



October 4, 2026

Mayor Kassakhian and Councilmembers Asatryan, Bartrosouf, Brotman, and Gharpetian,

GEC recommends **against** the October 6, 2026 City Council Meeting **Consent Item 5B: Public Works, re: Adopt Plans and Specifications for the Glendale Sports Complex Field 3 Artificial Turf Project.**

A warming climate is bringing extreme heat waves and longer summers to our area. Therefore, we ask you to reconsider replacing grass with additional artificial turf on municipal and school sites, including the Sports Complex field on Tuesday's agenda. Instead, replace grass with grass, and apply for Measure W funding to upgrade this field to a hydroponics style grass field system once funding is secured.

Of the many health hazards plastic fields present, perhaps the most undeniable is the heat they can generate. Artificial turf can get unbearably hot, reliably hotter than the asphalt which often surrounds them, regardless of infill type. We experienced this during graduation ceremonies in Glendale this June.

Our concerns are first and foremost for young people who will be playing on these fields. This September, 2026 ESPN article is alarming reading: "[Nashville turf temp of 157 degrees melts cleats, sends Sirianni for IV.](#)" In 2023, Nissan stadium replaced its grass field with (artificial) Matrix Helix Turf + organic infill (which requires watering). They maintain their grounds crew is among the best in the National Football League. Yet:

"NASHVILLE, Tenn. -- Players' cleats were melting and Eagles coach Nick Sirianni needed an IV as a result of extreme heat conditions at Nissan Stadium during Sunday's game between Philadelphia and the Tennessee Titans, a 24-20 win for the Eagles.

The temperature on the turf reached 157 degrees Fahrenheit, per the television broadcast.

Philadelphia left tackle Jordan Mailata, the team's NFL Players Association rep in 2025, said this is another reason the union should push for the league to do away with turf surfaces.

"I've never thought about how hot a stadium can be if it's turf. [The heat] just sits there and bounces up into you," Mailata said. "We've got to bring it up. This is why we want all-grass fields, to create a standard of play in the league where we're not putting players in dangerous positions if we don't have to."

Eagles offensive lineman Cam Jurgens noted postgame that his feet were "burning, still hurting." Jurgens said he went through multiple pairs of cleats due to melting issues.

"Halftime was like a NASCAR pit crew helping me get ready for the second half," he said. "That turf was just radiating."

The temperature in Nashville for Sunday's kickoff at noon local time was 95 degrees, with a heat index of around 105. A heat dome had settled over the area in recent weeks, with high pressure in the atmosphere pushing heat toward the surface and trapping it there.

Titans safety Amani Hooker said the midsoles of his cleats "melted completely off" during the season opener against the visiting New York Jets.

Mailata said he twice rolled his ankles in Sunday's contest and wondered if it could be the result of his shoes bending because the plastic in the bottom of his cleats got soft.

Television cameras showed a member of the Titans having his cleats sprayed with water to cool them off.

"It was hot as s---," Sirianni said. "I didn't play a snap and I had to get an IV. I so appreciate how much the guys prepared. I so appreciate how much they fought through because it wasn't easy."

The Los Angeles Unified Board of Education took bold and unanimous action in 2025 by [banning new artificial turf installations at all K-6 and middle schools](#). Let's build on this precedent. Consider that according to the U.S. Centers for Disease Control and Prevention, [heat-related illnesses are a leading cause of death or disability among high school and college athletes](#).

Finally, right now in Glendale we are experiencing a week-long heat dome / heat wave just as our youth soccer season gets started! How much better and healthier it would be for our young athletes if they were playing on cool grass instead of overheated turf.

Alternate Pathway: Install a revamped grass field now, and apply for Measure W funding to upgrade it to a Permavoid, Epic or other hydroponics style system in the future. Hydroponics-style systems using natural grass are much cooler and far less polluting. This type of mitigation aligns with Glendale's Climate Action and Adaptation Plan.

Our local Measure W liaison indicated that this is a viable grant request as this system collects and uses stormwater and acts as a filter to keep toxins, PFAS and microplastics out of the environment. Thank you for considering our suggestions and for taking into account the clear and present dangers of heat in your decision making on this item.

Sincerely,
Glendale Environmental Coalition Board



Above: Sports Complex showing heat island effect from existing artificial turf fields. Note that it is far hotter than the pavement.

Source: [Fairland & Briggs Chaney Master Plan Heat Island Effect Viewer](#)

What is a hydroponics-style field system?

In general, hydroponics-style systems allow real grass on the surface with deep roots moving down through a layer of sand blend and reaching water captured in a reservoir at the base. This tank can fill with storm water and with water delivered through underground pipes, so that there is no evaporation. Fertilizer is also delivered through these pipes. There is plastic involved in these systems, but it is not at the surface, does not degrade into the environment, does not generate heat and is not a disposable product. These fields drain much more quickly than regular grass fields, so play is less impacted by rain. The roots can grow much longer than they would in soil, making them stronger. These fields have the option to further strengthen the blades with some plastic netting, a compromise worth considering. These systems are in use by pro teams and colleges in hot, arid climates like ours.

Hydroponics Style System Pros:

- Top of the line system with real grass
- Used by colleges, pro stadiums and high schools in hot climates (Examples: Manchester City Stadium Etihad in UK; Liverpool stadium Anfield in UK; Rukh Lviv Soccer club in Ukraine; University of Nevada in Reno; So. Methodist University Washburne Soccer and Track Stadium in Dallas, TX; Vista Del Lago HS, Folsom, CA)
- Much cooler. The plastic fields get extremely hot - between 30-50 degrees hotter than natural grass. On a 90 degree day they can be 120-150 degrees. They can heat the air around the field approx 7 degrees.
- No skin burns from hot plastic abrasion
- No off gassing
- System lasts indefinitely, with only parts replacements needed (artificial turf needs replacing, at great cost, approx. every 10 years.)
- Low Maintenance: non-pressurized and vandal-resistant, with no moving parts to maintain.
- Effective storm water capture system (Apply for Measure W funding)
- No shedding of PFAS laden plastic dust into air, lungs, soil, waterways
- Drains very quickly since the base layer is sand (unlike normal grass fields)
- The grass is tough. Roots grow very deep and are much stronger than regular grass fields
- Can add an optional plastic webbing to strengthen further. Not ideal, but an acceptable compromise.
- Will not waste water (no above ground sprayers losing water via mist evaporation)
- Can be supplied with recycled or grey water (all water is underground)
- Sustainability bragging rights and attractive to visiting teams

Here is a graphic from Polypipe Middle East, who deliver engineered drainage and stormwater management to the Middle East, which has an even hotter environment than Glendale:

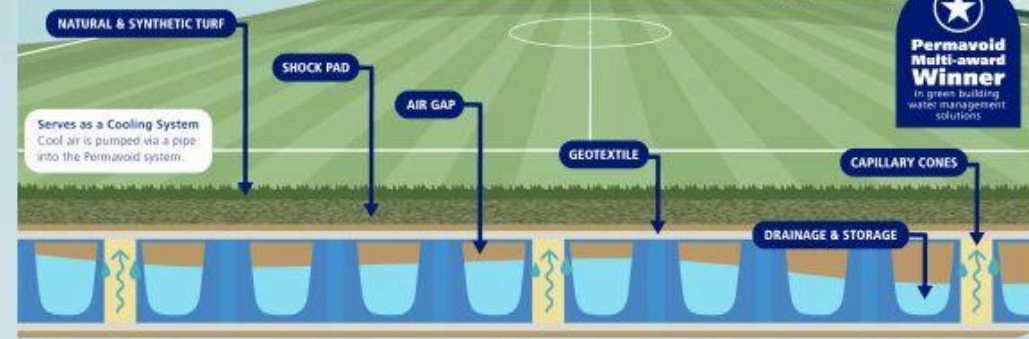
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- Captures, stores, and reuses water for passive irrigation and cooling.
- Irrigates natural grass fields, supporting optimal temperature and performance.
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- Saves potable water with a zero-energy, capillary-based irrigation system.





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- Stormwater reuse:** Uses captured rainwater for cooling and irrigation.
- Consistent, safe play:** Maintains reliable pitch conditions and reduces downtime.
- 40% water savings:** Reduces irrigation needs vs. traditional over-soil methods.
- Low maintenance turf:** Healthier grass with less wear and reduced upkeep.
- Climate-smart system:** Helps cool the playing surface.
- Proven in hot regions:** Tested in Gulf and Australia for reliable results.

Manufacturers Include:

PERMAVOID: <https://www.permavoid.com/> Permavoid Contact: <https://www.permavoid.com/contact>

Examples of sports fields - choose natural grass option:

<https://www.permavoid.com/solutions/sport-pitches>

Sports System - quick explanation:

https://cdn.prod.website-files.com/65e0445f933c79a900873cb4/661ce76edcfc2fa77247b25e_Permavoid%20Sports%20Hybrid%20%26%20NaturalGrass%20BuildUp.pdf

EPIC: <https://epictws.com/> Epic Contact: <https://epictws.com/contact/>

Examples of sports fields: <https://epictws.com/projects/>

Paradise Highschool (Chico, CA) Rebuilds with an [EPIC Sports Field](#) after fires.



Dangers of Artificial Turf (Plastic Grass)

- 40-70 degrees hotter than surrounding air temperatures on warm, sunny days. It can get superheated to temperatures from 120 to 180 degrees F. and melt shoes, blister hands and feet, and induce dehydration and heatstroke.
- Made from virgin plastic with blades and infill (such as coconut coir) that have unknown additives.
- Greatly contributes to the heat island effect and degradation of open space, increasing temperatures for the immediate area and surrounding areas.
- Injuries, including turf burns, are a major concern.
- At the end of their lifespans, these materials will be sent to landfills.
- Plastic grass is expensive and requires replacement every 7-10 years.
- Plastic grass, when cared for properly, does not save water as it requires multiple soakings per day during hot days to provide only temporary cooling.
- Requires faster replacement without proper care, costing hundreds of thousands of dollars.
- Synthetic grass usually contains PFAS chemicals. According to the Environmental Protection Agency, PFAS chemicals are a known carcinogen which can interfere with hormones, reproduction, immunity and cause developmental delays in children. Despite industry claims of PFAS being removed from the plastic blades, this is not yet verifiable. (See: [Report from Feb 2026 from Cal EPA](#)):
- Concerns remain regarding migration of PFAS-laden microplastics as the blades break down into dust from sun exposure and friction and end up in the air, soil and water. They migrate into players' bodies (though lungs, clothing, shoes) and into the environment, including via storm drains into waterways, such as the Verdugo Wash.
- Off Gassing: "...plastic grass carpet generates massive heat islands larger than their actual size. A regulation sized field is about 80k square feet, or 2 acres, comprising approximately 800,000,000 plastic blades per field. Both the field surface and the surface of each blade reflect heat, triggering visible waves of heat rising and spilling into adjoining areas like schools or spectator stands. The entire surface area of heated plastic constantly off-gasses both methane and ethylene. These greenhouse-gases are highly toxic chemicals that everyone on and near the field (children, athletes and bystanders) will constantly inhale. They are released in increasing volume as the blades break down from UV light, weather, age and grinding action during play. The off gassing continues even at night and will continue for the hundreds of years it takes for these materials to decompose. Choosing to install plastic synthetic turf is choosing to promote climate change." – Safe Healthy Playing Fields ([open letter](#))

For a much more detailed, comprehensive overview of the dangers of artificial turf to our community, we ask that you [read this letter from Safe Healthy Playing Fields](#), which offers a huge amount of research into why you should reject artificial turf fields for five reasons: cost, toxicity, heat, injury and disposal.