capacity as the amount of use a field can sustain before its condition declines below an acceptable level for safe or quality play (page 5), and its key findings state that only several of the City's native-soil grass fields are operating near or above sustainable capacity.

<https://www.paloalto.gov/files/assets/public/v/1/community-services/staff-report-contracts/open-space-parks-and-golf/turf-study-report/2025-city-of-palo-alto-turf-study-report.pdf>

¹⁹⁵City of Palo Alto City Council, meeting of 17 November 2025, turf study presentation, at approximately 1:44:44: a council member states "your estimate is 1500 versus 500" and the consultant confirms that a warm season grass field generates roughly three times the hours of a cool season native soil field. Video: <https://www.youtube.com/live/6GiHOHMQVQg?t=6294>

¹⁹⁶Battam and Lamble, study of usage, wear and carrying capacity across more than 1,000 sporting fields, page 23: twelve grass fields handling 40 to 60 or more hours of use per week at high or extreme wear while maintaining acceptable cover with minimal or no patching. The same study reports hundreds of examples in the Sydney Basin of well-constructed natural turf fields that can be played on within an hour after significant rain.

<https://www.turfaustralia.com.au/wp-content/uploads/2024/11/Turf-industry-report-playing-hours-and-carrying-capacity-of-sporting-fields-in-the-Sydney-Basin.pdf>

¹⁹⁷ABC News Australia (2022), video report on the reconstruction of Middle Head Oval, Mosman, New South Wales: a natural grass field that had been targeted for synthetic conversion, rebuilt with best-practice soil amendment by Dr. Mick Battam, now carrying 49 hours per week of play, more games than any other ground in Mosman. <https://youtu.be/YBzcZbSyqIQ>

¹⁹⁸Toxics Use Reduction Institute, University of Massachusetts Lowell, Natural Grass Playing Field Case Study: Marblehead, Massachusetts (July 2019, revised November 2020). Hopkins Field, an organically managed grass football field, recorded about 1,680 hours of scheduled practice and play in 2018, with five rain-related and two heat-related one-day closures across the year.

https://www.turi.org/TURI_Publications/Case_Studies/Organic_Grass_Playing_Fields/Natural_Grass_Playing_Field_Case_Study_Marblehead_MA/

¹⁹⁹City of Sunnyvale Council study session, 28 July 2026, staff presentation: Sunnyvale's actual logged hours on natural grass fields range from 23 to over 1,000 hours per year against an industry rule of thumb of 600 to 800; the report's ten recommendations begin with prioritizing and conserving natural grass and include an organic field management pilot; and on end of life, staff stated that artificial turf cannot fully be recycled and very few recycling facilities exist. Consultants identified as Kimley-Horn and CHA. Video: <https://www.youtube.com/live/ssVCKQW58Bc?t=2923>

²⁰⁰Study Appendix A (the 2011 Montgomery County report), findings: "For fields that would be dedicated for Parks' use, the cool season native soil field has the lowest net cost and cost per hour of each of the fields considered (including a Parks artificial turf field)." The appendix names Mr. Jerad Minnick, Sports Turf Manager at the Maryland SoccerPlex, among the experts consulted.

<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losqatos-meet-029e2953f9c144029081b35fa76ae063/ITEM-Attachment-001-85c69cea6ad440b8b7ab9c086ede9597.pdf>

²⁰¹Toxics Use Reduction Institute, University of Massachusetts Lowell, "Building an Organic Maintenance Program for Athletic Fields: Guidance from Experts and Experienced Communities" (April 2021), drawing on TURI case studies of organically managed grass athletic fields in Springfield, Marblehead and Martha's Vineyard, Massachusetts, with contributions from Jerad Minnick and others. Springfield aerates its fields about four times a year and soil tests every two to three years; the Field Fund rebuilt a 2.75-acre school field complex at Oak Bluffs, Martha's Vineyard, beginning planning on 27 June 2018 with both fields open for the school year on 4 September 2018 and playable three weeks after seeding; and the guidance advises moving goals, nets and other equipment periodically so that heavy use does not concentrate in the same areas.

<https://www.turi.org/publications/building-an-organic-maintenance-program-for-athletic-fields-guidance-from-experts-and-experienced-communities-2/>

Inadequate justifications for tolerating artificial turf	The evidence that natural grass remains the better choice
9k. "Grass means mud, divots and uneven ground."	Those are management outcomes, not species destiny, and the field that is uneven with ponding in this town, per the Town's own 2021 report, is the plastic one. ²⁰²
9l. "Grass maintenance is too expensive."	Real numbers: this plastic field's maintenance contract runs to \$27,690 a year, ²⁰³ its 2024 itemization was \$30,770, ²⁰⁴ and plastic adds a million-plus dollar replacement every decade that grass never pays. ²⁰⁵
9m. "This is about equity and access."	Then look at the schedule Mayor Moore read into the record: two leagues hold the field morning to night every weekend, residents outside them have essentially none, and the leagues pay none of the capital. Whose access is being bought?
9n. "Grass means pesticides."	Only if the Town chooses them. Pesticide-free and organic maintenance is established practice the Town can specify in its own standard; the realistic grass scenario in Q9 would price it; the Toxics Use Reduction Institute publishes step-by-step guidance drawn from communities already maintaining athletic fields organically, ²⁰⁶ and the City of Sunnyvale's new report recommends an organic field management pilot. ²⁰⁷
9o. "There isn't enough field space without plastic."	Nobody has counted. The community's full inventory has never been assessed for capacity, staff's own Morgan Hill example works by rotating play across grass fields, and Question Boxes Q6 and Q8 ask for the data.

²⁰²Town of Los Gatos, Council Agenda Report, Item 8, meeting of 7 September 2021, "Creekside Sports Park: Approve Ongoing Seasonal Field Lighting and Provide Feedback on Capital Maintenance Funding Needs," prepared by Jim Harbin, Superintendent. States a design life of approximately 10 years, and that the field is uneven in high use areas with issues with ponding due to compacted areas of the sub-base material.
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²⁰³Town of Los Gatos and FieldTurf USA, Inc., Agreement for Services (5 May 2026). Year one cost not to exceed \$27,690.00 for FY 2026-27, being \$19,690 of routine maintenance plus an \$8,000 allowance, CPI-adjusted thereafter.
<https://mccmeetingspublic.blob.core.usgovcloudapi.net/losgatos-meet-3744f4da1cc54d5bb6ac8bdea3608087/ITEM-Attachment-006-f259f70a2fc74557bd0b18f5a70d1ec9.pdf>

²⁰⁴City of Sunnyvale, Artificial Turf Policy Study (Kimley-Horn, July 2026 final), Attachment 1 to the 28 July 2026 Council study session, PDF viewer page 94: "Case Study Town of Los Gatos Creekside Sports Park Turf Operations Assessment Completed 2024," stating "The consultant completing this study is the same consultant working on the Sunnyvale study." The page reports an initial field cost of \$750,000 "verified by Town of Los Gatos staff"; grass refurbishment at \$95,000 per event at years 4, 8, 12, 16 and 20; average annual synthetic maintenance of \$30,770; \$45,000 for removal and recycling of infill and turf within a \$975,000 year-12 carpet replacement; synthetic use of 40 weeks and 2,000 hours per year with 1,000 hours deducted for replacement-year closure; and natural grass at 544 hours per year (640 minus 15 percent for rain).
<https://sunnyvaleca.legistar.com/View.ashx?M=F&ID=15709600&GUID=6BB1AD11-85F0-451E-9B3F-5538480E791E>

²⁰⁵Town of Los Gatos, Proposed Capital Improvement Program budget, FY 2025-26, Creekside Turf Replacement, pages D-16 to D-17 (PDF viewer pages 153-154). Records \$37,135 in FY 2024-25 actuals, Tier 2 unappropriated estimates of \$1,262,865 shown in FY 2029-30, and a project timeline in which design is "TBD, contingent on future funding." The FY 2026-27 volume (PDF viewer pages 152-153) carries the same project at a Total Project cost of \$1,300,000, being the sum of the \$37,135 spent and the \$1,262,865 unappropriated, remains Tier 2, states that "This project is not currently fully funded," records that "In February 2024, Council directed staff to evaluate converting this field to natural grass rather than replacing the artificial turf," and states that there are no operating budget impacts for this project in FY 2026-27. FY 2025-26 volume:
<https://www.losgatosca.gov/DocumentCenter/View/43385/FY-2025-2026-Capital-Budget>. FY 2026-27 volume:
<https://www.losgatosca.gov/DocumentCenter/View/45617/Proposed-CIP-2026-27-Budget>

²⁰⁶Toxics Use Reduction Institute, "Building an Organic Maintenance Program for Athletic Fields: Guidance from Experts and Experienced Communities": practical guidance drawn from municipalities already maintaining athletic fields organically.
<https://www.turi.org/publications/building-an-organic-maintenance-program-for-athletic-fields-guidance-from-experts-and-experienced-communities-2/>

²⁰⁷City of Sunnyvale Council study session, 28 July 2026, staff presentation: Sunnyvale's actual logged hours on natural grass fields range from 23 to over 1,000 hours per year against an industry rule of thumb of 600 to 800; the report's ten recommendations begin with prioritizing and conserving natural grass and include an organic field management pilot; and on end of life, staff stated that artificial turf cannot fully be recycled and very few recycling facilities exist. Consultants identified as Kimley-Horn and CHA. Video: <https://www.youtube.com/live/ssWCK0W58Bc?t=2923>

Inadequate justifications for tolerating artificial turf	The evidence that natural grass remains the better choice
9p. "The old turf gets recycled."	A 2026 peer-reviewed review finds complete turf recycling unfeasible today; ²⁰⁸ Sunnyvale staff told their council last week that artificial turf cannot fully be recycled and very few facilities exist; ²⁰⁹ the Town has waited since 2022 for the disposal proof this field's manufacturer promised in writing; and Palo Alto budgets \$80,000 with a chain of custody to do it for real. ²¹⁰
9q. "The manufacturer says no infill means no microplastics."	That claim is in writing: TenCate told a neighboring commission that removing infill eliminates primary microplastics and makes the surface 30 to 50 degrees cooler. ²¹¹ Its own PIVOT warranty, however, excludes coverage for fiber loss below half the field's total mass, which concedes that fiber loss is expected; a resident has documented shedding from the PIVOT field at John Mise Park in San Jose; fibers from turf fields have been measured at up to 15 percent of macroplastics in coastal waters near Barcelona; ²¹² and the plastic shed at Creekside is photographed, on the ground, here in Town. ²¹³
9r. "It complies with Prop 65, REACH and toy standards."	Look at what each of those actually certifies. A toy standard tests specific chemicals at the concentrations a child might mouth in a toy, not eleven years of sun, heat, abrasion and skin contact across a 70,600-square-foot field that drains toward Los Gatos Creek. Prop 65 is a warning-label law: passing means no warning sticker is required, not that the product is safe. REACH is a European import rule that likewise tests listed substances one at a time. None of them evaluates the migration of plastics and chemicals from the fields into the watershed. California's own toxics agency has published three documents on turf ²¹⁴ precisely because these regimes do not cover it.

²⁰⁸Anna Lena Seibel and others, "End-of-life management of artificial turf: State of the art and future challenges," Journal of Environmental Management, vol. 406 (2026), article 129822. Peer-reviewed review article, openly licensed. Concludes that complete recycling remains unfeasible today and that truly closed-loop solutions remain the exception. <https://doi.org/10.1016/j.jenvman.2026.129822>

²⁰⁹City of Sunnyvale Council study session, 28 July 2026, staff presentation: Sunnyvale's actual logged hours on natural grass fields range from 23 to over 1,000 hours per year against an industry rule of thumb of 600 to 800; the report's ten recommendations begin with prioritizing and conserving natural grass and include an organic field management pilot; and on end of life, staff stated that artificial turf cannot fully be recycled and very few recycling facilities exist. Consultants identified as Kimley-Horn and CHA. Video: <https://www.youtube.com/live/ssWCK0W58Bc?t=2923>

²¹⁰City of Palo Alto City Council, meeting of 17 November 2025: staff, asked the cost of recycling a synthetic turf carpet, answered approximately one dollar per square foot, about \$80,000 for an 80,000 square foot field, and described the removed Mayfield turf as repurposed with a chain of custody. Video: <https://www.youtube.com/live/6GiHOHMQrg>

²¹¹TenCate Grass Americas, letter to the City of Sunnyvale Parks and Recreation Commission, 9 June 2026: states that PFAS use in manufacturing has been eliminated, that PIVOT requires no sand or crumb rubber infill, that "by removing traditional infill, primary microplastics is eliminated and the surface can be 30-50 degrees cooler," and that turf systems can be recycled. <https://drive.google.com/file/d/1xEVNDapOu4r2FF6UsIVOGBl49TOaFdC/view>

²¹²TenCate PIVOT Non-Infill 12-Year Limited Warranty, which excludes from coverage fiber loss of less than 50 percent of total field mass: https://drive.google.com/file/d/1wQvg3VoMruek7c437BkgCipu2YM_EHxv/view. On measured fiber loss to waterways, de Haan et al., "The dark side of artificial greening," Environmental Pollution (2023), reporting artificial turf fibers at up to 15 percent of macroplastics in coastal waters near Barcelona: <https://doi.org/10.1016/j.envpol.2023.122094>

²¹³Cynthia Fan, photographic and video documentation of detached fibers and crumb rubber beyond the fenced perimeter of the artificial turf system at Creekside Sports Park, 1 May 2026. <https://sites.google.com/view/creeksideplasticpollution5126/home>

²¹⁴California Department of Toxic Substances Control, "Technical Document for Artificial Turf Containing PFASs" (February 2026). https://dtsc.ca.gov/wp-content/uploads/sites/31/2026/02/TechnicalDocument_PFASs-in-Artificial-Turf_accessible.pdf

Inadequate justifications for tolerating artificial turf	The evidence that natural grass remains the better choice
9s. "Artificial turf is the sustainable choice."	The agency responsible for this county's water has already answered that. Valley Water, the wholesale water provider for Santa Clara County, formally supported a proposed county ordinance prohibiting installation of artificial turf on County property, its Board Chair writing that artificial turf contributes to contaminated runoff, microplastic pollution and the heat island effect, and that runoff may contain heavy metals and chemicals such as PFAS that may reach surface water or groundwater used for public water supplies or private drinking water wells. ²¹⁵ Valley Water also excludes artificial turf from its Landscape Rebate Program because it does not meet the program's sustainability goals. ²¹⁶
9t. "Studies show plastic has lower emissions."	That Swiss study was built on Zurich city data and says itself the results have limited transferability; its advantage rests on assuming turf gets double grass's hours; it excludes microplastics entirely; and on greenhouse gases it reports the infill-free system is not the lowest while the filled system is the highest. ²¹⁷ A 2026 review adds the end-of-life data gap that undercuts such assessments. ²¹⁸

²¹⁵Santa Clara Valley Water District (Valley Water), letter from Nai Hsueh, Chair of the Valley Water Board of Directors, to the Santa Clara County Board of Supervisors, 12 April 2024, in support of Item 11 on the 16 April 2024 Board of Supervisors agenda, a proposed ordinance prohibiting installation of artificial turf on County property. The letter states that artificial turf contributes to contaminated runoff, microplastic pollution and the heat island effect, and that runoff may contain heavy metals and chemicals such as PFAS that may reach surface water or groundwater and move through ground infiltration into groundwater used for public water supplies or private drinking water wells. In the County of Santa Clara Board of Supervisors agenda materials for the 16 April 2024 meeting (Item 11).

²¹⁶Santa Clara Valley Water District (Valley Water), Artificial Turf information sheet (May 2022), which excludes artificial turf from the Landscape Rebate Program because it does not meet the program's sustainability goals.
https://s3.us-west-2.amazonaws.com/valleywater.org.if-us-west-2/f2-live/s3fs-public/Artificial%20Turf%20Fact%20Sheet_042922%20SL.pdf

²¹⁷Zurich University of Applied Sciences (ZHAW), Itten, Glauser and Stucki, "Life Cycle Assessment of Artificial and Natural Turf Sports Fields," Executive Summary, 28 January 2021, commissioned by Grün Stadt Zürich, the City of Zurich. The summary states that its data derive from City of Zurich inputs and "only have limited transferability to other geographical regions"; it models natural turf at 800 annual hours against 1,600 for artificial turf; it states that filled artificial turf causes microplastic emissions for which no accounting methodology exists, and excludes them from its results figure; and it reports that unfilled artificial turf has the lowest impact on the indicators studied except greenhouse gas emissions and primary energy demand, while the filled system has the highest per-hour greenhouse gas emissions. The Los Gatos study memo cites this document, at its own footnote 16, for the claim that the greenhouse gas difference may be reduced with increased hours of use. <https://digitalcollection.zhaw.ch/server/api/core/bitstreams/96187766-dbec-4f96-9281-7229483427c0/content>

²¹⁸Anna Lena Seibel and others, "End-of-life management of artificial turf: State of the art and future challenges," Journal of Environmental Management, vol. 406 (2026), article 129822. Peer-reviewed review article, openly licensed. Concludes that complete recycling remains unfeasible today and that truly closed-loop solutions remain the exception.
<https://doi.org/10.1016/j.jenvman.2026.129822>

10. The bottom line

The closure has put you in a hard spot, with two leagues and a lot of kids displaced while this gets decided. But the pressure to move fast is exactly why the record has to be right, because whatever you recommend will bind this field for a decade or more. On June 1 several of you said, in your own words, that this study was not ready. You were right. Monday is the chance to say so formally, direct staff to fix what is fixable, direct staff to gather what was never gathered, and to make sure the decision that follows can be made on complete and accurate data.

Thank you for reading all of this, and for the care you have already brought to it.

Respectfully,

Cynthia Fan

From: Andrea Wald
To: [PPW Comment](#)
Cc: [Rob Moore](#); [Maria Ristow](#); [Rob Rennie](#); [Matthew Hudes](#); [Mary Badame](#)
Subject: August 3rd mtg - agenda item not yet published for me to reference
Date: Friday, July 31, 2026 7:19:46 AM

[EXTERNAL SENDER]

Dear Parks and Sustainability Commissioners and City Council Members,

I wrote back in May regarding your 6/1 meeting where you were reviewing the Study prepared by Kimberly-Horn on artificial turf for Los Gatos. I also attended the meeting that evening.

I unfortunately will not be able to attend the meeting this coming Monday evening to represent those who believe artificial turf is something that ALL places should consider banning. There are way too many environmental and health hazards that decision makers seem to ignore in favor of giving in to sales pitches of vendors who profit from this unnecessary and harmful toxic plastic material and sports groups who feel their needs are more important than the rest of society.

The below quote is from a recent article I read. Although it was related to wasteful water usage in times of drought, it certainly applies to how we, Americas, are only thinking about ourselves – the here and now – and not the future, nor the planet we are leaving to future generations.

"Another example of First World problems. We waste so much in America since most people are basically selfish and never think about the consequences to the planet. Might save you money too but Wants outweigh Needs."

In my previous emails and public comment I urged you not to accept the Kimberly-Horn report. I provided detailed explanations on why the report should not be accepted, substantial material on the harms of artificial turf and several links where you could find for yourselves much more info about artificial turf. I hope that you've had adequate time since then to do your own research and soul searching to make the best informed decision and recommendation to city council regarding Creekside Park.

Replacing the worn out artificial turf with natural grass would mean that not only are you avoiding all the environmental and health harms of artificial turf but you won't need to revisit this issue again down the road when the artificial turf reaches, once again, its end of life.

Doing what is best for ALL of us and not just the sports groups is my only wish.

Sincerely,

Andrea Wald, Co-Founder, Community for Natural Play Surfaces

From: Pam Bond
To: [PPW Comment](#)
Subject: Public Comment 8/3/26 meeting item regarding artificial turf replacement assessment
Date: Thursday, July 30, 2026 10:44:17 PM
Attachments: [2026.7.30 Parks and Sustainability Commission Comments re artificial turf replacement assessment - Google Docs.pdf](#)

[EXTERNAL SENDER]

Dear Parks and Sustainability Commissioners and Staff,

Please see my attached comments regarding the artificial turf replacement assessment.

Thank you,
Pam Bond

From: Leanne McAuliffe
To: [PPW Comment](#)
Subject: Fw: Public Comment for Parks and Sustainability Commission meeting on August 3 regarding Creekside Sports Field.
Date: Thursday, July 30, 2026 10:59:33 AM

[EXTERNAL SENDER]

Dear Parks and Sustainability Commissioners,

Please see the attached website regarding the impact of artificial turf on the environment.

<https://www.greenmatch.co.uk/blog/artificial-grass-environmental-impact>

Please consider the contend when making your recommendations for the Kimley Horn Turf report and your recommendations for the field at Creekside Sports Park.

Kind regards,

From: Leanne McAuliffe
To: [PPW Comment](#)
Subject: Public Comment for Parks and Sustainability Commission meeting on August 3 regarding Creekside Sports Field.
Date: Thursday, July 30, 2026 10:56:43 AM

[EXTERNAL SENDER]

Dear Parks and Sustainability Commissioners,

Please see the attached webinar hosted by Sarah Evans, PhD MPH, Icahn School of Medicine at Mt Sinai, on July 14, 2026 recommending going from artificial (plastic) turf back to grass (natural turf).

Please consider the contend when making your recommendations for the Kimley Horn Turf report and your recommendations for the field at Creekside Sports Park.

Kind regards,

<https://www.youtube.com/watch?v=daZebzAfeyc>

July 30, 2026

Dear Parks and Sustainability Commission,

In advance of the August 3 meeting during which the Kimley-Horn artificial turf vs. grass study will be discussed, I wanted to share my thoughts and concerns. While the study is less biased than others I have come across, there are inconsistencies and lack of thoroughness in some areas. I don't think I can address all of the issues but I will point to some below. From experience listening to other communities discuss the issue of use of artificial turf vs. natural grass, I know that there will be huge community pressure from sports leagues who feel they don't have enough fields. This is a larger issue, to me, relating to a history of poorly maintained grass fields being compared to artificial turf as well as the dramatic increase in soccer and for-profit sports leagues clamoring for public fields. That subject is a letter and dialogue in itself and too much to process here, but I have been very interested in this issue and how we can manage to reduce/slow artificial turf installations, manage appropriate grass fields with the latest technology and knowledge, and increase access to the community at large.

Below are questions or comments related to the report. I included questions that I posted in September 2024 which were not answered in the report. And at the end of my letter, I have included a list of grass sports field consultants who could give a second or third opinion on the grass field data (cost, usability, etc.)

- It would be helpful if staff listed the discrepancies in the study pointed out by the Commissioners and community in advance of viewing by the Town Council so that time is not wasted with discussion of points that were inaccurate. Passing the report to Council or accepting the report as it is is disingenuous, particularly if it is looked back on in the future or looked at by, say, the local school districts or other towns when referencing any decisions made.
- At the September 17, 2024 Town Council Meeting, then Vice Mayor Hudes asked that the report include answers to all of the 8 questions I posted in my comment letter along with questions from Council. I don't think answers to some of my questions were addressed in the report. I am listing the questions as written in my letter below and attaching my letter from Sept 2024 as well. Additional notes or updates are in italics after the question.
- Are all of the storm drains now protected from crumb rubber and microplastic debris? I am noting here that trapping particles will not trap PFAS and particularly 6-PPD which is known to shed from tires/tire crumb. (More on this below.)
- Heat: The report states that "in mild climates such as in the Town of Los Gatos, intense heat may be less frequent and unpredictable." This is not proper research to me. I have recorded temperatures on Creekside and fields in San Jose as well as nearby schools and plastic heats up in the sun, even on a mild 65-70° day. At John Mise Park, which

has a two year old all plastic (no infill) field, the ambient temperature was 76° and the field measured between 176°-186°. In March, on a 73° day, the field measured between 152°-162°. I think this statement and the concern around heat deserved more attention and data.

- The EPA study on Recycled Tire Crumb has been picked apart by health experts and epidemiologists as lacking in thoroughness. And it is being used as evidence to green light artificial turf systems as a whole as safe when the plastic field itself was not included in the study. See this recent letter from Dr. Sarah Evans, Associate Professor at the Children's Environmental Health Center, Icahn School of Medicine at Mt. Sinai.
https://www.mocoalliance.org/uploads/4/8/8/6/48867647/mount_sinai_cehc_health_effects_of_artificial_turf_may_2026.pdf
- Material Renewability:
Circular Polymers is mentioned as one company that recycles some parts of artificial turf. I would argue that without proof, we don't know how much they actually recycle. Used fields processed by Circular Polymers are driven by multiple semi trucks from California to a location in Oregon where the infill is separated and then it is trucked back to Circular Polymers in Lincoln, CA for mechanical processing. I don't know if it has been independently determined how much goes to Oregon vs. returned to Lincoln or shipped elsewhere.
I am sharing this more recent paper "End-of-life management of artificial turf: State of the art and future challenges" though it concentrates on what is happening in Europe with European regulations which are generally more robust, American markets and companies are referenced.
<https://www.sciencedirect.com/science/article/pii/S030147972601282X#bib93>
"Future studies must place greater emphasis on the microplastic emission from all components of artificial turf in all stages of its lifecycle - from installation to recycling. In addition, studies dealing with the effects of microplastic released from artificial turf pitches on human health and the environment are missing. To date, there has been limited research on the assignment of microplastic to established LCA impact factors and impact categories that describe the consequences of microplastic release into the environment."
- Field Use Capacity and Lifespan: I question the estimates for grass capacity, lifespan and also cost but I am hoping others will dig into this more. I would like to share some recommended grass sports field consultants details in hopes that this can be looked at specifically and by others as a second or third opinion. I will share those at the end of this letter.

One example from this section was that the report states that a grass field will need to be taken out of service and replaced every 5 years. This came up in 2022 when Los Gatos Unified School District was discussing whether to replace their elementary fields with artificial turf. It was debunked then and I have not heard this as a general rule for grass

field maintenance. I have spoken to many grounds managers over the years and a well managed field will sometimes need patching in sod but generally proper care and maintenance will not require a full overhaul of the field.

My Questions from September 2024 meeting:

1. In evaluating the environmental impact of artificial turf, is the filtration system for the current field considered effective at removing PFAS and other chemicals from the water runoff? Test methods for PFAS in water have developed since 2012 as well as analysis of filtration methods. The report should indicate the details of this filtration system stating that it removes PFAS or details for a new filtration.

I had understood from email communications with staff prior to 2024 that all storm drains were being filtered or directed to bioretention areas. It appears from the June 2026 Parks and Sustainability Commission meeting that they did not all contain filters already. I am also unclear on where the storm drains empty. I assume this is directly into the creek.

Moving forward, should artificial turf replace the old field, will drain filter systems be robust enough to keep PFAS and other chemicals out of the creek?

2. There are visible plastic fibers blown off the current field. Can there be an assessment of this migration outside of the field? I assume any future artificial turf field will have the same issues, adding to the plastic debris along the *embankment to the creek*.
3. Environmental assessment should include the manufacture of the artificial turf and infill products. Artificial turf needs water during manufacture, for example. And communities living near refineries and plastic manufacturing and recycling facilities bear a huge health burden.

Part of this was mentioned in the section on Greenhouse Gases (manufacture and lifetime analysis of artificial turf shows greater greenhouse gas emissions) but the water use in production of artificial turf was not. Nor was the local community impact at production facilities or downstream/downcycling/reuse locations.

4. Will the public have time to review the assessment? It seems like Kimely-Horn consults scientific literature but I am concerned that within their Scope of Services they seem to negate most environmental and life cycle assessments preemptively or have already made their decision based on past research. What if we have experts that we can direct them to for more information, newer research that they may have missed?

A few examples:

<https://www.sciencedirect.com/science/article/pii/S1382668924002023?via%3Dihub>

In vitro endocrine and cardiometabolic toxicity associated with artificial turf materials

The Santa Clara County Medical Association has a Policy Recommendation on use of artificial turf published in June 2024.

<https://www.sccma.org/Portals/19/Artificial%20Turf%20Policy%20Recommendation%20>

The SCCMA letter was not included in the Kimley-Horn assessment.

SCCMA recommendation:

“Recommendations: *After careful consideration of the current scientific evidence of plastic and chemical contamination, sports injuries, urban heat effects, disposal, potential short and long-term health effects, as well as direct and indirect environmental costs, the SCCMA believes artificial turf is potentially harmful to both human and environmental health and is not a sustainable option when compared with natural grass. Taking a precautionary approach for the long-term protection of the children, the environment and public health, we recommend:*

- 1) That artificial turf not be used on sports fields, playgrounds, landscaping, residential lawns or in schools, but instead that natural grass turf be used, a choice that will serve to benefit the health and safety of children, athletes and the environment, and*
- 2) If artificial turf is in place, that at the end of its useful life it be replaced with natural grass and not artificial turf.”*

5. Please be sure that you are looking at the actual usage of the field and not reserved hours.
6. Consider whether other grass fields in Los Gatos could be improved in order to spread the usage out and also reduce the seeming dire need for synthetic turf.
7. I hope that the assessment will include newer natural grass technology like electric and robotic mowers.
8. Any assertions about newer artificial turf being safer should provide proof exclusive of statements made by artificial turf manufacturers who can say whatever they want. For example, TenCate has a new infill-less artificial turf but their “No PFAS” “proof” is from their own lab and only tests to PPM whereas it needs to be tested at PPT (or lower). One artificial turf supplier recently stated at a Santa Clara County Board meeting that the industry “regulates itself.” Which is true, and which is also the problem.

Eurofins, a leading testing lab, has conducted several webinars on PFAS and explained that as tests improve, testing limits will get smaller and as they made more discoveries about the many PFAS chemicals, more and more limits will be placed on their use. More recently, there was a webinar on ultrashort chain PFAS which are not generally tested for and which can slip through regular PFAS testing. There are also differences in testing protocols.

Consultant recommendations:

The following are some consultants recommended to me by industry leaders (turfgrass companies, SFMA board members and others).

Natural Grass Advisory Group

<https://www.naturalgrass.org/>

Jerad Minnick is world renowned and works all over the world consulting.

Clay Wood former head groundskeeper for the Oakland A's. 510-326-6510

Ross Kurcab who is now a consultant but who worked for the Colorado Broncos.
turf444@gmail.com (303) 912-6940 I attached his bio though it's an old one.

<https://www.sportsfieldmanagement.org/news/featured-speakers-of-the-month-moran-kurcab/>

Ryan DeMay with Field Source (based in Ohio but he works in other places too).

<https://fieldsourceohio.com/>

Turfgrass Producers International

<https://www.turfgrasssod.org/>

Casey Reynolds is on the board of Safe Healthy Playing Fields

They may be more of a resource than a consultant since their main focus is on turfgrass production and innovation.

Sports Field Managers Association

Norcal SFMA has a field day coming up August 18 at Excite Ball Park in San Jose.

<https://www.norcalstma.org/upcoming-meetings.html> These events are a great way to meet field managers and others in the industry as well as learn about new technology.

The SFMA National conferences seem like a great resource for staff to stay abreast of advances in the field of grass management. They offer a way to watch these workshops online for a small fee if you cannot attend. As of last year, the recordings were available indefinitely after purchase.

<https://www.sportsfieldmanagement.org/conference/>

I hope that information can be corrected or expanded upon for a final report which would be more robust than this. The report will be an important reference point for the Town as well as for surrounding communities or perhaps our school districts.

Sincerely,

Pam Bond
Los Gatos

From: Leanne McAuliffe
To: [PPW Comment](#)
Subject: Public Comment for - Parks and Sustainability Commission Meeting August 3, regarding Creekside Park Turf
Date: Thursday, July 30, 2026 10:49:04 AM
Attachments: [DZ NCHR Webinar slides.pdf](#)
[NCHR-Artificial-Turf-and-Playgrounds-2-Pager.pdf](#)

[EXTERNAL SENDER]

Dear Parks and Sustainability Commissioners,

Attached is a slide presentation with a brief overview on artificial (plastic) turf and its environmental health issues presented by Diana Zuckerman, PhD, President of National Center for Health Research.

A two pager is also attached.

Please consider these when assessing what action to take on the Kimley-Horn Turf Report and your recommendations for the field surface at Creekside Sports Park.

Kind regards,

What are Artificial Turf and Playgrounds Made Of? What is Their Impact on Health?

Is your child playing on rubber and plastic instead of grass? Grass has been replaced with artificial materials at schools and parks all over the country. But there is clear evidence they can be harmful to children and adults.

Unfortunately, artificial turf increases “turf burn” abrasions from sliding, limb injuries and concussions, and can become dangerously hot in the sun. PFAS and other endocrine (hormone) disrupting chemicals can contribute to numerous health problems, as described below.

So why are artificial turf fields and synthetic playground surfaces so popular? Artificial turf was installed in the Houston Astrodome football field in 1966. Nobody was talking about the risks of microplastics, PFAS, other hormone-disrupting chemicals, or recycled tire crumb in 1966. We know much more now than we did then.

Recycling Tires to Create Playgrounds

Using millions of recycled rubber tires seemed like a great idea at first – why not keep them out of landfills and provide a softer landing on the playground? It was known that burning old tires released harmful, smelly chemicals into the air and groundwater, but parents didn’t realize that recycled tires and new rubber used on fields and playgrounds can also be dangerous.

You may think of rubber as a natural product from rubber trees, but rubber is a mix of latex from rubber trees mixed with petroleum products, and old tires contain metal, too. That means recycled rubber can include lead, phthalates, polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and other chemicals known or suspected to harm human health.

Phthalates and other chemicals that disrupt hormones increase the chances of developing obesity, early puberty, asthma, and attention problems. Research reported that infants and children exposed to phthalates were more likely to develop childhood cancers. In addition, federal agencies warn that breathing air contaminated with PAHs may increase the chance of developing cancer and birth defects.



Why Aren't They Proven Safe?

There is no government agency that requires synthetic playground surfaces to be tested before they can be sold. In fact, the materials used are often not made public — that lack of information is justified as “trade secrets.” However, some researchers have independently examined the safety of these playground surfaces.

In 2019, Washington, D.C. admitted that 17 of their playgrounds had dangerously high levels of lead. That same year, the nonprofit Ecology Center tested the crumb rubber found on the broken rubber surfaces of several playgrounds and found that some of the pieces had levels of lead that were more than 1,000 times higher than considered safe.

A 2015 report by Yale scientists analyzed tire mulch samples used for school athletic fields and playgrounds. Most of the 96 chemicals they detected had never been carefully studied, so their health risks are unknown. However, 20% of the chemicals that had been tested are considered to probably cause cancer. In addition, 40% are irritants that can cause breathing problems such as asthma, and can irritate skin or eyes.

What About Your Schools or Parks?

Here are a few of the materials that have known risks due to lead and hormone-disrupting chemicals:



- Loose tire shred (rubber mulch) used on plastic “grass” fields as an infill or sold to homeowners to use around plants or under swing sets.
- Tire shreds or colorful “virgin” rubber combined with a binder and then poured onto a permanent surface, or factory-molded and then glued to a playground surface, or “poured in place” (PIP) on top of loose tire crumb.

Children are much more likely to be harmed by chemicals in their environment than adults because they are smaller (so the exposure is greater) and because their bodies are still developing. Pregnant women should be even more careful to avoid these exposures.

Parents in many communities are persuading local officials to conduct safety tests on artificial turf fields every year, and to install grass or wood chips because they are safer in terms of chemical exposure, heat, and if their children fall.

PFAS chemicals are of particular concern because they enter the body and the environment as “forever chemicals,” which means that they are not metabolized and do not deteriorate, accumulating over the years.

Although manufacturers often claim that their products do not contain PFAS, that is based on very limited testing. There are thousands of PFAS chemicals, and only a few are tested for. Several worrisome PFAS chemicals have been found by independent researchers studying artificial turf, including but not limited to BrockFILL artificial turf. Although BrockFILL claims it “meets the

“requirements of the FIFA quality programme for synthetic turf systems as well as those of World Rugby” those requirements do not evaluate long-term safety for either children or adults. Unfortunately, there are zero testing criteria for artificial turf materials’ long-term safety, making such claims meaningless.

Plastic grass itself exposes children and adults to dangerous levels of PFAS, microplastics, and other toxic chemicals as well. The fields and playgrounds deteriorate due to weather and use, and that results in the emission of chemicals and microscopic particles into the air. “Particulate matter” from microplastics and other materials can be inhaled while playing or even sitting nearby, causing serious lung damage and other health problems. Microplastics from plastic materials have been found in the human brain, lungs, heart, liver, and testicles. Research suggests that they can cause heart disease, lung disease, infertility, and dementia.

Injuries

Warranties for most artificial turf fields require annual tests to check for hardness, called GMax scores. One community found that 37 of their 51 fields failed and needed to be replaced.

Artificial turf and rubber playgrounds retain heat. On warm or sunny days, the heat in the air on the field can be 50-60 degrees hotter than natural grass. That can cause heat poisoning as well as burns.

Other injuries include turf burns and musculoskeletal injuries such as ACL tears, ankle sprains, and muscle strains. That's a major reason why players' associations of the NFL and Men's and Women's Soccer oppose artificial turf fields.

Why are chemicals that are banned from children’s toys allowed in artificial turf and playground surfaces?

The Consumer Product Safety Commission has banned several hormone-disrupting chemicals from pacifiers and teething toys, even though they would result in very short-term exposures compared to artificial turf or playground surfaces.



Environmental Health Impact of Artificial Playing Fields and Rubber Playground Surfaces

March 14, 2025

Diana Zuckerman, PhD, President
National Center for Health Research



National Center for Health Research

We are:

- ❖ A nonprofit research center in Washington, DC
 - ❖ Staffed by scientists, medical professionals, and public health experts
 - ❖ We conduct and explain research that can improve the health and safety of adults and children
 - ❖ We do not accept funding from companies whose products we evaluate
-

Artificial Turf and Rubber Tiles, Mulch, and Playground Surfaces

- **Contain lead, PFAS, and other risky hormone-disrupting chemicals (EDCs) and heavy metals**
- **Tire crumb is used for turf infill and rubber mulch and tiles and contains lead and EDCs.**

Children are exposed day after day and year after year.



NC HR Rubber Playground Surfaces for Slides, Swings, etc.

- Some playgrounds are covered with **recycled tire mulch** or “**virgin rubber**.” They vary in color. None are tested for metals or chemicals.
- **Poured in Place (PIP)** is a **solid rubber surface** that may be “virgin rubber” but under the surface is recycled tire mulch.
- Testing has shown **chemicals and heavy metals, even in dust on the surface.**





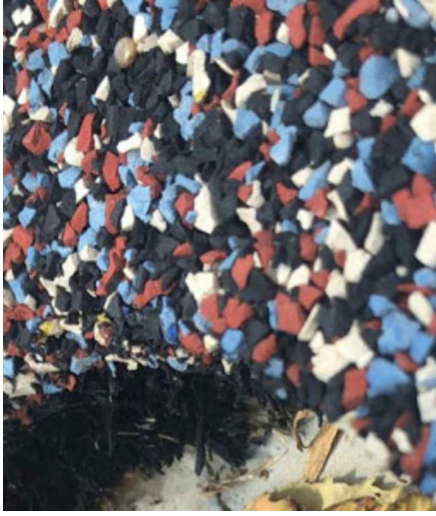
Rubber playground surfaces contain hormone-disrupting chemicals that can cause:

- Attention deficits
- Early puberty (and infertility in adults)
- Obesity
- Asthma and allergies
- Cancer years later

Rubber Surface Deteriorates!



What's below the rubber surface?



- Recycled tire mulch can be on the top layer of a playground surface or just below the top PIP (poured in place) solid layer.
- Plastic grass that makes up artificial turf often contains lead.
- Many turf fields use recycled tire crumb for infill – whether NFL fields, college fields, or local homes.



From the Ground to the Air

- When lead dust or other dust is on the surface of playgrounds, power washing does not solve the problem.
- Turf fields infill tire crumb is kicked up into the air.





From the Ground to the Air (cont'd)

Lots of Options But No Infills have been proven safe





Envirofill

Because she's on it,
we care about what's
in it.



**Earth-friendly infill
that's safe around
children and pets.**

Non-toxic and completely reusable, Envirofill makes artificial turf look and feel great. And, Microban® antimicrobial product protection works continuously to help prevent the growth of bacteria, mold, and mildew. No wonder it's the new favorite of landscape experts. Call 877-881-8477 or visit xgrass.com and have your families love their lawn.



Envirofill Ads (cont'd)

A different kind of infill. Envirofill® is composed of naturally occurring **silica** sand found only in the Hickory Formation in central Texas. Its highly rounded quartz core resists compression so it doesn't continue to compact over the life of your lawn.

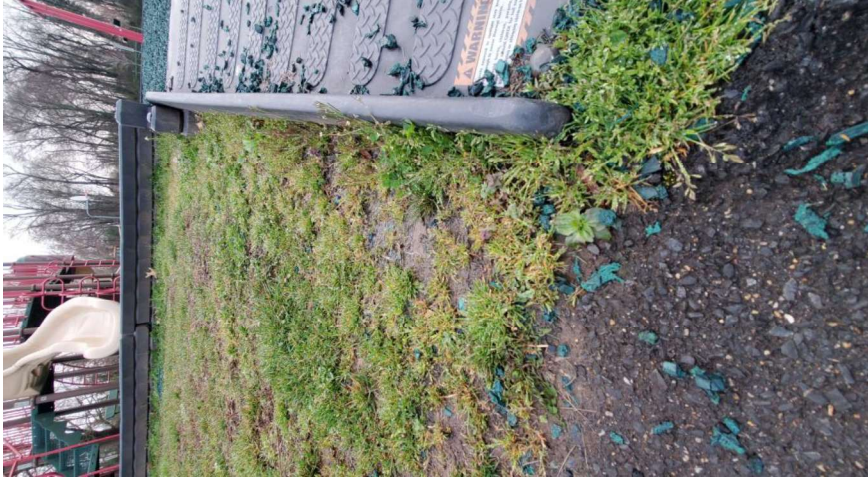
New wording: Envirofill is composed of naturally occurring sand found only in the Hickory Formation of central Texas. Its highly-rounded quartz core resists compression.

American Lung Association: When silica dust is inhaled over time, tiny particles cause scarring and inflammation that can result in lung cancer, COPD, or pulmonary fibrosis.



From the Ground to the Air, Water, Grass

- **Infill (shredded tire, silica sand, or other materials) also migrates to grass, water, etc**
- **These materials release chemicals and particles into the air.**
- **Children breathe in these chemicals, lead, and particulate matter when they play. And small children eat them.**





Study of Aerosolized Particulate Matter from Artificial Turf

University of Georgia faculty member found particulate matter that contained **arsenic, cadmium, chromium, and lead.**

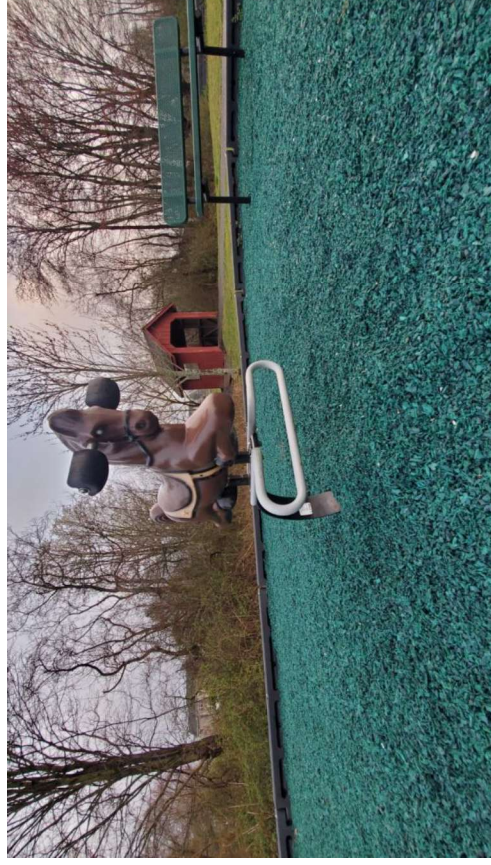


Shalat, S.L. (2011). An Evaluation of Potential Exposures to Lead and Other Metals as the Result of Aerosolized Particulate Matter from Artificial Turf Playing Fields, Final Report. Submitted to NJ Department of Environmental Protection, July 14, 2011
<https://www.nj.gov/dep/dsr/publications/artificial-turf-report.pdf>



Safety Tests

- No tests on **human health** prior to getting on the market
- U.S. government agencies restrict **lead** and some **phthalates** from other children's products. They are starting to restrict PFAS. But these substances, VOCs, and other heavy metals are not restricted in artificial turf, rubber tiles, mulch on lawns, or playgrounds.





Relaxing for Hours on Artificial Turf



If Only Toddlers Could Read!





Consumer Product Safety Commission Warnings

- **Avoid mouth contact** with playground surfacing materials, including mouthing, chewing, or swallowing playground rubber. This may pose a choking hazard, regardless of chemical exposure.
- **Avoid eating food or drinking beverages while directly on playground surfaces**, and wash hands before handling food.
- **Limit the time at a playground on extremely hot days.**
- **Clean hands and other areas of exposed skin after visiting the playground, and consider changing clothes** if evidence of tire materials is visible on fabrics.
- **Clean any toys that were used on a playground after the visit.**

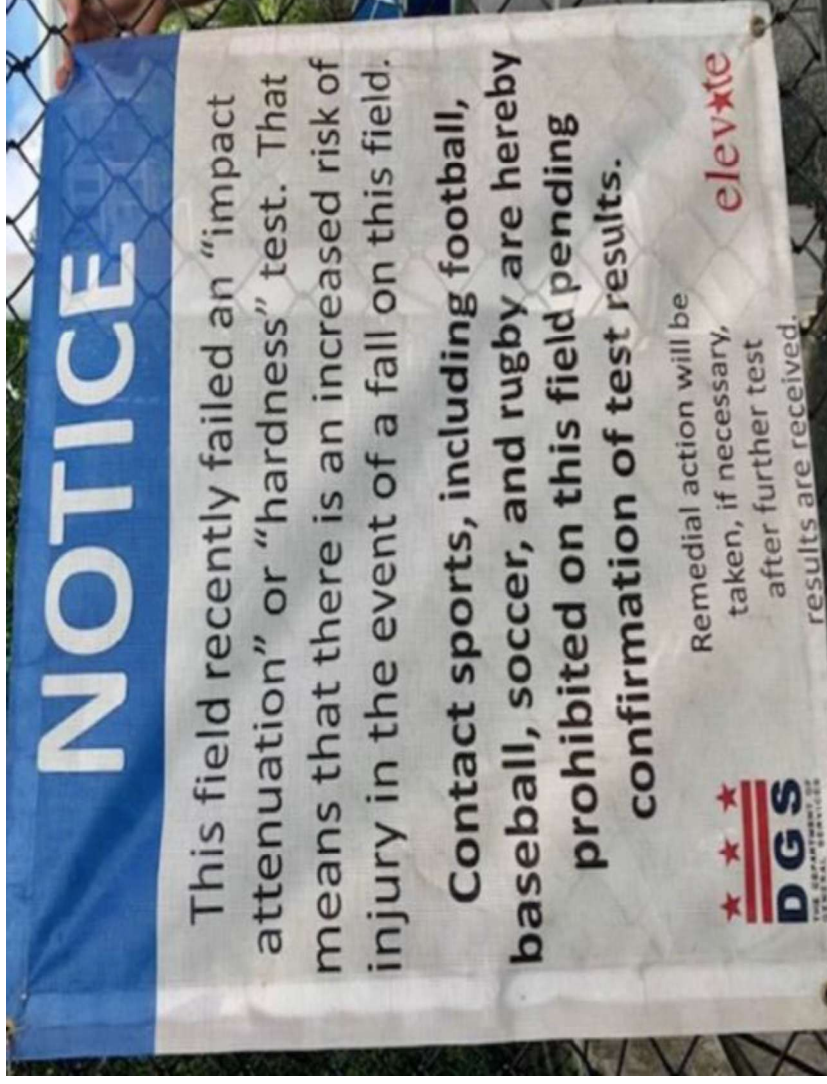


Grass is 90 degrees.
Turf and Playground are 180 degrees!



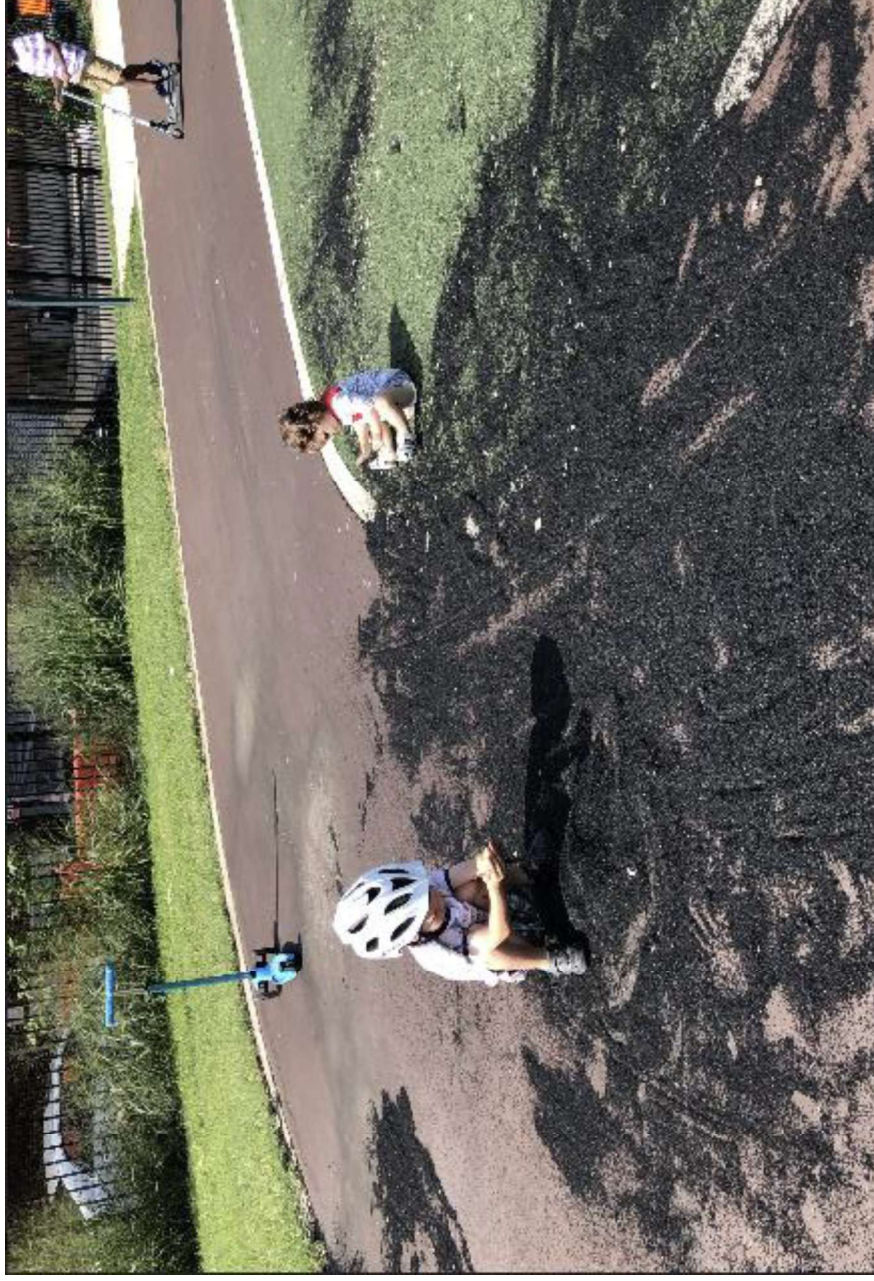


Injuries Include Concussions, Leg Injuries, And infected Turf Burns





Where does tire crumb infill go when it rains?



Are the old turf and infill recycled?



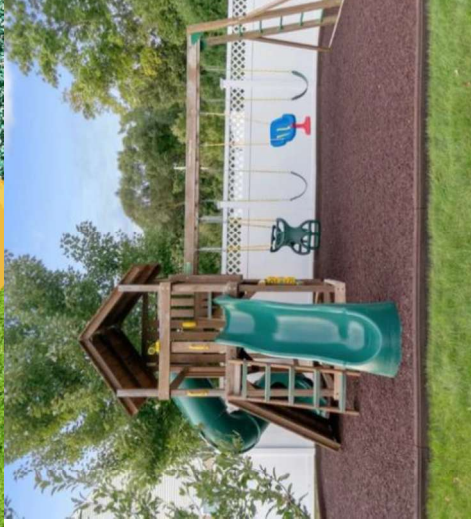


Recycled Tire Crumb For Your Home

A RUBBERRECYCLE™ COMPANY

PlaySafer™ Rubber Mulch

WHY PLAYSAFER? VIEW PRODUCTS





Indoor or Outdoor Tiles Made of Recycled Tires



Widely available at Home Depot and other stores, and proudly described as recycled rubber. But you need to check the manufacturers to find out it is made from recycled tires.



Myth, Reality, and Alternatives?

- Does artificial turf need **watering** ? **YES**
Does it use **pesticides/herbicides**? **YES**
- Does it pass all required safety tests? **YES**
Are there any required safety tests? **NO**
- **Grass is safer than artificial turf. Engineered wood fiber is the safe alternative for playgrounds. It feels spongy and has no lead or dangerous chemicals. Natural wood mulch for plants has no lead or toxic chemicals and is the alternative to rubber mulch.**

Engineered Wood Fiber



Government Policies

- **Consumer Product Safety Commission restricts lead and some EDCs in children's toys, but not these products.**
- **FDA restricts PFAS in some food packaging (e.g. microwave popcorn and grease-proof cardboard carryout containers), but not in plastic packaging.**
- **EPA restricts lead in water and as of 4/10/24 requires monitoring 6 PFAS chemicals (PFOA and PFOS) in public water systems. As of 1/2024, prevents 329 unused PFAS.**

Challenges to Safeguards

- Recycling tires is big business.
- Artificial turf is big business (\$\$millions/field).
- There are thousands of PFAS chemicals and companies that claim “No PFAS” have only tested for a few.
- There are some established tests for PFAS in liquid. Testing PFAS in solid materials is more controversial. Safe limits are not established for some heavy metals, making policies difficult.
- Voters like convenience and don’t like government telling them what to do.



Diana Zuckerman, PhD, President National Center for Health Research

www.center4research.org

info@center4research.org

From: Cynthia Fan
To: [PPW Comment](#)
Cc: [Rob Moore](#); [Maria Ristow](#); [Mary Badame](#); [Rob Rennie](#); [Matthew Hudes](#)
Subject: 6/1 Parks Commission, Public Comment Item #2
Date: Monday, June 1, 2026 11:03:03 AM
Attachments: [2026 06 01 LG Parks and Sustainability item 2.pdf](#)

[EXTERNAL SENDER]

Please see attached.

-Cynthia Fan

To: Parks and Sustainability Commission, Town of Los Gatos

Email: ppwcomment@losgatosca.gov

CC: rmoore@losgatosca.gov; mristow@losgatosca.gov; mbadame@losgatosca.gov; rrennie@losgatosca.gov; mhudes@losgatosca.gov

Date: June 1, 2026

Re: Agenda Item 2: Creekside Park Artificial Turf Replacement

Dear Commissioners,

I am a Los Gatos resident who has followed the artificial turf issue closely since 2020 and submitted comments to the Town on multiple occasions. I cannot attend tonight's meeting in person but am submitting written comments before the deadline.

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I have extensive additional comments on the report's specific findings but have not had time to prepare them for tonight. I hope tonight's discussion is part one of a larger process.¹

Questions for staff:

- (a) The report was submitted to the Town in July 2025. Why was it not scheduled for commission review until ten months later? Commissioners, staff, and the public could have used that time to engage with its contents.
- (b) Does the Town currently have the budget to fund this replacement, or is Council being asked to commit to a project without confirmed funding?
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Before anything else, I ask you to watch this short ABC News Australia report on Middlehead Oval, a community grass sports field in Sydney: <https://www.youtube.com/watch?v=YBzcZbSyqIQ>.

Middlehead Oval was a field that generated years of complaints from local sports organizations about muddy, unplayable conditions and rainouts. The soccer community was convinced a grass field simply could not support their needs. After soil scientist and certified agronomist Dr. Mick Battam implemented modern grass management techniques, the field's performance was transformed. The sports organizations that had been demanding artificial turf became satisfied users of a natural grass field. Dr. Battam's techniques have enabled grass fields to handle up to 60 hours of use per week.²

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The story at Middlehead Oval is not an outlier. It illustrates a pattern: grass fields that are described as inadequate are often poorly designed or under-managed, not inherently incapable of meeting the community's needs. The question this commission should be asking is not "what has been done in the past" but "what is achievable with proper expertise applied to Los Gatos's specific conditions."

3. The report's grass assumptions need expert scrutiny before you accept them.

The report concludes that natural grass is impractical at Creekside, based on two claims that deserve challenge.

The first is that grass fields require full replacement every four to five years.³ This assumption drives most of the cost gap between grass and artificial turf. The 20-year lifecycle cost for natural grass of \$7.1 million in Table 4 includes approximately \$900,000 every four years for field replacement. The cited source for this replacement cycle is a 2005 San Francisco Recreation and Parks document. That is a 21-year-old source. If this replacement cycle is wrong, the cost comparison changes fundamentally.

The second is that Creekside's usage would require seven or more natural grass fields.⁴ This claim is attributed to "the consultant's 40 years of experience." No independent data is cited. This is a significant assertion used to justify a multimillion-dollar decision, and it rests entirely on one person's professional judgment, not on documented evidence for this field, this climate, or fields managed to current professional standards.

It is also worth examining the consultant's own model for what grass can support. The report calculates natural grass availability as 32 weeks per year, approximately eight months, using two hours per weekday and five hours per day on weekends, then deducts 15 percent for rain closures. That produces an estimate of 544 hours per year. The report does not explain why the field is assumed unavailable for approximately four months of the year, or whether that assumption reflects a field under current unmanaged conditions or a field managed to professional standards. A soil scientist and a Certified Sports Field Manager consulting on this specific field, this soil type, and this climate could either validate or challenge every one of those assumptions with actual agronomic data.⁵

The report was prepared by a parks operations and maintenance consulting firm. Before committing to artificial turf for another generation, I urge the commission to recommend that the Town retain two additional experts: a soil scientist and certified agronomist to assess what natural grass, properly designed and managed, could support at Creekside; and a Certified Sports Field Manager (CSFM), the professional credential issued by the Sports Field Management Association to sports turf managers who have demonstrated mastery of field maintenance science and operations.⁶ These are two distinct disciplines. Neither was consulted in preparing this report.

4. There may be a systemwide solution the report did not examine.

The report evaluates Creekside in isolation. It does not ask whether a coordinated grass management strategy across the Town's fields could absorb Creekside's usage.

³Report, p. 16, Table 4: The 20-year lifecycle cost for natural grass totaling \$7,116,337 includes approximately \$900,000 every four years for field replacement. The cited source for the replacement cycle is: San Francisco Recreation and Parks, 2005, Natural and Synthetic Turf: A Comparative Analysis (a 21-year-old document). Report also states, p. 13: "for optimal rehabilitation natural grass fields need to be rested each year during a growing season for a continuous and uninterrupted six to eight week period, then removed from service and replaced every five years." No independent source cited for this assertion.

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The Town owns two grass baseball fields at Balzer Park and Blossom Hill Park. When not in use for baseball, those fields could potentially be reconfigured to accommodate soccer and lacrosse. This would require study and possibly some redesign. It is not a trivial undertaking. But it is a question worth asking before committing to decades more of artificial turf at Creekside.

I would also suggest the commission ask staff to obtain usage data for the Town's grass fields and for the Los Gatos Union School District's grass fields, and to assess whether a shared soil scientist and Certified Sports Field Manager retained by the Town and the school district could bring those fields to a higher standard of performance to absorb use potentially displaced if Creekside's field were upgraded to natural turf.

5. Please look at what the existing Creekside field is doing to our environment right now.

I documented the following at Creekside Sports Park on May 1, 2026: detached plastic carpet fibers littered across the field surface, ready to migrate offsite via wind, stormwater, or tracking on shoes; crumb rubber crossing the cement threshold out of the field; plastic fibers and crumb rubber mixed into the soil approaching the park perimeter fence; and plastic fibers mixed into soils in the creek corridor outside the park fence, near a drain labeled as flowing to the creek. Please see the photos and video here:

<https://sites.google.com/view/creeksideplasticpollution5126/home>. This is what the current artificial turf system is already doing. The Town is proposing to replace it with more artificial turf.⁷

6. The environmental analysis is not sufficient for a Sustainability commission to accept.

The California Environmental Quality Act (CEQA) is the state's primary law requiring public agencies to analyze the environmental impacts of projects before approving them. It is designed to ensure that decision-makers and the public understand the environmental consequences of a project before it is approved. The report's introduction states that environmental impacts are "likely to be insignificant based on the results of available studies," and that CEQA review will be scoped separately upon request.⁸

I am concerned this framing will lead to staff proposing a categorical exemption from CEQA review. A categorical exemption is a process by which a project is declared exempt from environmental analysis without any study being conducted. I want to explain why I believe that would be inappropriate here.

The scientific and regulatory evidence base for artificial turf's environmental impacts has changed significantly in recent years. California's Department of Toxic Substances Control published findings in 2024 and 2026 documenting that artificial turf fibers and backing contain PFAS and other toxic chemical classes, and that microplastics from artificial turf discharge into stormwater receiving waters without treatment in most urban California environments.⁹ These findings post-date many of the studies the consultant's report relies on.

Beyond new regulatory findings, the Town of Los Gatos has received extensive public comments raising environmental and public health concerns about artificial turf over several years.¹⁰ Under CEQA, substantial evidence in the administrative record that a project may have significant environmental impacts is sufficient to

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require a full environmental review rather than a categorical exemption, even if other evidence suggests it may not. The Los Gatos administrative record contains that substantial evidence.

I ask the commission to recommend that any CEQA review for this project be conducted by an independent environmental consultant whose scope incorporates current regulatory findings, and that the commission not accept a categorical exemption as an adequate substitute for environmental analysis.

7. Your enabling resolution asks this of you.

The Parks and Sustainability Commission's enabling resolution charges you with ensuring Town decisions "meet the needs of the present without compromising the ability of future generations to meet their own needs."¹¹

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That gap is not the consultant's failure. CEQA analysis and intergenerational sustainability assessment are outside the scope of a cost and operations study. They are squarely within yours.

Thank you for your service. I hope tonight's discussion opens a more thorough process.

Respectfully,
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¹¹Town of Los Gatos Parks and Sustainability Commission Enabling Resolution No. 2023-062 (2023). <https://www.losgatosca.gov/DocumentCenter/View/17612/2023-062-Parks-and-Sustainability-Commission-Enabling-Resolution>. Per the enabling resolution, the commission's scope is advisory regarding sustainability, defined in terms of meeting present needs without compromising the ability of future generations to meet their own needs.

From: Pam Bond
To: [PPW Comment](#)
Subject: Agenda item 2 Parks and Sustainability Commission Public Comment
Date: Monday, June 1, 2026 11:02:45 AM
Attachments: [2026.June 1 Parks and Sustainability Commission agenda item 2 Public Comment.pdf](#)

[EXTERNAL SENDER]

Please see attached letter.

To: Parks and Sustainability Commission, Town of Los Gatos

Email: ppwcomment@losgatosca.gov

CC: rmoore@losgatosca.gov; mristow@losgatosca.gov; mbadame@losgatosca.gov; rrennie@losgatosca.gov; mhudes@losgatosca.gov

Date: June 1, 2026

Re: Agenda Item 2: Creekside Park Artificial Turf Replacement

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From: Rika Gopinath
To: [PPW Comment](#)
Cc: [Rob Rennie](#); [Maria Ristow](#); [Rob Moore](#); [Mary Badame](#); [Matthew Hudes](#)
Subject: Comments and a request to meet or present to the Parks and Rec Commission
Date: Monday, June 1, 2026 12:25:34 PM

[EXTERNAL SENDER]

Dear Los Gatos Parks and Recreation Commissioners and staff,

I have not had adequate time to review the 100+ page report, and will respond when I have, but wanted to share some information that is not addressed.

Thank you for your work on the Town's athletic field study. I am writing on behalf of Beyond Pesticides' members who are residents in Los Gatos to share peer-reviewed and case-study evidence that bears directly on the Kimley-Horn report before the Commission, specifically, the figures Kimley-Horn used for natural grass field costs and playable hours.

The documented record from organically managed municipal and school fields shows that costs are meaningfully lower, and playable hours are meaningfully higher, than the values typically cited in consultant studies built on conventional chemical-management assumptions.

Additionally, the model used by the consultants builds in natural grass conversion construction costs that far exceed what is logical or realistic.

Playable hours. Consultant reports often cite a ceiling of roughly 400 to 800 hours per year for natural grass athletic fields. The independently documented record on organically managed fields shows otherwise:

- Marblehead, Massachusetts: approximately 2,210 annual hours on the Village School Lower Field and approximately 2,320 annual hours on the Veterans Middle School field, across 20 acres managed organically since 2002. Toxics Use Reduction Institute, Marblehead Natural Grass Playing Field Case Study, November 2020, <https://www.uml.edu/research/lowell-center/athletic-playing-fields/>.
- Springfield, Massachusetts: approximately 1,051 hours annually on the Treetop Park soccer field including informal use, with over 3,628 hours annually of programmed use across Blunt Park and Forest Park sports complexes (TURI, Springfield Natural Grass Playing Field Case Study, June 2019, <https://www.uml.edu/research/lowell-center/athletic-playing-fields/>)
- Sonoma County / City of Petaluma — Ragle Ranch Park — California-specific case study and how-to guide demonstrating successful natural grass sports field renovation (from grass) with installation aligned to the City's Integrated Pest Management Policy that prohibits synthetic pesticides (attached Petaluma Climate Community / Sonoma County Parks Department, November 2024)

Costs.

Independent documentation likewise shows organic management costing less than the figures typically presented in consultant studies:

- Springfield, Massachusetts: total program costs of approximately \$1,460 per acre across 67 acres managed organically (TURI, 2019, <https://www.uml.edu/research/lowell-center/athletic-playing-fields/>)
- Denison University: natural grass maintenance at approximately \$1,752 per acre per year across 21 acres of athletic fields, with grass concluded to be far more cost effective than artificial turf once full lifecycle costs were included (TURI Denison Case Study, 2021, <https://www.uml.edu/research/lowell-center/athletic-playing-fields/>). Note that 2026 prices for artificial turf systems and for the synthetic pesticides and fertilizers used in conventional management have both risen substantially since 2021, widening the cost advantage of organic management.
- Beyond Pesticides Cost Comparison Brief: reports that, once established, an organic turf management approach delivered savings greater than 25% over chemical management and include lower irrigation needs. <https://www.beyondpesticides.org/assets/media/documents/documents/Cost%20Comparison.pdf>
- A 2025 peer-reviewed case study in Sustainability further documents that natural grass acts as a carbon sink, reduces surface temperatures, and emits up to three times less lifecycle CO₂ than artificial turf — climate co-benefits the Commission's analysis should weigh alongside cost and hours (Cumberbatch 2025 <https://doi.org/10.3390/su17146292>)
- TURI's comprehensive report, "Athletic Playing Fields: Choosing Safer Options for Health and the Environment," finds that when full life-cycle costs (installation, maintenance, and replacement/disposal) are considered over 16–25 years, natural grass—especially when managed organically—is more cost-effective than synthetic turf. For example, synthetic turf installation is typically \$4.50–\$10.25 per square foot (often 1.2 million or more for a full multi-sport field), plus 5,000–

8,000 per year in maintenance and \$ 6.50–7.80 per square foot for disposal and resurfacing at replacement. By contrast, new natural grass fields (soil-based or sand-cap) are typically \$ 1.25–5.00 per square foot to build, with annual maintenance costs in \$ 4,000–\$14,000 range, and life-cycle analyses from university and government studies show natural grass systems have significantly lower annualized costs than synthetic turf when replacement cycles are included. <https://www.turi.org/publications/athletic-playing-fields-choosing-safer-options-for-health-and-the-environment/>

- TURI's separate fact sheet, "Building an Organic Maintenance Program for Athletic Fields," fact sheet summarizes these performance and cost lessons, including when it makes sense to rehabilitate versus fully rebuild a grass field, and how to phase organic practices within realistic municipal budgets.

See: https://www.turi.org/TURI_Publications/Fact_Sheets/Building_an_Organic_Maintenance_Program_for_Athletic_Fields

I respectfully ask the Commission to revisit the Kimley-Horn figures for natural grass cost and playable hours against this documented record before any recommendation moves forward. Beyond Pesticides would be glad to provide additional documentation, peer-reviewed sources, and/or a technical briefing for the Commission and Town staff on what a sustainably managed natural grass field actually delivers in California conditions, as well as how Beyond Pesticides could work with the city and parks staff on a two year pilot project to transition two or three natural grass athletic fields to organically managed systems approach through our Parks for a Sustainable Future program.

Thank you for your consideration and service to the Town.

Respectfully submitted,

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[Parks for a Sustainable Future program](#)

Beyond Pesticides

www.beyondpesticides.org