

**GLENBROOK HIGH SCHOOLS**  
**District Business Office**

**TO: Dr. Riggle**

**FROM: Kimberly L. Ptak**

**DATE: November 14, 2011**

**RE: DISCUSSION/ACTION: Turf Field Proposal**

**Recommendation**

It is the recommendation of the administration that the board approve installation of artificial turf to replace the natural grass in the main stadiums at both high schools in the next two years. The estimated cost of the projects is \$3.5 million and includes the following:

1. Synthetic surfaces - \$1,050,000
2. Irrigation systems - \$80,000
3. Site work/drainage - \$880,000
4. Running track replacement as required - \$615,000
5. Water detention according to MWRD permits - \$370,000
6. Fees and contingencies - \$505,000

The administration further recommends that the projects be funded in the following manner:

7. Athletic Booster Club Donations - \$500,000 (\$250,000 per school over a four-year period)
8. Small Building Project Donation - \$500,000 (\$250,000 per school over a three-year period)
9. School Community Donation - \$400,000 (To be coordinated by the building principals)
10. Capital Projects Reserve - \$900,000
11. Remaining Build America Bond Funds - \$1,200,000

At the October 24, 2011 board meeting, the Board asked for data on the average cost incurred, per year, to maintain a natural grass field vs. an artificial turf field.

**COST OF NATURAL GRASS VS. TURF – Over a 10 and 20 year period – PER FIELD**

	<u>NATURAL GRASS</u>	<u>TURF FIELD</u>
<b><u>Cost over a 10-year period:</u></b>		
Upfront Cost	\$300,000 – drainage, irrigation, sod	\$1,150,000
Labor (10 year period)	\$350,000	\$30,000*
Water	\$50,000	\$0
General upkeep (non labor)	<u>\$100,000</u> –seeding, aerating, paint, fertilize	<u>\$0</u>
TOTAL – 10 years	\$800,000	\$1,180,000
<b>Difference between turf and grass</b>		<b>\$380,000</b>
<b>Incremental cost per year</b>		<b>\$38,000</b>
<b><u>Cost over the next 10-year period</u></b>		
Resod/Recarpet	\$120,000	\$550,000
Labor (10 year period)	\$350,000	\$30,000*
Water	\$50,000	\$0
General upkeep (non labor)	<u>\$100,000</u> –seeding, aerating, paint, fertilize	<u>\$0</u>
	\$620,000	\$580,000
20-year cost	\$1,420,000	\$1,760,000
<b>Difference between turf and grass</b>		<b>\$340,000</b>
<b>Incremental cost per year</b>		<b>\$34,000</b>
* <u>Labor</u> – this is not a true cost savings, as the fte currently dedicated to the main stadium at GBN and GBS will be repurposed to focus on maintaining the practice fields and other natural grass areas.		

Information shared at the October 24, 2011 board meeting -

### **BACKGROUND**

Over the last five years, artificial fields have been discussed at several board meetings, facility committee meetings and finance committee meetings. In general, the consensus of the administration and the board, has been in favor of artificial fields from a usage, safety and environmental standpoint. The hesitancy has been the cost of the fields.

### **USAGE CONSIDERATIONS**

Currently the stadium fields at GBN and GBS are used exclusively for football, soccer and lacrosse competitions – approximately 37 games per year. In the event of heavy rain, these games are moved elsewhere or rescheduled. It is estimated that only 130 students per school play on the main field every year. The stadium field at each school is used only 4% of the estimated time allowable. Due to the extremely low usage, the average cost per hour of use is approximately \$470 or \$2,200 per competition.

	<b><u>Current Usage w/Grass Field</u></b>	<b><u>Projected w/Artificial Field</u></b>
Hours Used	170	3,500+
Usage Percent	4%	100%
Cost Per Hour	\$470/hour	\$49/hour
Cost Per Competition	\$2,200	\$225
# of Students Impacted	130	All students + community ~ 3500+

### **Current Concerns**

- ✓ The stadium fields are ONLY used for football, soccer and lacrosse competitions meaning only 130 students per school benefit from using the field. Games have been rescheduled or moved due to inclement weather causing usage to be even lower.
- ✓ The stadium fields sit unused during the summer so the grass can be properly irrigated, fertilized and have time to grow.
- ✓ All practices are held on practice fields unless weather is bad, then the practices are moved to the field house or other locations to protect the practice fields. When this happens it is a domino effect as the cheerleaders are moved from the field house, clubs are moved from gyms etc. At GBS lacrosse and field hockey are sent off campus to practice.
- ✓ Practice fields cannot be properly maintained as they are always in use and cannot be taken out of use for rest on a rotational basis.
- ✓ PE never uses the stadium field and, depending on the condition of the practice fields are sometimes not able to use the practice fields. As a result, PE spends more time indoors

and needs to be extremely flexible as it is common for them not to know their scheduled location until that morning. This can impact the quality of the curriculum as the location dictates the instruction.

- ✓ The bands rarely uses the stadium fields. Instead, they practice in the parking lots which impacts traffic flow and is not an ideal condition for the band.
- ✓ The school campuses are landlocked preventing them from adding additional fields to increase usage. The only solution to allow 100% participation on a stadium field is an artificial surface.

**FINANCIAL CONSIDERATIONS**

The cost of an artificial field is approximately \$1.75M per school.

<b><u>ARTIFICIAL TURF FIELD</u></b>	
Site Work/Drainage	\$440,000
Irrigation System	\$40,000
Synthetic Surface	\$525,000
Fees and Contingencies	\$145,000
	\$1,150,000
Two Fields	\$2,300,000
<b><u>ADDITIONAL INFRASTURE – part of facility master plan</u></b>	
Running Track – GBN	\$390,000
Running Track – GBS	\$225,000
Detention - GBN	\$120,000
Detention – GBS	\$250,000
Fees and Contingencies	\$215,000
	\$1, 200,000
	\$3,500,000

Every 10+ years the “carpet”, which is the backing and artificial blades, need to be replaced. The infill is removed, cleaned and reused. This cost is approximately \$550,000. The annual operating cost for an artificial surface is estimated at \$3,000/year.

**NEXT STEPS and TIMELINE**

November 14, 2011  
Fundraising

BOE Approval of Concept and Commitment to

**IF APPROVED**

December, 2011 – September, 2012

- Fundraising w/Community
- Discussions with Village of Northbrook on Shared Detention
- Complete MWRD for Glenbrook North Detention
- Turf Field Surface Material Discussions

September 1, 2012

Fund Raising Efforts Complete

September, 2012 (1<sup>st</sup> meeting)

BOE Meeting Discussion

September, 2012 (2<sup>nd</sup> meeting)

BOE Meeting Approval of Project

October – December, 2012

Bid Specifications

March, 2013

Facility Committee – Review of Bids

March, 2013

BOE Meeting – Review of Bids

April, 2013

BOE Meeting – Approval of Bids

May – August, 2013

Construction and Project Completion