

**GREATER BOCA RATON BEACH & PARK DISTRICT**  
**MINUTES OF A REGULAR MEETING OF THE BOARD OF COMMISSIONERS**  
**SUGAR SAND PARK - 300 SOUTH MILITARY TRAIL**  
**January 20, 2015**

The MEETING was called to order by CHAIRMAN Vogelgesang at approximately 5:15 p.m.

**COMMISSIONERS PRESENT:** Steven M. Engel  
Dennis R. Frisch  
Robert K. Rollins, Jr.  
Earl L. Starkoff  
Susan Vogelgesang

**CHANGES TO AGENDA:** None

**PUBLIC REQUESTS:**

Michele Peel

7391 NE 8<sup>th</sup> Court, Boca Raton

Ms. Peel, Friends of Gumbo Limbo liaison to the District, advised that the Friends provided input to the District and Miller Legg regarding the possible incorporation of Ocean Strand into the planning for the Red Reef Park Master Plan Update. The focus of the Friends on the Red Reef Park Master Plan is how to enhance the ability of Gumbo Limbo to achieve its mission and the goals set forth in the Strategic Plan. Elements that the Friends would like to see incorporated include a new and permanent location for Sea Turtle Rehab; possibly relocating the Conservation Program; and expanding education facilities to Ocean Strand.

**APPROVAL OF MINUTES OF PREVIOUS BOARD MEETINGS:**

**MOTION** was made by Commissioner Engel and seconded by Commissioner Frisch to approve the minutes of the regular meeting of January 5, 2015.

*Discussion:*

Commissioner Rollins referred to his comments on page 3, under *Athletic Field Usage*, and requested that the paraphrased first sentence be substituted with his direct quote: "Commissioner Rollins felt that there is obviously something wrong between our expectations and the product that is being delivered."

**MOTION UNANIMOUSLY APPROVED**

**REGULAR BUSINESS:**

**1. Dialogue with Motre on the Cost Benefit Analysis: Natural vs. Artificial Turf Report**  
Tinu Pena, Principal of Motre and Jeffrey Crews of Stantec gave a presentation and overview of the subject report which they jointly issued. Topics included Existing Condition & Turf Composition; Health Concerns [injury issues and footwear]; Field Availability & Usage; Lifecycle Cost Analysis; and Recommendations. A dialogue with the Board ensued.

Board members raised the following questions:

Commissioner Starkoff asked if a field “in general” (not necessarily Patch Reef Park), constructed of Tifway Bermudagrass and incurring many hours of usage, would result in the same field conditions as reported in the presentation. Ms. Pena responded “that is correct”.

Commissioner Frisch inquired about the pros and cons relative to painting and striping fields for different sports on artificial turf. Mr. Crews replied that most cities are striping fields in seams that are sewn in.

Commissioner Rollins commented that he heard if lines are painted, during the removal process blades of grass may get brittle and break off. This may also be a cause for replacement areas on the field. Mr. Crews responded that he was aware of difficulties in completely removing all of the paint from the turf, but he has not heard about issues relating to the breakdown of the turf due to the removal process.

As a follow-up Commissioner Frisch asked if there were any corollary problems with the multiple number of seams from the different colors of lines. Mr. Crews stated that it varies between turf manufacturers as they have different methodologies for installing the lines: some sew in the lines and others might glue in the lines. His recommendation would be to go with sewn in seams.

Turf temperature issues were of concern to Commissioner Engel. He asked about the difference in the temperature above the field as opposed to the actual artificial turf. Specifically, how far above the field was the temperature measured. Ms. Pena answered that the temperature experiment was set up and measured in the 2 to 5 ft. range noting that children playing on artificial turf would experience the heat effect more than adults.

Referencing health concerns [carcinogens] Commissioner Starkoff asked if there was a time line for Epidemiological evidence to arise. Mr. Crews stated that to his knowledge, there is no on-going study. Ms. Pena added that there is no conclusive evidence on crumb rubber vs. cancer.

Commissioner Frisch asked if the organic infill material was affected by mold/mildew, water retention or pests. Ms. Pena offered that the product literature provided to her did not address those problems.

As a follow-up, Commissioner Starkoff inquired as to how long the alternative infill systems have been in existence. Mr. Crews replied, in the United States a couple of years; in Europe over 8 years.

To cool the artificial turf, Commissioner Vogelgesang inquired about the use of a “misting system”. Ms. Pena responded that due to Florida’s high level of humidity, a misting system would not be effective.

Commissioner Frisch asked about damage to the artificial turf from different shoe types. Mr. Crews stated that as long as players are using actual turf cleats, and not using baseball cleats that have metal studs, none of the manufacturers have any concerns about damage.

In addition, Commissioner Starkoff, referencing the Penn State Traction Study asked if data was available regarding the sale of different types of shoes by sport. Mr. Crews did not have that information.

Referencing the section "Field Availability & Usage", Mr. Koski asked if the reported Patch Reef Park available hours (2,016) and scheduled hours (1,796) take into consideration "cancellations". Ms. Pena responded it does not.

Mr. Koski stated that the peak time demand only appears to be able to be resolved with the provision of additional fields, rather than a field that can be used in a certain weather condition.

Commissioner Engel inquired about the anticipated growth and usage demand of the fields over a 3 to 8 year period.

Commissioner Starkoff offered that the population changes of the District in the last 15 years have remained fairly stable in terms of children ages 5 to 18. Additionally, participation numbers in the various sport groups have also remained fairly stable, although it has increased somewhat with the addition of other sports. He noted that there are only 11 or 12 weeks of peak demand

Ms. Pena summarized the project costs for implementing and maintaining natural grass and artificial turf fields at Patch Reef Park. Based on the equivalent uniform annual cost, assuming an 8 year breakeven analysis, the natural turf system is the economical option in comparison to the other alternatives. Extended to a 10-year period, a breakeven point exists between natural grass and artificial turf (crumb rubber) at approximately the 6 year period.

Commissioner Frisch noted that one of the artificial turf drawbacks was the need for additional infill to keep the turf system functioning as designed. He asked if this cost was factored in the cost of maintenance. Ms. Pena provided the additional cost factors which were negligible amounts.

Based on usage cost per hour only, the breakeven point exists between natural grass and artificial turf (organic infill) at 3.5 years.

Ms. Pena made the following Recommendations: 1) gradually integrate artificial turf which addresses usage demand and health concerns. 2) Do nothing –seek alternatives to meet increased capacity. 3) Institute Agronomist recommendations to keep the fields healthy 4) Explore the feasibility of reconfiguring one of the existing baseball fields to include a rectangular field.

Commissioner Engel inquired if the herbicides and pesticides currently used by the City are considered carcinogenic and if there are alternative products. Mr. Crews stated he was unfamiliar with current City practices but noted that there is a growing move towards a "greener" style of maintenance. Effectiveness would be an issue, and the cost of maintenance could increase.

Commissioner Rollins felt that the presentation had reaffirmed what he concluded by his own studies and visits to other facilities and fields and highlighted some of the areas where improvements could be made if sports turf was not considered. The issue with the NBC study was overblown as there is no evidence to support it. The report was helpful in supporting his feelings of what probably needs to be done.

Mr. Koski felt that the District had reached somewhat of a basic conclusion that more facilities are needed to satisfy demand at peak times. If that assumption is correct, implementing the gradual integration of artificial fields would still require additional facilities to satisfy that peak demand. He posed the question “what do you need to do to satisfy peak demand or do you want to?”

**2. Maintenance Policies**

This item was deferred.

**APPROVAL OF INVOICES:**

The Board was furnished a revised invoice disbursement list.

**MOTION** was made by Commissioner Frisch and seconded by Commissioner Rollins to approve the invoices as presented totaling \$2,436,940.56.

*Discussion:*

The disbursement list included the final payment to the City of Boca Raton for September 2013/2014 operation and maintenance in the amount of \$2,411,100.77.

Commissioner Starkoff took issue with the fact that to date, the District has not received the approximate \$2 million beach renourishment reimbursement from the City. He suggested holding back the payment for the final September 2013/2014 operation & maintenance invoice until the status of the anticipated reimbursement is determined.

**MOTION UNANIMOUSLY APPROVED**

Mr. Merv Timberlake, District Financial Advisor, provided a calculation indicating District payments and adjustments in support of the \$2,411,100.77 disbursement to the City for final September 2013/2014 operation and maintenance.

**REPORTS AND DISCUSSION ITEMS:**

**Executive Director**

*Sugar Sand Park Science Playground Renovation & Improvement Project*

Mr. Koski advised that he has received 100% drawings from Leathers and Associates for the subject project. The estimated project construction completion time is between 8 and 9 months.

**District Counsel - None**

**Commissioners - None**

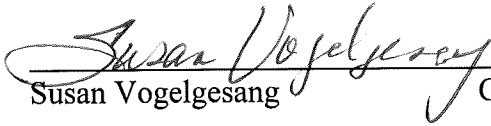
**FUTURE AGENDA ITEMS:**

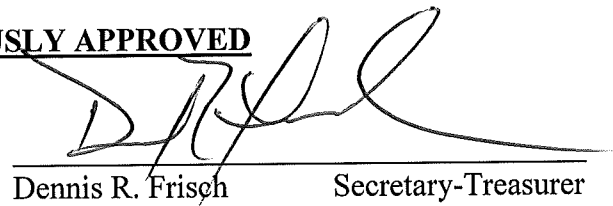
February 2 - Public input on Artificial Turf vs. Natural Grass Report

**ADJOURNMENT:**

**MOTION** was made by Commissioner Frisch and seconded by Commissioner Starkoff to adjourn the meeting at 7:05 p.m.

**MOTION UNANIMOUSLY APPROVED**

  
Susan Vogelgesang Chairman

  
Dennis R. Frisch Secretary-Treasurer