#### CITY OF NEWTON

#### IN BOARD OF ALDERMEN

### JOINT MEETING OF PROGRAMS AND SERVICES AND PUBLIC FACILITIES COMMITTEES REPORT

#### WEDNESDAY, SEPTEMBER 5, 2007

Present: Ald. Johnson (Chair), Hess-Mahan (Vice Chair), Baker, Coletti, Lipof, Merrill, Parker, Sangiolo; Present from Public Facilities Committee: Ald. Schnipper (Chair) Weisbuch, Lappin, Albright, Gentile, Yates, Salvucci; Absent: Ald. Mansfield

Also Present: Ald. Samuelson, Harney

Others Present: Mayor Cohen, Dori Zaleznik (Chairperson, School Committee), Susan Heyman, Jonathan Yeo, Anne Larner, Reenie Murphy, Claire Sokoloff (School Committee Members), Dr. Jeff Young (Superintendent of Schools), David Naparstek (Health and Human Services Commissioner), Karyn Dean (Committee Clerk)

**Note**: The Programs and Services Committee met to discuss the first two agenda items. They then joined with the Public Facilities Committee to discuss the synthetic turf items.

Re-appointment by His Honor the Mayor

#249-07 <u>KATHERINE HOWARD</u>, 84 Fenwick Road, Newton re-appointed as a

member of the URBAN TREE COMMISSION with a term to expire July

30, 2010 (60 days 10/12/07). [08-07-10 @3:26PM]

**ACTION**: APPROVED 6-0 (Ald. Coletti, Parker not voting)

<u>NOTE</u>: The Committee voted approval of Ms. Howard's appointment and noted that she had been doing a very fine job. There was a question as to whether there was a vacancy on the Commission and the Committee Clerk was asked to find out what the process was to get that position filled. Katherine Howard was contacted as she is the Chair of the Commission. She said that there were at least 3 positions available at this time. They had one person who has been volunteering with them and they will probably suggest that she join them. She said that they also had a couple of other leads for good candidates and said that they would welcome any suggestions as well. Their process is that they generally suggest that interested people come to meetings on a volunteer basis to see if there is a good fit.

#### REFERRED TO PROGRAMS & SERVICE AND FINANCE COMMITTEES

#271-07 HIS HONOR THE MAYOR requesting an appropriation of \$20,669 from

FY'08 Budget Reserve to fund payments to the East Middlesex Mosquito Control Project (EMMCP) for mosquito larva control in catch basins to

control the spread of West Nile Virus. [8-28-07 @4:13 PM]

ACTION: APPROVED 6-0 (Ald. Coletti, Parker not voting)

**NOTE:** The Committee voted approval of this item and noted it was a program that was implemented each year to control the mosquito population in the interest of public health.

#### REFERRED TO PROGRAMS & SERVICES AND FINANCE COMMITTEES

#86-07 <u>HIS HONOR THE MAYOR</u> requesting an appropriation in the amount of

\$2,300,000 from bonded indebtedness for the purpose of funding the construction of a new synthetic turf recreation complex at Newton South

High School.

[03-13-07 @ 7:04 PM]

**ACTION:** PUBLIC FACILITES HELD 7-0 (Ald. Mansfield absent)

**HELD 8-0** 

#### REFERRED TO PROGRAMS & SERVICES, PUBLIC FACILITIES, AND FINANCE COMMITTEES

#276-06(2) HIS HONOR THE MAYOR requesting an appropriation in the amount of

\$1,800,000 from bonded indebtedness for the purpose of funding the construction of a new synthetic turf recreation complex at Newton South

High School.

**ACTION:** PUBLIC FACILITIES HELD 7-0 (Ald. Mansfield absent)

**HELD 8-0** 

#### NOTE:

#### **Introduction of Joint Meeting**

The Programs and Services Committee joined with the Public Facilities Committee for discussion of the two turf items. A public meeting was held and was very well attended. Ald. Johnson introduced the items and explained the format for the public meeting. She asked all present, who would like to have the opportunity to speak, to use the sign-up sheets. She also asked that all present be respectful of the forum and allow speakers to do so uninterrupted. Mayor Cohen was then asked to begin his opening statement.

#### **Mayor Cohen's Statement**

Mayor Cohen said that he was speaking in favor of both docket items and respectfully urged the Committees to act favorably upon them. He spoke of the relationships that are formed and the community building that happens on the fields in Newton. He noted that the turnout at the meeting was remarkable because it was rare to see such a strong show of support on any particular item. To him, this illustrated how strongly the community felt about supporting this project. He said that they had an opportunity to do something better – to provide the students and athletes with a surface that was safe, usable, and durable. He said that a few years ago there really was not a good alternative to natural turf but now, the studies have shown that this new type of turf surface is as safe, or safer, than any natural turf surface. Those studies compare very highly maintained and manicured natural turf fields to the artificial turf fields. In Newton, the natural turf fields have their flaws and the technology of this new kind of surface could provide a safer experience for the athletes.

He said there were some very obvious truths in that the fields behind Newton South High School simply did not work. They were out of commission for much of the year and therefore a resource whose potential was not being realized. He said that by fixing those fields with artificial turf, the fields could be made available for a tremendous part of the year. He pointed out that drainage was a huge problem and a considerable portion of the funds in this proposal were to fix the drainage in the fields. Once the drainage issues were dealt with, you then have a resource that if covered with the same type of turf, would allow greater playability on the fields. He said it was very easy to wear out a natural turf field by overuse. Having 3 of these fields would help preserve other natural turf fields in the city because they could mitigate the overuse of those fields.

The Mayor said a high school team should be able to play their home games on their home fields. The teams have not been able to do that due to the all too often unplayable conditions of the fields. Artificial turf would ensure the teams could play on their home fields. This will also help the private leagues that use fields around the city to play. From the point of view of cost effectiveness, drainage, quality of the City's programs, and safety, he felt this proposal made sense. He said that the Board would be doing something that would benefit the City for decades to come. He felt that when the fields were built, it would be a point of pride to have been in support of them.

#### Additional Appropriations

The Mayor said they would like to include aluminum stands for the stadium and in dealing with the track, they are recommending a more extensive treatment of the track and he endorses both of these items. He said he will be providing the Board with the necessary amendments that will increase the appropriation by approximately \$400,000. He thanked the Committees for their time in listening to his comments.

#### Presentation by Ted Tye of NEWTURF

Ted Tye of NEWTURF (Newton Committee to Promote Synthetic Turf Fields and Track) delivered a power point presentation to the Aldermanic Committees.

He said that NEWTURF was a group of concerned citizens and parents that was formed in 2004 to develop some safe, usable fields in the City. After some study, it became apparent to them that Newton South High School was the right site as it was the largest field complex in the City, it was unsafe, and it was very frequently unusable because of the poor conditions of the fields.

#### History of Project

The group went to a couple of the youth sports groups for seed money (\$15,000) to hire a professional engineering firm with extensive experience in designing both turf and grass fields (Geller Sport/Stantec Engineering). They did a very extensive study that looked at the fields, developed the preliminary engineering cost estimates and have provided them with very professional advice. The project was recommended by the Community Preservation Committee but was tabled when there was a question whether CPA money could be used for this purpose. Therefore, they are back in front of Programs and Services and Public Facilities Committees to ask for their support.

#### Benefits of Project

Mr. Tye went on to describe the groups support of this project. He outlined in detail the safety, environmental, and cost benefits of this project. He also pointed out that there were 100 turf fields in the greater Boston area including most of the Dual County League Schools (only Boston Latin and Newton do not currently have turf fields). He outlined how often the Newton teams lost on-campus slots for field use due to unplayable conditions (712 for youth sports, and 81 for Newton South freshmen and JV teams. Newton South teams had 80 games/meets and 502 practices off campus.) This was significant because it made it difficult for student athletes to get to the alternate field if they didn't have transportation. 15% of all games against other schools had to be cancelled and were not made up.

The proposal for implementation was explained. This would include geotechnical testing of the field, a fully engineered drainage system, re-grading of the entire field complex, construction of baseball, softball and competition fields, repair of track including subsurface conditions, new running surface and areas for field events, and landscaping and fencing.

#### Drainage

Mr. Tye said that the new drainage system was really at the heart of the proposal. The pre-testing was very important to determine the groundwater and soil characteristics to design accordingly. The turf provided a very efficient, pervious drainage surface. Instead of the water ponding as it does now, the turf was designed to let the water flow through the surface. Most of the system was below ground. The idea was that the water flowed into a stone layer and allowed the water to be collected in perforated pipes that run in a grid below the field. The pipes were engineered to provide storage for the water and the outlet of that water is then controlled. In a storm, on the current field, the water runs off the field, some collects on the field, some of it goes to the wetlands, some of it might find a catch basin. In this system it will be collected and released gradually so it does not flood the system the way it can happen today. He said that the engineers they worked with designed on a landfill in Cambridge, over a pond in Belmont, and over a landfill in Millennium Park in Boston. He said this was established engineering and it can be done. There are standards of engineering that will be observed and overseen by the city engineer to make sure this all works as advertised. A diagram is attached showing the layers of the system.

#### Why Not Grass?

Mr. Tye explained why the group concluded that grass would not work in this setting: overuse, maintenance costs, drainage problems and, therefore, wasted investment of funds. Fixing the drainage and staying with grass would not work due to the overuse, and use during the wet seasons even with the best maintenance. He pointed out that Gillette Stadium had the most expensive grass system one can create – underground heaters, underground drainage, and a top notch maintenance crew. The middle of last season the

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Patriots had to switch to turf although they would have preferred to stay with grass. They had to change because they could not maintain it well enough. He noted that field was only played on 20 times a year and the Newton South fields were played on about 20 times a day.

#### Football Field

He also said that putting turf on the football field would not work due to the fact that the dimensions would be unsuitable for other sports (not wide enough for soccer or lacrosse, but may work for field hockey), the change would require rebuilding of the track, there was no ability to expand due to the adjacent wetland and flood plain area, spring sports conflict with track and field, and it would add over \$1M to the cost of the project.

#### Budget

The group estimates the project budget to be a about \$5M with youth sports groups committing \$500,000.

#### Maintenance Costs

Over 12 years, the cost of maintaining 3 natural turf fields is \$590,148 (according to Newton Parks and Recreation Dept.) The cost for maintaining 3 synthetic turf fields over 12 years is \$108,000. (Chart attached)

#### Environmental and Injury Concerns

The group had also found no evidence of environmental problems associated with synthetic turf and provided a list of studies supporting this conclusion (attached). He outlined environmental benefits such as no need for chemicals, weekly painting, watering (about 2 million gallons/year), or gas mowers/equipment, etc. Animals are not attracted to the synthetic turf thereby eliminating feces on the field.

He said there had been concerns about injuries on synthetic turf and found that the American Journal of Sports Medicine and NCAA did a 5-year comparative study that concluded there was an equal injury rate for turf as compared to well maintained natural grass. He pointed out that the Newton South fields are filled with ruts and holes and really can not be considered "well maintained". Grass surfaces resulted in higher lost injury time, concussion rates, and ligament tears. Synthetic turf surfaces resulted in more skin abrasions, minor injuries, and increased fatigue potential (due to enhanced game speed). He pointed out that Newton South fields have resulted in a disproportional number of injuries, including breaks and serious sprains due to unsafe conditions.

#### Neighborhood Concerns

As for neighborhood impact concerns, Mr. Tye said that the complex would have no lights (this was a commitment that was made early in this process), only occasional PA system use, plenty of parking, tree and fence buffers, pleasant aesthetics and the construction of a drainage system.

#### Conclusion

He concluded that the turf project would reclaim a large, unsafe and underutilized area for public use. It would also bring parity to the 2 high schools, take pressure off other fields in the City, be cost efficient based on use, and be safe for the players and the environment. There are an estimated 5,000 residents who either play, watch or participate in school programs on these fields on an annual basis. This would be the single largest recreational project that the City has ever undertaken. He urged the Committees to take action as soon as possible and thanked them for their time.

A copy of the presentation is attached to this report and can also be found on the City's website attached to the electronic version of this report.

#### **Committees Questions**

#### Replacement

<u>Ald. Lappin</u> asked if there was another table that included replacement costs of the turf over 12 years. Mr. Tye said the replacement time table was between 12 and 15 years and even with replacement costs, he said it was still more cost effective. Mr. Tye has provided a cost comparison which is attached to this report.

<u>Ald. Baker</u> asked if replacement involved just the surface or the entire substructure as well. Mr. Tye said that the surface only needed to be replaced. The majority of the money in the current budget was for the drainage system and everything that goes below the grade. All of that stays forever. The sand and rubber mixture holds the turf in place and that is reclaimed and reused during replacement, therefore, only the top turf surface is replaced.

<u>Ald. Hess-Mahan</u> asked what happened to the used synthetic turf when it was replaced. Mr. Tye said it was shredded and land-filled. The recycled rubber was an important part of this process, so it was taking some recycled materials and putting them onto the site. Every 12 years that surface does need to be shredded and disposed of and he said it's probably a lot less than the wall-to wall carpeting that gets put out on the City streets each week, and it will only be once every 12 years. Hopefully, there will be better solutions for disposal when the time comes to replace the turf.

#### Football Field/Track

<u>Ald. Sangiolo</u> asked about the football field and track. She wanted to know what the breakdown cost would be to redo just the track (leaving the football field intact). Mr. Tye said it would be about \$245,000. Ald. Sangiolo said that would not bring the track up to where it ultimately should be. Mr. Tye said that if they took out the football field and rebuilt it as a multipurpose field with a new track around it would add another \$1M.

#### Vandalism

<u>Ald. Weisbuch</u> asked about the problem of vandalism. Mr. Tye said there was a survey that was done in which that was a question and it was found not to be a significant issue. It is an issue on the grass fields as Ron Lanham has said that during the school year, cars have gone out on the existing fields and chewed them up. Most of the communities with turf fields have been able to allocate use of the fields by permit as well as making some times available to the community for general use. He said that fencing and locking the fields at dusk were the most important things to do to prevent vandalism.

<u>Ald. Hess-Mahan</u> asked if Mr. Tye had spoken with the people in Arlington about how much it was going to cost them to repair the vandalism at their synthetic football field. Mr. Tye said he had not

#### **Team Displacement**

<u>Ald. Baker</u> was also concerned about where the teams would play during construction of both the North and South fields, were that to happen. Mr. Tye said that the football field will stay in service for Newton South and North teams, as well as middle schools teams and Trinity Catholic. All varsity teams were playing off campus now. NEWTURF had discussions with Fran Towle and, hopefully, the teams will feel the pinch for only one season. But Mr. Tye said he believed the end justified the temporary pains.

#### **Drainage**

<u>Ald. Baker</u> said he'd like to understand the project in terms of drainage. Newton South was a whole area that had a history with water and drainage problems. Mr. Tye said that it's been a very important part of the discussion with the City engineering department as well as the engineering firm. There was no drainage system today which was part of the problem. That was why controlling the water and its outlet was so important. The Conservation Administrator has also been party to a number of meetings as well on this issue.

<u>Ald. Schnipper</u> said that since concerns about synthetic turf at Newton North were never expressed, she assumes that the concern with South is the field's proximity to wetlands. She wanted to know how that would be protected. Mr. Tye said that any synthetic turf field's runoff eventually flowed into some sort of wetland or river or groundwater. At Newton South there are wetlands located at the far side of the football field in the meadow area. The groundwater will run in that direction. There were at least 2 studies that he said he provided to the Aldermen that have studied the impact of draining through the rubber material. Those studies have shown no impact. He said it was the Redman Washington Study. It has not been proven to be an issue in any location. He also said that the EPA actually lists the rubber crumb material as recommended for use in playgrounds and athletic field installations.

#### **Neighborhood Impact**

<u>Ald. Baker</u> also was concerned that in terms of neighborhood impact, the actual use of the fields would go up when conditions improved which would increase traffic. Mr. Tye said

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they have reviewed that with the City's traffic engineer and there will be plenty of on-site parking to handle it. The traffic/parking would be far less than on a typical school day.

#### **Heat on Turf Surface**

Ald. Johnson said that several members of the Committee took a field trip to Lasell College to look at their synthetic turf fields. The people at Lasell said that in the summer, the surface does get hot and they practice on the grass fields. She wanted to know how they can use the fields in the summer if that is an issue. If the fields aren't being used, then they don't collect the fees. Mr. Tye said that Gail Associates talked to several communities to discuss this issue. The synthetic surface does heat up more than the natural grass. The rubber and sand mixture has black rubber which attracts the heat. It is not a significant source of heat, however. There was a survey of 8 athletic directors in the area asking if the heat had an impact on their fields and all 8 said it was not. Boston College has a field that is surrounded by stands with no airflow in it. They have found that in the middle of August, it does get pretty hot out there. Because of that they have a sprinkler system to cool it down prior to the team taking the field. Geller Sport said that when they design these fields in hotter climates they put a water cannon on it to cool it down in the summer, but in new England that was not a significant issue. Maybe on an extremely hot day in August it would mean the field doesn't get used for an hour or two. The major use of these fields will be fall and spring and will not be an issue during those times.

#### **Funding**

<u>Ald. Yates</u> told Mr. Tye that it has been their custom in big projects to have some of the preliminary steps taken first and the design done before they approve the funding itself. He asked if they were to approve the money to get the tests and the design done, would Mr. Tye see that as any obstacle to the completion of the project? Ald. Yates said the drainage system sounded great, but it's not backed by detailed designs showing that it can actually be done. Mr. Tye said he's been involved in much more complicated drainage problems than this one and feels confident this can be dealt with. If the City goes through the testing and design and finds that it shouldn't go ahead, the stop sign can go up. He said they've been at this for so long that it seems it's time for this to go ahead.

#### **Questions to the Mayor**

<u>Ald. Albright</u> said that with all they've seen it's hard to argue that something shouldn't be done about the Newton South fields. There are schools in the City where you can't see through the windows, schools that are in the lowest groups according to the State, and the fire stations need repair. She asked the Mayor where this project falls in the list of priorities. He said the most appropriate forum for those questions would be before the Long Range Planning Committee.

The Mayor also said that funding for these fields was part of the overall funding plan that has been looked at by the bonding council as was presented to the Board at the time of the Newton North discussion. This has been a longstanding commitment. He said she was right that they obviously have to work on the fact that their capital plan in the City has been ignored for 2 generations, and they are now taking on the enormous task of

looking at those issues. He said these are issues that they did not create but were incumbent upon us to solve. The fact that those issues exist should not preclude this very important project from happening. The Mayor felt this was going to have a tremendous positive impact on literally thousands of people a year and be a source of pride for decades to come.

<u>Ald. Johnson</u> asked the Mayor about an article that Priscilla Leish wrote for *The Newton Tab* (sent out in last week's packet). She asked that he have some responses to the list of questions that Ms. Leish had at the end of the article. (Article attached to this report). He said he would look into that list and have answers prior to the next meeting.

#### PUBLIC COMMENT

#### **In Need of Further Information**

<u>Stephen Farrell, 30 Winston Rd.</u> He said that he was not opposed to having turf fields on the Newton South site. He just felt that the current plan was not the best plan. The issue of drainage was of utmost importance. A letter that Mr. Farrell sent to the Board of Aldermen outlining his concerns is attached to this report.

Jeff Seideman, 53 Eliot Memorial Rd., President of the Newton Taxpayers Association. He said he is neither in favor, nor opposed at this point. He was concerned that there may be a lack of honest and accurate information. For example, he said the cost for maintaining the Newton South fields was \$90,000, as represented by Mr. Tye that evening. Two weeks ago, in the op-ed piece that Mr. Tye and Mr. Remy wrote in The Tab, it was \$50,000. He said that in emails with Mr. Remy, he learned that \$29,000 was for water costs. Mr. Seideman said that water did not have to come from the MWRA and therefore that cost could be drastically reduced. He pointed out that the actual cost per year that Mr. Remy said he got from Newton's Park and Recreation Dept. was \$21,000, not the \$90,000 that was represented that evening. He wanted to demand that accurate information be provided so that an educated decision could be made.

#### **Opposed to Turf Proposal**

<u>Guive Mirfendereski, 24 Carleton St.</u> He opposed replacement of natural grass fields with artificial turf fields at Newton South as well as any other sites in the City. He presented a copy of his opinions and a copy of information from the website synturf.org. A copy of these documents is included in the packet with this report.

<u>Louise Bruyn, 48 Glenwood Ave.</u>, Member of the Green Decade Coalition. She had concerns about the expense and the environmental impact. She said the Green Decade Coalition had sent a letter to the Board of Aldermen that asked for careful further study that included a span of 50 years, not 25 years. She was concerned about the disposal of this material and the long-term consequences in terms of contributing to the degradation of the earth. She felt drainage should be fixed first and hearing what the Charles River Watershed Association can recommend in terms of what can be done with the run off would be prudent.

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<u>Anatol Zuckerman, 17 Noble St.</u> He was opposed to the replacement of the fields with synthetic turf. A copy of his statement is attached to this report.

<u>Ellie Goldberg, 79 Elmore St.</u>, Mother and former soccer coach. She is more against than for the concept of synthetic turf. She felt there was a real problem of neglect to the infrastructure of the City, and she believed that taking shortcuts on funding projects was short-sighted. She said if they could look forward and have people working together on the maintenance of projects it would be more efficient and cost effective and produce the best results.

#### In Favor of Turf Proposal

Ron Remy, 440 Beacon St., Co-Chair of NEWTURF. He said his role has primarily been in finding out the facts about this process. He went on to reiterate the positive impact this project would have on the City, and rebutted the negative impact (cost, health risks, spontaneous combustion, risks of sand). He asked that people look to the studies and data that are available from independent sources, and ignore the industry sponsored work on both sides (turf industry/grass, fertilizer, sod industry). He referenced the National Institutes of Health and the EPA websites as good sources of information. He asked people to reach out to other communities who have adopted this approach to find out what their experience has been.

<u>Dori Zeleznik</u>, Chairman of the School Committee, and a parent. She also expressed the need for usable fields at Newton South High School, citing bad field conditions, and cancelled games due to same. As a infectious diseases person, she noted that there was no greater risk of infections from synthetic turf.

Jonathan Yeo, 152 Grove St., School Committee Member, parent, and Director of Water Supply Protection for the Commonwealth of Massachusetts. He said the Environmental benefits were real. The animal feces contaminate the water supply and the ground water and they make a mess. Turf fields do not attract these animals and also a lot less water is needed on these fields.

<u>Jeff Young</u>, Superintendent of Schools. He said that the Board must have the courage to finally take all the information and make a decision. The process could go on forever, each side continuing to accumulate more information, but that moment of leadership has arrived and he urged the Board to support this program.

<u>Brian Salzer</u>, Principal, Newton South High School. He expressed strong support for this project citing school pride, and the needs of the students. He reminded the Board that they challenged the proponents of turf to do their research and they did. In the meantime surrounding communities all built their turf fields and Newton is still waiting.

<u>Scott Perrin, 43 Levbert Rd.</u>, Athletic Director and Director of Wellness at Newton South. He strongly advocated for this project as it was good for the school and good for the Newton youth programs. He said these teams are displaced by the un-usability of these fields.

<u>Steven McChesney</u>, Track and Field and Cross-Country Coach, Newton South. He said that he has seen teams been displaced all too often. He asked the Board to take into consideration what the students have to go through in being displaced. He said they ask the students to get enough sleep, take care of themselves, come to practice, and then they have no place to play and feel that they're not being taken care of in return.

<u>Anthony Principe, Charlestown, MA</u>, Football Coach Newton South High School. He said the athletic field is also a classroom. He has seen injuries due to the bad conditions of the field. Opponents come to their facility, and they are embarrassed by what they have to show for themselves in terms of playing fields.

*Kathleen Marucci*, 25 *Smith Ct*., Varsity Coach, Newton South Field Hockey Team. She felt that if they had a facility available to them, instead of being displaced to Weeks Field, they would get more support from student and faculty. Transportation to and from Weeks Field is difficult as well, especially for the underclassmen who don't drive.

<u>Chuck Hurwitz</u>, 80 <u>Longfellow Rd</u>. Newton South Coach. He said this was not a new problem and that this was going on when he was a coach in the late '70s. Some of the girls that were on his team then are now coaches and are still looking at the same problem. He wanted to propose updating the football field so that they could use it for javelin (turf can not be used for this purpose).

<u>Elliott Loew, 32 Stanley Rd.</u>, Representative of the Newton Youth Baseball Community and parent of 2 Newton South students. All of the baseball leagues/teams in Newton (including Little League, Babe Ruth, High School, Senior, etc.) are in favor. He asked the Board to listen to the experts who have done the research and support this project.

<u>Derek Russell, 140 Oliver Rd.</u>, Student at Newton South. He said he wanted to transfer after his first year at Newton South. He felt that the high school was neglecting its athletes by neglecting their fields. They all work hard and deserve to have quality playing fields because they want to represent their school and their City. Transportation is also an issue as they have to try and catch rides to get to and from practices and games. He said that METCO students who need to take the bus often would not get back from practice in time to catch their bus and, therefore, would have to choose between finding some other way of trying to get home, and not playing sports at all.

<u>Sam Hyun 25 Elliot St.</u>, Student. He said he's been expecting since his freshman year that new fields would be forthcoming for South. He said that members of teams from other schools have told him that Newton South is a "joke". The fields were in bad shape and the teams don't have the practice time and space and therefore can't perform as well as they could. The whole athletic program suffers due to this and he felt that was unfair.

<u>Sam Russell, 140 Oliver Rd.</u>, 8<sup>th</sup> grade Student. He described the fields as being made up of dirt and weeds and holes. He's been thinking about going to a private school so he

could play sports. He said that when students don't even want to play on their own home fields, it's not good for morale.

<u>Kaitlyn Spink, 47 Chandler Place</u>, Student, Captain, Newton South Cheerleaders. She also said it was embarrassing to be on the fields and hear other teams talk about how bad they were. She also said it was dangerous to practice on uneven fields and that serious injuries could occur.

Joseph Needleman, 80 Puritan Rd. Student. He noted the amazing contrast between his fall and spring sport. In wrestling, they used brand new facilities that were amazing. He said they received so many compliments and they were asked to do All State competitions because of the quality of their facility. He said the team improved so much with the new facility and equipment. In the fall, it's a completely different scenario. He would throw the discus and it would land in a puddle, then they would have to lay it out to dry for 2 days. He has seen people trip and fall just running around the track. He felt it was just a matter of respect that all teams be treated well and equally.

<u>Nancy Leipzig, 37 Dwhinda Rd.</u>, Parent. She was in support of this project for safety reasons. Her husband has coached in the past and she said there have been injuries, and there were sure to be more unless the conditions improved.

<u>Deena David, 60 Rokeby Rd.</u>, Parent. She said the fields have deteriorated over time. She said the Board has approved many improvements for the buildings and programming and she appreciated that. She felt that athletics had been left behind and it's time to bring things up to par to meet the needs of the students. The student population is growing and the need for fields was increasing each year.

<u>Sandy Sedacca Ives, 25 Bowen St.</u>, Parent. She said athletics was an adjunct to the educational experience. She felt the students go into Newton South disadvantaged due to the bad circumstance of lousy field conditions.

<u>David Noymer</u>, 160 Varick Rd. Parent and soccer coach. He agreed that the fields were in deplorable condition and synthetic turf fields in other communities work. He also agreed that there are many worthy projects in need of funds in the City and that this is one of them.

*John Koger, 62 Herrick Rd.*, Parent. He felt that this was something that should already have happened, something that the City should already be providing for the students and that it's not right that they have to be lobbying for it.

<u>Nancy Mann, 45 Columbine Rd.</u>, Parent, Representative of Newton Youth Soccer, Parent. She said the Board can be remembered for their legacy of bringing something positive to Newton South, or for being the Board of "analysis paralysis".

<u>Liz Richardson</u>, <u>55 Mossfield Rd</u>. She asked that the Board consider the facts as to how many fields Newton South needs.

#### **Closing Comments by the Committees**

Ald. Parker said there was a unanimous resolution 3 years ago asking the Mayor to come up with a plan to improve fields conditions at Newton South, and he did. Ald. Parker felt it was time to take action on this and he moved for approval. Ald. Parker withdrew his motion for approval as Ald. Johnson pointed out that the Committees needed an opportunity for further discussion, due to the late hour.

Ald. Baker said it was very important to hear from the public and this was the first time many of the Board had heard any of this testimony. He said they needed an opportunity to process this information and have further discussion before a vote. Ald. Johnson said that she and Ald. Schnipper (Chairman of the Public Facilities Committee) would hold joint meetings to continue discussions of this issue in a more timely manner.

Ald. Coletti said that as a member of the Programs and Services Committee, he hoped they would have some kind of prioritized list from the School Dept. since this committee deals with the programmatic aspects of this project. He said they still have other issues with schools that are being put on the back burner and it seemed to him that a decision had been made that puts the construction of these fields as a priority over those other items. There were many things that fall under the direction of this committee, and the Finance Committee needed to see, with some specificity from the Mayor's office, how they're going to get all these things done with the small amount of money that has been set aside. He said they were not going to be able to take up this issue until they had dealt with the firehouse improvements. They had been vetoed by the governor and they still didn't know if the veto had been overridden.

Ald. Johnson asked the Committees to submit any questions they have to Karyn Dean, the Committee Clerk, so that they could be ready for discussion at the next meeting. No questions have been submitted.

Motion to Adjourn.

Respectfully Submitted,

Marcia Johnson, Chairman

# NEWTURF Presentation to Board of Aldermen



**Newton South** 



Lasell College

September 5, 2007

### What's Happened Since 2004...

- NEWTURF formed by group of parents in 2004 to develop safe, usable fields
- Newton South selected because of unsafe and often unusable conditions at City's largest field
- Extensive engineering and design study by Geller Sport/Stantec Engineering
- Recommended for funding by Community
   Preservation Committee in 2006

### Where We Are Now...

- Newton has some of the most active recreational and school athletic programs in the state
- Deplorable conditions
- Minimal maintenance
- Poor drainage
- Baseball, track, soccer, field hockey, lacrosse teams cannot play or practice at home
- Domino effect on parks all over the City now compounded by Newton North construction



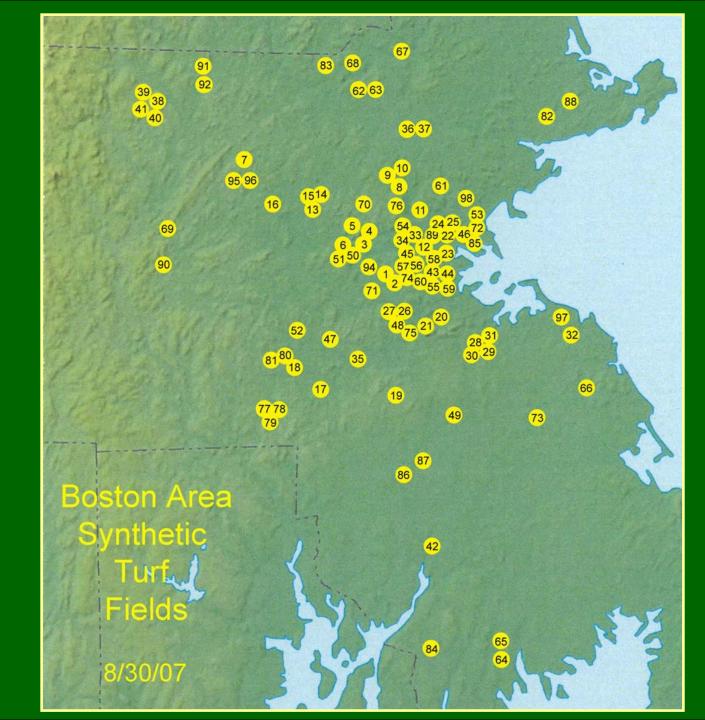
### Where We Are Now...

We are not inventing the wheel!

Over 100 turf fields built in greater Boston

 Proven safety, environmental and cost benefits

Lasell College 1 Boston College 2 Waltham HS 3, 4, 5 Brandeis University 6 Acton-Boxboro HS 7 Lexington-Lincoln Park 8, 9, 10 Arlington HS 11 Cambridge - Danehy Park 12 Lincoln-Sudbury HS 13, 14, 15 Sudbury - Cutting Field 16 Medway HS 17 Holliston HS 18 Canton HS 19 Milton HS 20 Curry College 21 City of Boston, Pagel Playground 22, 23 Boston English HS 24, 25 Xaverian HS 26, 27 Thayer Academy 28, 29, 30, 31 Weymouth HS 32 Harvard University 33 BB&N 34 Gillette Stadium 35 Reading Memorial HS 36, 37 Mass Youth Soccer 39, 40, 41 Durfee HS 42 Dexter School 43, 44 Cambridge - Russell Field 45 BC High 46 Medfield HS 47 Westwood HS 48 Brockton HS 49 Bentley College 50, 51 Framingham State College 52 Chelsea HS 53 Cambridge - King Middle School 54 Brookline HS 55 Northeastern University 56, 57 Boston University 58 Town of Brookline 59, 60 Tufts University 61 North Andover HS 62, 63 New Bedford, Normandin MS 65 Pembroke HS 66 City of Lawrence, Vetrans Memorial Stadium 67 City of Lowell, Cawley Stadium 68 MDC Southborough, 9/11 Memorial Field 69 Belmont HS 70 Rivers School 71 Boston Rotch Playground 72 Whitman Hanson HS 73 Madison Park HS 74 Catholic Memorial HS 75 Somerville - Dilboy Field 76 Franklin HS 77, 78, 79 Holliston Youth Center 80, 81 Endicott College 82 UMass Lowell 83 UMass Dartmouth 84 Wentworth Inst. Tech. 85 Mansfield HS 86 Stonehill College 87 Gordon College 88 City of Boston - Moakley Park 89 Westborough HS 90 Tyngsboro HS 91 Tyngsboro Elementary 92 Wayland HS 93 West Suburban YMCA 94 Concord-Carlisle HS 95, 96 Scituate HS 97 Malden Catholic HS 98



### Dual County League Schools

## Towns With Turf Fields Built Or Planned

- Acton Boxborough
- Arlington
- Bedford
- Concord-Carlisle
- Lincoln-Sudbury
- Tyngsborough
- Waltham
- Wayland
- Westford
- Weston

## Towns Without Turf Fields

- Boston Latin
- Newton



Lasell College



Newton YMCA



Waltham High School



Waltham High School – Harding Field



Xaverian High School – Westwood



Lincoln-Sudbury Regional High School





Lincoln Park – Lexington



Lasell College

## Newton South Field Usage Study – 2005 Fall Season\*

- Newton South teams had 80 games/ meets, 502 practices off campus
- Youth sports teams had 712 lost field usage slots due to conditions
- Newton South freshmen and JV teams had 81 lost on-campus slots due to conditions
- All 1,500 lost uses will be recaptured with turf

## What Is The Proposal?

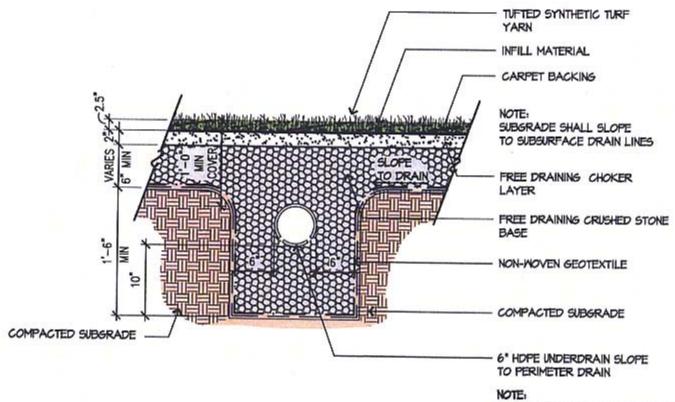
- Geotechnical testing of field area
- Fully engineered drainage system
- Re-grading of the entire field complex
- Construction of baseball, softball and competition field
- Repair of track including subsurface conditions, new running surface and areas for field events
- Landscaping and fencing for buffering and protection



## How Does The Drainage System Work?

- Pre-testing to determine characteristics of soils, groundwater elevations, drainage flow
- Turf provides an efficient pervious drainage surface
- Stone layer allows water to be collected into perforated pipes below the surface
- Pipes provide an engineered storage system with storm capacity and controlled release

### INFILLED SYNTHETIC TURF SYSTEM SCALE: |"=1'-0"



PIPE IS LOCATED AT THE TOP OF THE TRENCH TO ALLOW FOR MORE INFILTRATION. BASED ON THE GEO-TECH FINDINGS, THE LOCATION OF THE PIPE MAY BE LOWERED.

## Why Not Just Fix Drainage And Stay With Grass?

- Grass would not survive due to overuse and use during wet seasons – even with the best maintenance
- Upfront cost differential not huge, annual cost of maintaining grass much higher
- Grass is not as efficient as drainage solution
- Would lead to wasted investment of funds

## Why Not Put Turf On The Existing Football Field?

- Dimensions of field suitable only for football – too small for other sports
- Change in field would require complete rebuild of track
- Ability to expand footprint is limited by adjacent wetland and flood plain area
- Spring sports conflict with track and field
- Adds over \$1 million to cost

## What Is The Project Budget?

- About \$4.5 million, net of \$500,000 in community contributions and product discounts
- Prepared by Geller Sport/Stantec in August 2007 to account for cost adjustments, changes in track scope from 2005-2006 estimates
- Includes ten percent contingency
- Based on observed conditions at Newton South fields

## What Are Comparative Maintenance Costs?

Recommended Annual Maintenance Cost/Field	Newton's Current Annual Cost/Field	Turf Cost/Field
\$30,000	\$16,393*	\$3,000
12 Yr./3 Field Cost		
\$1,080,000	\$590,148	\$108,000
12 Yr. Savings with Turf		
\$972,000	\$482,000	

<sup>\*</sup> Source: Newton Parks & Recreation

## Is There Evidence Of An Environmental Problem?

- Opponents have brought up everything from global warming to staph infections to water quality to flesh eating bacteria
- Numerous studies performed by communities, private and government agencies
- We have surveyed all information on installed fields and many of the communities – no reported problems or issues
- Tremendous body of work should leave no doubt about safety

### Representative Studies

- Brookline Greenspace Alliance
- New England Journal of Medicine
- Chappacqua, NY Board of Education
- Woodside, CA Study
- Bald Eagle Area School District Study
- San Francisco, CA Study
- NCAA Sports Specific Injury Data
- Pennsylvania State University Study
- Report from University of Massachusetts on the Environmental Impact of Recycled Rubber
- Redmond, WA Field Turf Toxicity Study
- Northwest Parks Foundation Study
- FIFA Study
- ADEME, the French Agency for Environment and Energy Management Study
- European Commission Opinion of the Scientific Committee on Toxicity, Ecotoxicity and the Environment (CSTEE)
- European Union Commission Report
- Department of the Environment Investigation Denmark 2004
- Gale Associates Survey and Report

### Are There Environmental Benefits?

- No need for chemicals or fertilizers
- No weekly painting
- No watering (typical field uses over two million gallons per year)
- No gas mowers or equipment
- No dogs, geese or seagulls polluting surface
- No ponding to attract insects

## How Does Injury Rate Compare?

Substantial research by American Journal of Sports Medicine and NCAA. Five year comparative study conclusions:

- Injury rate for turf equal to WELL MAINTAINED natural grass
- Higher lost injury time on grass
- Higher concussion rate on grass
- More ligament tears on grass
- More skin abrasions and minor injuries on turf
- More consistent surface of turf enhanced speed of the game leading to increased fatigue potential

## How Does Injury Rate Compare?

 FIFA three-year study of 492 soccer players: No evidence of a greater risk of injury was found on turf compared to grass

Newton South fields have resulted in a disproportional number of injuries, including breaks and serious sprains due to unsafe conditions



## What About Impact on Neighborhood?

- No lights
- Occasional PA system use similar to existing
- Plenty of available parking, off peak use
- Pleasant aesthetics
- Tree and fence buffer
- Construction of drainage system

### What Is The Schedule?

Fall 2007 Board of Aldermen

**Approval** 

Winter 2007-2008 Testing and Design

February 2008 Bidding

March 2008 Award

April 2008 Construction Start

Fall 2008 Project Completion

Completion during Newton North construction is critical!

## Why NEWTURF, Why Now?

- Reclaims a large, unsafe and underutilized area for public use
- Project for the recreational needs of our entire city used by 5,000 residents
- Safety and health of our children
- Parity for our high schools
- Pressure off other recreational areas
- Cost efficiency based on use
- Proven technology and environmental benefits
- No more studies time to decide!



# NEWTURF Presentation to Board of Aldermen



**Newton South** 



Lasell College

September 5, 2007

#### **GRASS V. TURF 25 YEAR COST COMPARISON**

**Annual Maintenance Cost/Field** 

Year	Grass-Typical	Grass-Newton South Actual	Turf
1	\$30,000	\$16,393	\$5,000
2	\$30,900	\$16,885	\$5,150
3	\$31,827	\$17,391	\$5,305
4	\$32,782	\$17,913	\$5,464
5	\$33,765	\$18,450	\$5,628
6	\$34,778	\$19,004	\$5,796
7	\$35,822	\$19,574	\$5,970
8	\$36,896	\$20,161	\$6,149
9	\$38,003	\$20,766	\$6,334
10	\$39,143	\$21,389	\$6,524
11	\$40,317	\$22,031	\$6,720
12	\$41,527	\$22,692	\$6,921
13	\$42,773	\$23,372	\$7,129
14	\$44,056	\$24,074	\$7,343
15	\$45,378	\$24,796	\$7,563
16	\$46,739	\$25,540	\$7,790
17	\$48,141	\$26,306	\$8,024
18	\$49,585	\$27,095	\$8,264
19	\$51,073	\$27,908	\$8,512
20	\$52,605	\$28,745	\$8,768
21	\$54,183	\$29,608	\$9,031
22	\$55,809	\$30,496	\$9,301
23	\$57,483	\$31,411	\$9,581
24	\$59,208	\$32,353	\$9,868
25	\$60,984	\$33,324	\$10,164
Total	\$1,093,778	\$597,677	\$182,296

Replacement Cost/Field

Year	Grass	Grass-Newton South Actual	Turf
1	\$900,000	\$900,000	\$704,000
2	\$927,000	\$927,000	\$725,120
3	\$954,810	\$954,810	\$746,874
4	\$983,454	\$983,454	\$769,280
5	\$1,012,958	\$1,012,958	\$792,358
6	\$1,043,347	\$1,043,347	\$816,129
7	\$1,074,647	\$1,074,647	\$840,613
8	\$1,106,886	\$1,106,886	\$865,831
9	\$1,140,093	\$1,140,093	\$891,806
10	\$1,174,296	\$1,174,296	\$918,560
11	\$1,209,525	\$1,209,525	\$946,117
12	\$1,245,810	\$1,245,810	\$974,501
13	\$1,283,185	\$1,283,185	\$1,003,736
14	\$1,321,680	\$1,321,680	\$1,033,848
15	\$1,361,331	\$1,361,331	\$1,064,863
16	\$1,402,171	\$1,402,171	\$1,096,809
17	\$1,444,236	\$1,444,236	\$1,129,713
18	\$1,487,563	\$1,487,563	\$1,163,605

19	\$1,532,190	\$1,532,190	\$1,198,513
20	\$1,578,155	\$1,578,155	\$1,234,468
21	\$1,625,500	\$1,625,500	\$1,271,502
22	\$1,674,265	\$1,674,265	\$1,309,647
23	\$1,724,493	\$1,724,493	\$1,348,937
24	\$1,776,228	\$1,776,228	\$1,389,405
25	\$1,829,515	\$1,829,515	\$1,431,087

#### Total 25 Year Maintenance Plus Replacement Cost/Field

Grass	<b>Grass-Newton South Actual</b>	Turf
\$2,923,293	\$2,427,191	\$2,546,202

#### Notes:

- 1. Typical Grass and Turf Costs from Geller Sport/Stantec based on three field complex
- 2. Newton South Maintenance Costs from Newton Parks and Recreation Department
- 3. Grass Field Replacement Cost from Geller Sport/Stantec based on full field reconstruction
- 4. Turf replacement cost based on average for three proposed fields
- 5. Grass field is replaced every 25 years if reasonably maintained (shown in yellow)
- 6. Turf field is replaced every 12 years (shown in yellow note that field should have 12-15 year life)
- 7. All costs inflated by 3% annually
- 8. Continuing current maintenance program would not allow the grass fields to last 25 years