

MEMORANDUM

Date: April 30, 2019
Project: Centennial Park Bocce Ball Court Renovation
Subject: Bocce Ball Court Maintenance

The City of Pleasanton is planning to renovate the existing bocce facilities at Centennial Park to increase the playability of the facility utilizing court surfacing that can be maintained with current City staff resources. In order to adequately assess the maintenance requirements of the various bocce ball court surfacing options the City reviewed existing bocce ball courts and conducted a survey of existing bocce ball court facility managers. The results are as follows:

Bocce ball court surface options reviewed:

1. Type 1 – Boccecomon Oyster Shell Surfacing
2. Type 2 – Classic Oyster Shell and Flour Blend
3. Type 3 – Oyster Shell and Flour Blended with Decomposed Granite
4. Type 4 – Synthetic Turf with Sand Infill
5. Type 5 – Synthetic Turf without Infill
6. Type 6 – EPDM (Elastomeric Propylene Dien Terpolymer) Rubber Surfacing

Bocce ball facilities evaluated:

1. Elk Grove – Morse Community Park (court type 1)
2. Laguna Niguel – Marina Hills Park (court type 1)
3. Dana Point – Lantern Bay Park (court type 1)
4. Ruby Hill Country Club (court type 1 - this is assumed - may be court type 2 - the facility manager couldn't confirm)
5. Clayton – Ipsen Family Bocce Facility (court type 2)
6. Martinez – Waterfront Park (court type 3)
7. Danville – Sycamore Valley Park (court type 3)
8. Antioch – Chichibu Park (court type 3)
9. Elk Grove – George Park (court type 4)
10. Foster City – Leo J Ryan Park (court type 4)
11. Livermore – Bothwell Park (court type 5 (could be type 4 – unconfirmed by facility manager))
12. San Carlos – Burton Park (court type 6)
13. San Rafael – Albert Park (alternative surface – resin)

Routine Maintenance Requirements

The amount of maintenance required per week for each surface per court, based on the survey results, was as follows:

Surfacing type	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6
Average hours per week per court	2.5± hrs	5 hrs	2.5± hrs	<1/2 hr	<1/2 hr	1/2 hr

In addition to the six court surfaces studied, the alternative resin court surface in San Rafael requires less than 1/2 hour per week per court.

More significant maintenance required for the court surfacing options is as follows:

Court type 1 - boccecomon

The Boccecomon surfacing, does not require replacement, but the bocce facility managers recommended that the courts be more aggressively groomed before the start of each bocce season. That takes approximately 4 hours per court with additional material added, scarification, brooming, watering, and rolling the courts.

Court type 2 – oyster shell and flour

Oyster shell and flour does not require replacement, but does require replenishment. Similar to the boccecomon surfacing, it is recommended that the courts are more aggressively groomed and leveled prior to the start of each season. The amount of time and process to groom the oyster flour and shell is similar to the boccecomon surfacing, but it takes more experience and knowledge to create a more balanced, level, and smooth compacted playing surface.

Court type 3 – oyster shell, flour, and decomposed granite

Oyster shell, flour, and DG does not require replacement, but does require replenishment. The oyster shell, flour and decomposed granite surface was by far the most common surface. The amount of time and process to conduct a more aggressive grooming for the blend is similar to the plain oyster shell and flour with an aggressive groom recommended before each season.

Court type 4 and 5 – synthetic turf

Both synthetic turf court surface options require very little maintenance. It is recommended that the courts with sand have the sand replenished annually with the sand broomed in. Synthetic turf also breaks down over time from UV rays and wear so it is recommended that the turf get replaced every 8-10 years or so.

Court type 6 – EPDM rubber

According to the San Carlos facility manager, the EPDM courts do not require much additional maintenance beyond the routine maintenance to keep the courts clean and dry. A crew pressure washes the surfacing quarterly and flushes the drainage system annually. The expectation for the EPDM surface is that it will need to be replaced on an 8-10 year cycle.

Resin surface

According to the facility manager at San Rafael, not much additional maintenance is required beyond the regular smoothing/raking of the courts. There are special drains required for the courts that need to be flushed annually and the grit (surfacing) needs to be replenished throughout the year. The manager plans to redo the courts every 5-7 years.

Summary

From a maintenance perspective, including short term maintenance, semi-regular maintenance, and long term replacement, the intensity of maintenance from least intensive to most intensive is:

1. Synthetic Turf (< 1/2 hr per court per week, replacement every 8-10 years)
2. Resin (< 1/2 hr per court per week, replacement every 5-7 years)
3. EPDM (1/2 hr per court per week, replacement every 8-10 years)
4. Boccemon (2.5 hr per court per week, 4 hrs per court before each season)
5. Oyster shell and flour with DG (2.5 hrs per court per week, 4 hrs per court before each season)
6. Oyster shell and flour (5 per court per week, 4+ hrs per court before each season)

From the perspective of the facility managers regarding playability and longevity concerns, the EPDM surface didn't rank very well, while the other surfaces did rank well in regards to playability and longevity. All the facility managers stressed the importance of a good drainage system.

The challenge with the two existing bocce ball courts at Centennial Park is that the City has been unable to maintain the courts to an acceptable level of play with the oyster shell and flour blend that is currently installed. The drainage has been clogged over time and only one court is consistently playable. Additionally, the courts need to be shut down for an extended period of time after the rain to allow time for them to properly dry/drain. When they do dry, the amount of time and expertise required to properly work the courts exceeds the capabilities of the City.

Court maintenance for the facilities surveyed was typically handled by an experienced person or crew funded by the bocce league fees. The City does not have a facility manager with the level of experience of those crews nor are bocce league dues sufficient to fund the maintenance of the courts.

Recommendation

Based on current staffing levels for the bocce ball courts, with maintenance as a top priority when considering the type of surfacing, synthetic turf is the preferred bocce ball court surface.