

High School Athletic Preferred Improvement Plan – Stadium Complex Relocation and Renovation

FREQUENTLY ASKED QUESTIONS

Why Are We Doing This?

- 1.) Why does the new high school need to replace its athletic facilities?
 - The WHS Building Project, completed in 2012, included renovations to the Field House, but the outdoor athletic facilities were not improved. Needed improvements have long been identified but have been deferred over the past several years.
 - Weston and Sampson, the town's on-call design consultants, were hired in fall of 2016 and detailed the critical conditions of the existing WHS athletic facilities including deteriorating field conditions, substandard turf quality, inadequate maintenance and irrigation, deficient/non-conforming ancillary facilities, and a lack of drainage, storage and ADA accessibility.
 - In addition, Weston and Sampson found that the tennis courts and track had deteriorated to the point that several tennis courts had to be taken offline and varsity track competitions can no longer be scheduled at the existing facility due to safety concerns.
- 2.) Have these improvements been part of The Town of Wayland 5-year capital plan?
 - Improvements to the WHS athletic facilities have been part of the Town's capital plan and were projected to be financed in fiscal year 2019, at an estimated cost of \$2,750,000. These improvements were first proposed by Gale Associates in 2010 who recommended renovating tennis courts, replacing bleachers, press box and athletic field lighting and improving ADA accessibility.
- 3.) What are the existing conditions of the WHS athletic facilities?
 - The current high school synthetic turf field is at the end of its useful life, the current high school track's condition does not allow for varsity competitions and may not allow for any use (practice, competition, or recreational) in the spring, two of the ten tennis courts have been taken offline due to disrepair and more may be taken offline before the spring season, the stadium bleachers are not in ADA compliance, and the stadium lights are inefficient compared to modern lights.
- 4.) Why can't we use the track - because of toxicity of the decaying synthetic turf field?
 - The reason we cannot use the track is because of its deteriorated condition. It has nothing to do with toxins.
- 5.) What is the urgency?
 - The current conditions of the track and tennis courts are already affecting varsity competitions. The synthetic turf field condition will likely follow soon. As the conditions worsen over time, we face a potential situation of non-use of the facilities by not only high school sports, but by the community (youth leagues, adult leagues, and recreation).

Environmental Resources

- 6.) What environmental resources are located on or near the WHS athletic campus?
 - Many environmental resources are located on lands that surround the developed WHS campus including:
 - the Happy Hollow well heads, especially the protected areas that recharge the public water supply (Zone 1);
 - the Sudbury River watershed and nearby perennial stream;
 - the surrounding wetlands and associated buffer zones;

- the property is also located on a 100-year floodplain.
- 7.) How does the Athletic Improvement Plan protect these resources?
- One of the key recommendations of the improvement plan is to enhance protections to the important environmental resources by relocating the tennis courts outside of Zone 1 and improving and expanding drainage.
- 8.) How does the Athletic Improvement Plan remediate Zone 1 issues?
- Zone 1 is a regulatory term that is defined by the Massachusetts Department of Environmental Protection (MaDEP) as the protective “radius required around a public water supply well or well field.” Any development not related to well protection and maintenance is prohibited by MaDEP regulations.
 - The tennis court complex and portions of two multi-use fields (the Rock and the Wetfield) are currently located within Zone 1 and their continued use is “grandfathered.”
 - Relocating the tennis courts outside of Zone 1 reinforces the protections under the current regulations and enhancing drainage eliminates the potential of contamination from the run off.
- 9.) What drainage improvements are being recommended? Can we add a barrier rather than moving the stadium field?
- Drainage improvements will be evaluated during the design phase.
- 10.) What has the MA DEP said about the plan?
- As part of the design process, once the exact boundaries have been measured, an application for a permit for the proposed work will be submitted to the Town of Wayland’s Conservation Commission and MaDEP, who maintain jurisdiction over the wetland resources and 100-year floodplain. The commission (and/or MaDEP) may issue an Order of Conditions that will list any conditions being placed on the work in order to protect the wetlands. On a related effort, the town is working to close out two Orders of Conditions previously issued for the construction of the synthetic turf field in 2007 and the construction of the new high school in 2012.

What Is The Plan?

- 11.) What is the plan?
- A four-part Athletic Improvement Plan developed by Weston and Sampson, the town’s on-call design consultant, proposes a full scope of recommended improvements and redesign for the Wayland High School athletic facilities. Currently the project scope encompasses Part 1 and Part 2 of the plan.
 - Part 1 - The Stadium Complex Renovation - proposes the repositioning of the stadium; the renovation of the stadium, track, existing synthetic turf field; adding storage and bringing the bleacher seating into ADA compliance.
 - Part 2 - The Swap - proposes relocating the tennis courts out of Zone 1 and swapping their location with the current softball field as well as reconstructing a new softball field and court complex including new tennis courts, outdoor basketball courts and possibly a new volleyball court, and improving related parking.
 - Part 3 - Baseball and Multi-Use Field Improvements - proposes renovating and adding maintenance upgrades to these grass fields.
 - The final phase of the improvement plan includes maintenance and drainage upgrades to The Rock and The Wetfield, both partially located in Zone 1. The continued use of these fields is grandfathered, but the Zone 1 designation prioritizes the protection of the drinking water supply over any field improvements.
- 12.) What is the duration for Part 1 and Part 2? When will whole project be completed?

- If funding for the design fee is approved in the fall and funding for construction funds are approved in the spring, on July 1 when appropriation is available the project will begin. Expected completion is spring/summer 2019.

13.) Why is Part 3 lowest priority when the results would be to make those fields well functioning playable fields available for more hours of playtime?

- Before we invest in grass fields, we must have a commitment to maintain the fields. At this time, the cost to do so is too high. However, Part 3 will be kept on the five year capital plan for out years.

14.) What, specifically, are we asking someone to design?

- The requested appropriation for design will be used in the following way: design work will begin with the W&S recommendations for Part 1 and 2 and delve deeper into creating detailed and engineered designs for the WHS stadium campus shaped/influenced by the layout resulting from W&S work, developing bid specifications for construction, and conducting bids in order to have a specific cost for construction that will be requested for appropriation at Annual Town Meeting.

15.) Do these improvements provide more fields or increase field availability?

- No additional fields are being proposed for the WHS athletic campus.

16.) Are there other design options than moving fields? Will the issues about the stadium complex field materials continue when design work is completed?

- The design presented by Weston and Sampson is the most optimum given site constraints and goals. However, the design phase will involve a more detailed review of the site and options. The stadium complex field materials will be determined early in the design phase before project is put out to bid.

17.) Could we move the proposed varsity softball field over to left rather than move the stadium complex?

- It is a very damp area. While it may fit, we must conform to the wetland buffer zone. The design phase will determine if we can move the softball field accordingly.

What Will Happen To High School Sports During Construction?

18.) What will the High School athletic program do while the athletic facilities are under construction?

- We will first look to town-owned fields for practices and games. Secondly, we will look to move home games to later in the season when the new stadium field is opened. Lastly, we will try to play more away games and look to neighboring fields (i.e., Regis and Rivers) to use.
- If the synthetic turf field at the Loker Conservation and Recreation area is approved and built, the high school teams would be able to use that facility during construction.

19.) Can you estimate the cost of having to have sports teams practice and play matches out of town while the HS project is underway (as opposed to having a field at Loker Rec where they can practice/play)? For this it would be helpful to know what fields at the HS could still be used and to what capacity.

- If fields were rented for all home varsity fall sports games (field hockey, soccer, and football), the expenditure would total approximately \$20,000. Before committing to that sum, the school department would ask other communities to host all varsity games. The cost for the spring season would be the same.
- There should be a maximum use of 3 hours a day on a grass field (depending on sport and level). The Rock, Wetlands, and practice football fields are used 6 or more hours per day during the fall and spring seasons by high school and community (youth and adult leagues) teams. During construction of the high school athletic facilities, the high school

teams would have to use these practice fields and the community would not be able to use the fields.

Grass vs Synthetic Turf

- 20.) Will the stadium be grass or synthetic turf?
- The School Committee is exploring different options to replace the existing stadium tire crumb rubber synthetic turf field, including converting to a grass field. The durability, higher usage capabilities and cost benefit advantage of a synthetic turf field is being evaluated against its environmental, health and safety concerns, especially when considering its proximity to sensitive environmental resources. Based on what we know now, we believe a synthetic turf field is the better option.
- 21.) What are the perceived benefits of a synthetic turf field over a grass field?
- A synthetic turf field supports more use than a grass field. The recommended use of a grass field is 3 hours/day, while a synthetic turf field is available except when safe field temperatures are exceeded on hot/sunny days.
 - Wayland's availability for scheduling synthetic turf fields is estimated at 2-3 times that of a grass field, and industry standards report up to a 5-6 times the advantage
 - A synthetic turf field can be used during wet conditions and following snow melt, which allows teams to commence their seasons as scheduled, especially in the spring.
 - Maintenance for crumb rubber synthetic turf fields is more cost effective. Maintenance costs of other types of synthetic turf systems will be evaluated during the design phase.
- 22.) What are the perceived disadvantages and concerns of a synthetic turf field over a grass field?
- Synthetic turf fields present potentially elevated environmental and health risks due to concerns around exposure to potential carcinogens in tire crumb. There has not been conclusive evidence that long-term exposure to materials found in tire crumb rubber do not present a health concern when used in synthetic turf playing fields. Further exploration is required before recommending their use.
 - Leaching of infill material containing heavy metals and potential carcinogens may contaminate nearby environmentally sensitive areas including the Town's public drinking supply.
- 23.) What does the scientific evidence show?
- The scientific evidence is not clear on whether there are elevated environmental and/or health risks associated with tire crumb rubber fields. Advocates for converting to a stadium grass field support protecting the community's health and safety from any potential risks by eliminating the potential exposure all together. Synthetic turf supporters refer to numerous studies that report minimal or no increased risk.
 - Synthetic turf fields measure increased field surface temperatures during hot and/or sunny weather. The associated health risks include dehydration, heat exhaustion and heat stroke.
 - The School Committee is reviewing the following information:
 - Literature review and Gap Analysis of EPA Federal Research Action Plan on Recycled Tire Crumb used on Playing Fields and Playgrounds.
 - MaDEP FAQ
- 24.) What are the recommendations from Wayland's Board of Health?
- Wayland's BOH voted (3-0) to recommend the use of an alternate turf field system to replace the existing tire crumb rubber stadium turf field. Even though no impact to the water quality has been detected, there remains a concern that a potential exists for contamination by the tire crumb rubber of nearby environmental resources.
- 25.) If we only played the recommended 2 games/week on the stadium field because it is grass, how would this affect the High School sports program?

- Losing the turf field would severely impact the high school sports program. Currently there are 4 or more games a week on the stadium turf field and 4 hours of practices/day when there are no games. All varsity games are played on the turf field and there are not any other suitable fields in town at this time for varsity games.
- If the stadium field is converted to a grass field, it would limit varsity games to 2 per week on that field and no practices.
- All additional games and all practices would be shifted to the grass fields which are already overused. While the high school would not plan to cut any teams, the practice and games schedule would be very tight and more importantly, the existing grass fields would be destroyed.
- Youth and adult leagues would not be able to use any of the high school fields and facilities.

26.) What is the cost difference between grass and synthetic turf?

- There is a cost to both types of fields including both installation and maintenance. A sustainable maintenance plan for the recommended field type would need to be developed during the design phase of the project. If a grass field were chosen for the high school stadium complex, the town would need to commit significant additional resources to the proper ongoing maintenance of the field.

27.) What are the different kinds of synthetic turf fields?

[Include Gale Associates table and/or Weston and Sampson's list]

28.) If there are concerns about health risks created from current synthetic turf fields, why then replace our current synthetic turf field with another synthetic one?

- There have been many improvements with infill over the past ten years. We will be considering different infill options.
- Weston and Sampson held a public forum to discuss this as well as other turf vs grass issues in September. Please see WayCam's September 12, 2017 tape of the meeting.
- See question #23.

29.) What is the cost of putting additional grass fields in town to address the field usage issue and make it feasible to put a grass field in the High School Stadium Complex?

- The town's Open Space Plan has identified the overuse of the existing grass fields in town. The Recreation Commission is in the process of creating a field development plan.

30.) How many turf fields do each of our peer districts have?

Number of Synthetic Turf Fields*:

	League Opponent	# of Synthetic Turf Fields
Acton Boxboro	Y	3 (HS)
Bedford	Y	1 (HS)
Boston Latin	Y	3 (off site)
Cambridge	Y	4 (off site 3 Danahey, 1 Russell)
Concord Carlisle	Y	3 (HS)
Dover-Sherborn	N	1 (HS)

Lexington	N	3 (off site)
Lincoln Sudbury	Y	3 (HS) 1 town
Needham	N	3 (off site)
Newton South	Y	2 (HS)
Waltham	Y	7 (off site)
Wayland	Y	1 (HS)
Westford	Y	3 (1 at HS, 2 off site)
Weston	Y	2 (currently adding 2nd)
Wellesley	N	3 plus use of local colleges

*This table lists both schools in the DCL and schools that the School Committee uses as peer towns.

Usage

- 31.) How many WHS teams and students use the high school athletic facilities?
- In total, there are 1169 roster spots with over 75% of WHS students participating in at least one of the many athletic teams. There are over 28 sports that offer several levels of competition (varsity, junior varsity or freshmen) fielding over 61 athletic teams.
 - Of the total students and teams participating in sports, approximately 40 teams use the outdoor athletic facilities accounting for over 600 roster spots.
- 32.) How many town youth and adults play in town sports that use the athletic facilities?
- There are approximately 3600 roster spots in Wayland Youth Programs (soccer, lacrosse, softball, etc). The Town of Wayland Recreation Programs supports over 24 adult teams or programs.
- 33.) How much are the HS grass fields overused based on the ideal use which is 3 hrs/day for grass?
- The Rock, Wetlands and practice football fields are used over 6 hrs/day during the fall and spring seasons.
- 34.) Of the users who use the high school fields, what percent are outside users (ie, out of town groups)?
- Out of town groups account for just over 9% of the use of the synthetic turf field and just over 4% of the use of the grass fields.

Cost

- 35.) What is the cost of the project?
- The cost for the design of Part 1 & 2 of the Athletic Improvement Plan is \$202,000 and \$156,000 respectively. The construction costs are estimated at \$3,500,000 for Part 1; \$1,960,000 for Part 2 and \$1,500,000 for Part 3. The cost for the Rock and the Wetfield improvements has yet to be determined.

36.) How can the town afford to do all these expensive capital projects (library, community center, other town and recreation fields) while still funding the ongoing capital needs of the town?

- Several large capital projects are being proposed for the town's consideration including a new library, additional recreation fields, and a new Council on Aging/Community Center. The School Committee expects to work with the Board of Selectman and Finance Committee to prioritize these multiple requests. The School Committee also plans to explore other financing mechanisms and develop a construction timeline to moderate the project's financial impact.

37.) Why is the School Committee only asking only for design money in the fall?

- By asking for design money in the fall, it will allow for accurate construction bid documents to be developed for approval at a future town meeting allowing the community to make an informed decision about the construction project.
- Ideally, if design money is approved in the fall and construction money is approved in spring 2018, the project would begin in the summer of 2018 and be completed by summer 2019. If we wait and ask for design money in the spring, the construction project will be delayed a full school year and we risk having to close the athletic facilities during that time due to facility failure and safety concerns.

38.) How did the cost go from \$2.9 M (in the 5 year capital plan) to \$5.4 M? What portion of the cost is attributed to the well zone area? Is this a project that gets funded over 2 or 3 fiscal years?

- The condition of the athletic facilities was far worse than originally believed. Deferred repairs as well as inadequate drainage have led to costly replacements including full-scale reconstruction of the track, the tennis courts, and the synthetic turf field.
- There are 3 additional aspects of the redesign that have contributed to the increased cost estimate including the increased footprint of the stadium, the repositioning of the stadium to permit moving the tennis courts out of Zone 1, and the added drainage.
- The majority of funding will occur in a single fiscal year but could stretch over two fiscal years/two borrowing cycles.

TABLES

Recommended Improvements and Cost Estimates

		Improvements	Design Cost (est)	Construction Cost (est)
PART 1	The Stadium Complex Renovation	<ul style="list-style-type: none"> *Track reconstruction *Turf field reconstruction (grass vs synthetic turf) *Replace stadium lights & bleachers (code compliant) *Improve storage *Improve ADA accessibility *Improve field drainage *Improve Concession/Ticket Booth (not included in cost estimate) 	<p align="center">\$202,000</p> <p align="center">Funding Request 2017 Fall TM</p>	<p align="center">\$3.5 MM</p> <p align="center">Anticipated Funding Request 2018 Annual TM</p>
PART 2	The Swap Tennis Courts/ Softball Field Outdoor Basketball & Volleyball Courts	<ul style="list-style-type: none"> *Relocate tennis courts out of Zone 1 *Swap location softball field & tennis courts *Reconstruction of grass softball field *Enhance safety of softball field with fencing *Reorientation of field *Improve drainage *Add and improve outdoor basketball, possible volleyball courts & related parking *Improve lighting 	<p align="center">\$126,000</p> <p align="center">Funding Request For CPC Funds 2017 Fall TM</p>	<p align="center">\$1.96 MM</p> <p align="center">Anticipated Funding Request 2018 Annual TM</p>
PART 3	Baseball and Multi-Use Fields	<ul style="list-style-type: none"> *Reconstruction of varsity & JV Baseball grass fields *Reconfiguration of fields for increased flexibility of use *Improve ADA accessibility *Improve drainage & grading *Upgrade ancillary facilities *Improve orientation of fields *Intensive maintenance upgrade including irrigation 	<p align="center">Included in construction cost estimate</p>	<p align="center">\$1.5 MM</p> <p align="center">Projected Funding Request FY 2020</p>
	The Rock & Wetfield	<ul style="list-style-type: none"> *Maintenance upgrade *Drainage upgrade 	<p align="center">TBD</p>	<p align="center">TBD</p>