



CITY OF LONG BEACH

DEPARTMENT OF PARKS, RECREATION & MARINE

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June 15, 2015

MEMBERS OF THE PARKS AND RECREATION COMMISSION
City of Long Beach
California

RECOMMENDATION:

Recommend to the City Manager the use of coated crumb rubber as the standard infill material for all future synthetic field projects in City of Long Beach Parks. (Citywide)

DISCUSSION

As part of the Fiscal Year 14 (FY14) Budget, the City Council approved \$2.32 million, and as part of Fiscal Year 15 (FY15) Budget, the City Council approved \$1.27 million in one-time funding for turf conversion projects (Turf Project) and identified soccer fields at three park locations for synthetic turf installation. The three parks identified were Admiral Kidd Park, located at 2125 Santa Fe Avenue, El Dorado Park West, located at Studebaker Road immediately south of the Parks, Recreation and Marine Administration building at 2760 Studebaker Road and Seaside Park, located at Chestnut Avenue and W. 14th Street. Community meetings were held on January 26 and February 23, 2015 to provide an overview of the City's synthetic turf projects and solicit community feedback.

A consultant was retained by the Department of Public Works to provide information on the various synthetic turf materials available in the market (Attachment 1). Synthetic turf is commonly used in playgrounds, soccer fields and running tracks, making up the majority of fields installed each year at schools, universities, and professional league stadiums. Replacing natural grass turf with synthetic turf on athletic fields has several benefits. Synthetic turf can:

- Reduce water use, helping to meet the State's water reduction mandate;
- Manage stormwater runoff through subsurface drainage systems;
- Provide a durable, consistent, and safe playing surface that addresses field safety issues and meets the demand for use;

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- Increase playable hours, without the need to close fields for sod replacement or following rain events; and
- Lower maintenance costs and provide a longer lifespan than grass fields.

The most common infill material for synthetic turf fields is crumb rubber, which is made of recycled tire material, and some concern has been raised regarding its impact on player health. The consultant was asked to provide information on turf infill alternatives to address concerns related to health effects of turf infill material. Alternative turf infill materials were identified and information such as reduction in water use, safety, playable hours, material availability, field temperature and installation and maintenance costs were reviewed to determine a suitable material that could be used to standardize all turf conversions across the City (Attachment 2). These alternatives also generally meet the intent of State Senate Bill 47, which would have prohibited a public or private school or local government from installing a field or playground surface made from synthetic turf until January 1, 2018, unless specified conditions were met. However, SB 47 will not be voted on in this year's legislative session.

Based on the turf infill alternatives identified, the use of coated crumb rubber was selected by the Department of Parks, Recreation and Marine (Department) as an infill material superior to crumb rubber, due to its ability to coat the material and further protect against potential health impacts. Coated crumb rubber, which has an acrylic coating applied to the exterior of each granulate, that encapsulates the rubber particles to mitigate any potential health impacts, was selected as best achieving the benefits of turf infill material for the following reasons:

- Minimal water is used for cooling and cleaning, helping to meet the State's water reduction mandate;
- Subsurface drainage system manages water runoff;
- Playable hours on a durable, safe playing surface are maximized to meet the demand for use;
- Seven to 10-year lifespan for turf infill will reduce maintenance costs by not needing to close fields for sod replacement;
- Available in colors other than black, such as green or tan, reducing the field temperature by five to ten percent; and
- Compared to the current crumb rubber standard, coated crumb rubber is the lowest cost alternative.

Additionally, the conversion of grass fields to synthetic turf fields ensures the City can provide athletic fields amidst drought conditions. Currently, when the City takes down an athletic field for repair, the field needs to be watered several times a day for six to eight weeks. Given the drought conditions, the City will not be able to do this moving forward, thus grass fields will not get the water necessary for field refurbishment. This will result in more grass fields being unavailable for play due to safety and field conditions: having available synthetic turf fields can offset this impact.

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The average annual maintenance cost of a 72,660 square-foot natural grass soccer field is approximately \$11,000, which does not include field repair or replacement costs or the cost for the 900,000 to 1,200,000 gallons of water needed annually for upkeep. The average annual maintenance cost of a 72,660 synthetic turf field is approximately \$9,000, which does not include repair or replacement costs or the water needed for a cooling system. Should the City elect to include a cooling system, this would require up to ten percent of the water used on a grass field, or approximately 90,000 to 120,000 gallons a year. Therefore, every converted field would save \$2,000 annually on maintenance costs plus the cost savings associated with less water use.

Long Beach Municipal Code Section 2.54.005 B states that the Parks and Recreation Commission (Commission) shall recommend to the City Manager plans for development, beautification and maintenance of public park and recreational areas, including parks, recreation centers, playgrounds, beaches, parkways, and the City cemetery. It is therefore appropriate for the Commission to make a recommendation to the City Manager supporting the Department's recommendation to use coated crumb rubber as the standard turf infill material for turf conversions for athletic fields across the City.

Should the Commission support the recommendation to use coated crumb rubber as the standard turf infill material for turf conversions for athletic fields, construction plans will be finalized and put out to competitive bid. Once a contractor is selected, the Turf Project's plans, specifications, and construction contract will be submitted to the City Council for approval as part of the standard contract and purchasing approval procedure.

This matter was reviewed by Deputy City Attorney Kendra L. Carney on June 10, 2015.

FISCAL IMPACT

Synthetic turf fields can provide financial savings through reduced water use, reduced maintenance and longer field lifespans, thus saving long-term infrastructure investments. The City Council approved \$3.5 million in one-time funding for the Turf Project in FY14 and FY15. Maintenance of synthetic turf fields will be budgeted each year as a part of existing field maintenance operations.

SUGGESTED ACTION:

Approve recommendation.

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Respectfully Submitted,



STEPHEN P. SCOTT
MANAGER
BUSINESS OPERATIONS BUREAU

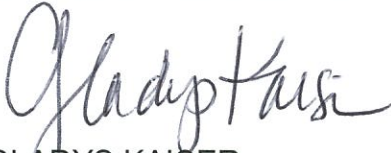
APPROVED:



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MANAGER
RECREATION SERVICES BUREAU

GC:HO:GK:SS:MR

Attachments:

Attachment 1: D.A. Hogan & Associates, Inc. Memo
Attachment 2: Turf Infill Alternatives