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MEMORANDUM

To: Mayor and City Council
From: Brent Walker, Parks and Recreation Director
Date: December 12, 2016
Subject: Presentation on Artificial Turf vs Natural Turf for Athletic Fields

ITEM DESCRIPTION

During the discussions of the land purchase and intergovernmental agreement between the City and the DeKalb County Board of Education, a concern of field usage and upkeep was raised. One potential option to minimize wear and tear on the field and increase the playable hours of the facility is to install artificial turf in place of natural grass.

There are benefits to both natural and artificial turf. While artificial turf does maximize the playable hours of the fields it comes at a substantially higher cost for installation and replacement. Also the standard lifespan of an artificial turf field is 10 years before it would need to be replaced. If Council chooses this option, there will be the cost of replacing the field surface at least once during the 25 year term of the IGA.

Natural grass fields are much less expensive to install but do have a greater cost for annual maintenance. Also, times of rest for the grass are required to keep the fields at an optimal condition. Inclement weather can also decrease the playable hours on natural grass fields.

Attached you will find data that shows the costs associated with installation and upkeep for both types of surfaces.

REQUEST

Staff respectfully requests that Council provide direction on what type of field surface to install at the new baseball facilities to be built at Peachtree Charter Middle School.

Natural Turf vs. Artificial Turf Analysis

Natural Turf Installation & Maintenance Costs over 10 Years

Installation

\$3.75 per sq ft x 198,300 sq ft = \$743,625

Maintenance

\$43,500 per year x 10 years = \$435,000

(includes mowing, spraying, fertilizer, edging, seeding, aerifying, top dressing, irrigation, field paint and sod replacement in worn areas.)

Total \$ 1,178,625

Artificial Turf Installation & Maintenance Costs over 10 years

Installation

\$8 per sq ft x 204,300 sq ft (includes batting cages and bull pens) = \$1,634,400

Maintenance

\$12,000 per year x 10 years = \$120,000

(includes spraying disinfectant chemical once per year, sweeping fields 1-2 times per month with field groomer made for artificial turf and spreading infill pellets 1-2 times per year or as needed.)

Total \$ 1,754,400

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Play Hours per week

Natural Turf

45 hours x 16 weeks (summer usage) x 10 years = 7200 hours - 1440 hours (20% reduction for weather and maintenance) = 5,760

70 hours (25 hours of school usage + 45 hours of DSB Usage) x 36 weeks x 10 years = 25,200 - 5040 (20% reduction for weather and maintenance) = 20,160

Total over 10 years = 25,920 hours

Artificial Turf

45 hours x 16 weeks (summer usage) x 10 years = 7200 hours

70 hours (25 hours of school usage + 45 hours of DSB Usage) x 36 weeks x 10 years = 25,200

Total over 10 years = 32,400 hours

Cost Analysis Breakdown

Artificial Turf will cost an estimated \$575,775 more than Natural Turf over a 10 year lifespan and will yield an additional 6,480 playable hours

Artificial Turf Field Examples:



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