



Parks, Recreation & Community Services

Surface Type Selection for Villa Parke and Robinson Park Athletic Fields

City Council

October 13, 2026





Recommendation

Parks, Recreation & Community Services

- Find the project categorically exempt under State CEQA Guidelines Sections 15301 (Class 1, Existing Facilities) & 15302 (Class 2, Replacement or Reconstruction)
- Approve the replacement of the existing artificial turf at Villa Parke & Robinson Park with enhanced artificial turf systems that are recyclable, that both remove PFAS from manufacturing and use natural infill materials, while directing staff to continue to evaluate natural grass for future renovation projects



Background

Parks, Recreation & Community Services

- 22 dedicated athletic fields for youth & adult sports, schools & community groups
- Villa Parke: turf installed 2009–2011, replaced under warranty in 2018; funded in the FY 2026–27 CIP
- Robinson Park: nearing end of service life; not yet funded
- MSC (March 24 & June 23, 2026) requested analysis of natural grass, hybrid, & artificial turf



Three Surface Options Evaluated

Parks, Recreation & Community Services

- **Natural Grass**

- > Living grass: irrigation, mowing, fertilizing
- > Coolest surface, natural traction
- > Highest water use & maintenance
- > 4-6 months initial closure; 3 month per renovation

- **Hybrid Grass**

- > Natural grass reinforced w/synthetic fibers
- > Grass-like play w/durability
- > Water & maintenance like grass
- > Closure not established

- **Artificial Turf**

- > Synthetic fibers w/organic infill
- > Consistent surface, warmer than grass in extreme heat
- > Less water, no mowing & irrigation
- > 2-3 months installation & no closure for grooming

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Hybrid / Reinforced Natural Grass

Parks, Recreation & Community Services

- Rose Bowl: FIFA World Cup
 - > Temporary hybrid field installed by FIFA's contractor
 - > Uncommon on municipal fields
- City of Palo Alto
 - > Planning level study comparing natural, hybrid, and artificial turf with natural infill
 - > Selected artificial turf



Grass - Test Pilot

Parks, Recreation & Community Services

- Villa Parke: Multipurpose Field Pilot
 - > Two-Year test pilot over 25,000 sq. ft. using four seed varieties
 - > Consistent irrigation, mowing, and fertilizing
 - > Compare establishment, wear, recovery, & resource allocation



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Lifecycle Cost Comparison

Parks, Recreation & Community Services

Category	Natural Grass	Hybrid	Artificial Turf
Base annual maintenance cost (Year 1)	\$27,937	*\$58,580	\$5,738
Base annual renovation cost (Year 1)	\$9,848	N/A	\$10,908
10-year cumulative maintenance total	\$320,266	\$671,554	\$65,780
10-year cumulative renovation total	\$112,896	N/A	\$125,048
Initial capital / conversion cost	\$1,100,000	\$2,197,128	\$970,810
Surface replacement – Year 10 (3% escalation)		N/A	\$1,266,687
10-year total cost	\$1,533,162	**\$2,868,682	\$2,428,325

**Based on Palo Alto's hybrid system study, scaled to Villa Parke's 72,099 SF field at approximately \$2.2M.*

*** Excludes unknown renovation & replacement costs*

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Cost per Prime-Time Hour

Parks, Recreation & Community Services

\$16.15

Natural Grass

2,340 hours / year

\$25.03

Hybrid Grass*

2,340 hours / year

\$5.34

Artificial Turf

3,120 hours / year

Hours shown are prime-time hours available per year and do not reflect closures for rainouts

Natural grass and artificial turf include annual maintenance and renovation only; excludes initial capital and future surface replacement

**Hybrid includes routine maintenance only, based on a planning-level estimate from the City of Palo Alto's hybrid system*



Environmental and Heat Considerations

Parks, Recreation & Community Services

	Natural Grass	Hybrid	Artificial Turf
Materials	Natural; no synthetic infill	Synthetic fibers removed at end of life	Cork or coconut infill; recycled or disposed
PFAS	No synthetic components	Fiber composition to be evaluated	Manufacturer must disclose PFAS and comply with law
Heat	Coolest when healthy and irrigated	Similar to natural grass	Warmer than grass in direct sun
Heat Mitigation	Irrigation, hydration breaks	Irrigation, hydration breaks	Cooling, hydration breaks, schedule changes

- **Extreme Heat Guidelines**
 - Public Health drafting guidelines for youth outdoor activity
 - Applies to grass and turf; aligned with CIF
 - Uses on-site Wet-Bulb Globe Temperature (WBGT)
 - Sets hydration, duration, and cancellation thresholds



Field Capacity and Partnerships

Parks, Recreation & Community Services

- PUSD & Rose Bowl - Limited availability due to school, athletic, & event schedules
- Scheduling - Closures may require weekday or Sunday play, shorter seasons, or additional games per week
- Field Constraints - Existing league & seasonal commitments limit scheduling flexibility



Fiscal Impact

Parks, Recreation & Community Services

- \$1.125M included in FY 2027 CIP for replacement (*Villa Parke)
- No additional appropriation or General Fund impact for artificial turf or natural grass
- Additional funding required for hybrid/reinforced natural grass
- Robinson Park is not funded – will require future CIP appropriation

** Fiscal Impact of the Agenda Report erroneously lists \$975,000 adopted*