Aerial image of Wayland High School

Wayland High School Master Plan | Summary Report

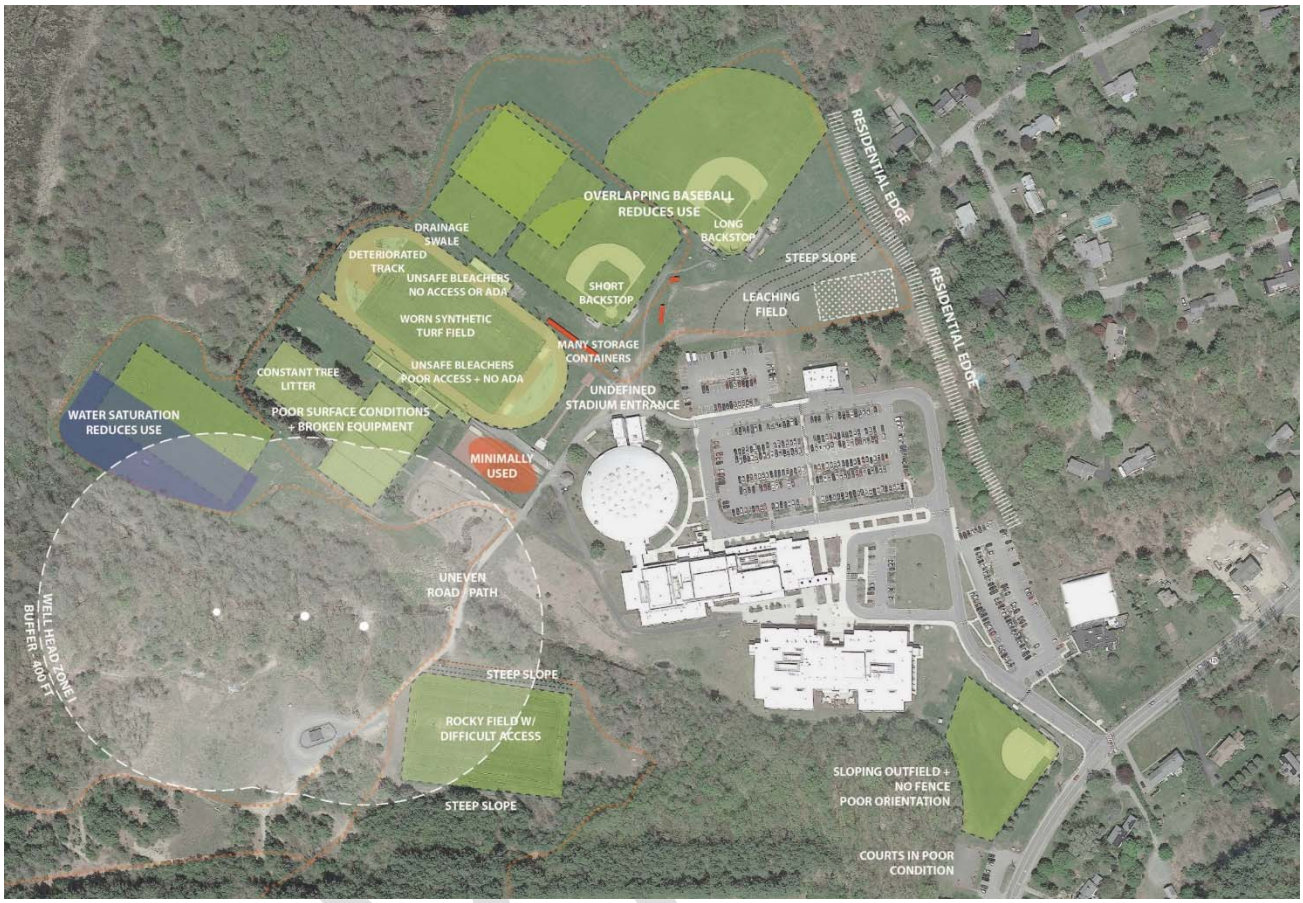
During late 2016 and 2017 Weston & Sampson worked with School Department and Recreation Commission/Department representatives to develop a master plan that identifies a strategy for bringing meaningful improvements to the outdoor sports and recreation facilities at the Wayland High School property.

While the High School itself was reconstructed as part of a major project in 2012, the outdoor facilities remained, and continue to remain, in varying conditions that can be described as poor, fair and good. Many of the facilities are in poor or fair condition and certain facilities (notably tennis courts and track) have deteriorated to the point where the scheduling of events is at risk and alternate venues will need to be sought.

The purpose of this summary report is to identify the information that was garnered during the process and to describe the preferred renovation strategy that was vetted at the final public hearing. An outline of the information contained herein is included below:

Existing Conditions
Sensitive Environmental Characteristics
Public Hearings
Preferred Improvement Plan
Budget Considerations
Phasing

Existing Conditions



Aerial image showing well head zone 1 protection areas. Wetland resource areas form the much of the southern, western and northern perimeter of the property.

A summary of outdoor sports and recreation facilities located at Wayland High School includes the following:

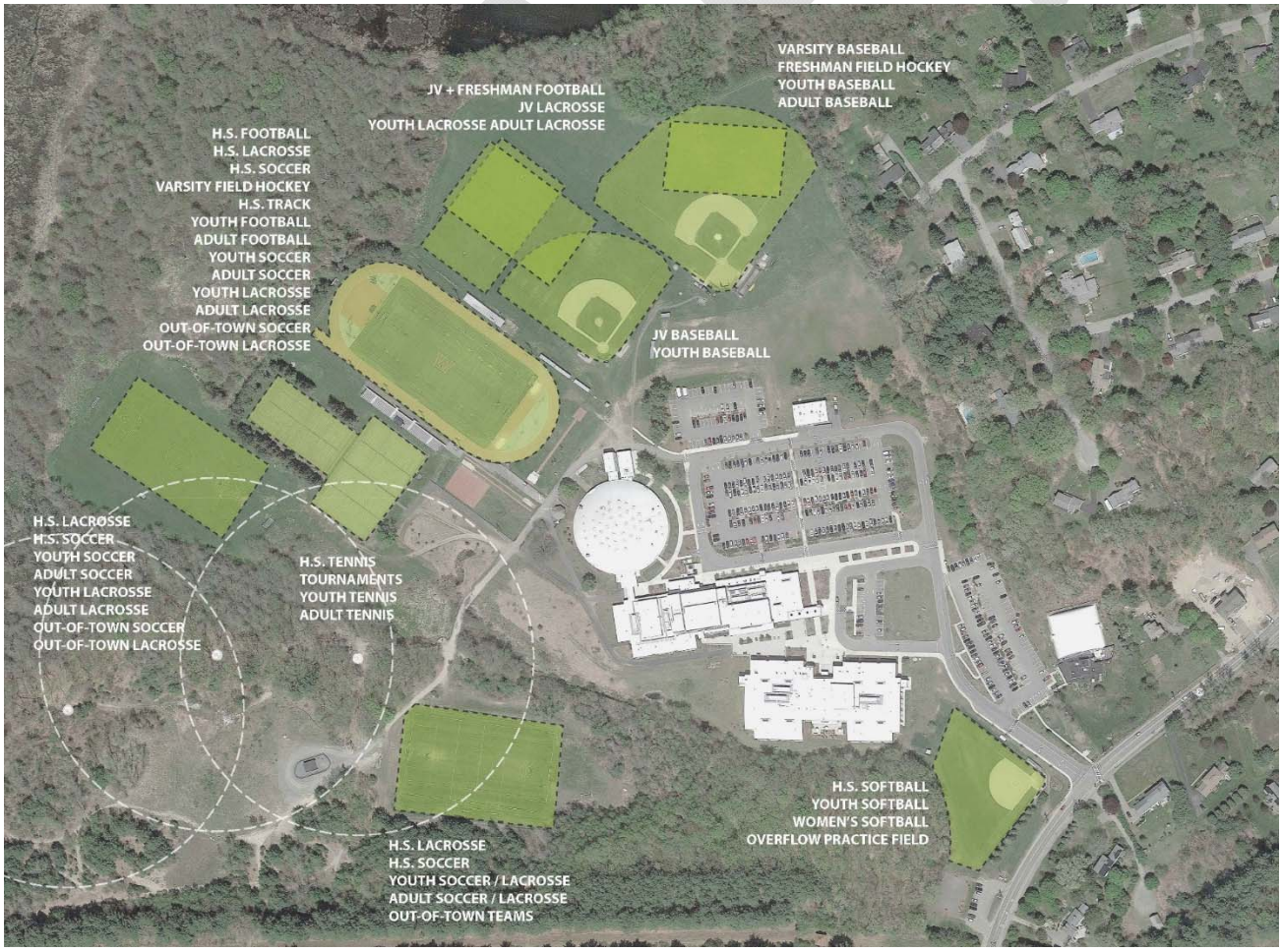
- 6 lane track
- Synthetic turf multi-use field
- Girls softball field
- Tennis courts (10)
- Varsity baseball field (with overlapping uses)
- Junior varsity baseball field (with overlapping uses)
- Multi-use field (northern edge of property) (overlaps with baseball fields)
- Multi-use field (western edge of property) (known to be seasonally wet)
- Multi-use field (southern edge of property) (known to be rocky and difficult to access)
- Cross country trail
- Basketball court

The facilities listed above serve the high school physical education and sports/athletics programs during the spring, fall and to a lesser extent winter seasons. Many facilities also serve youth sports leagues from the greater community and during certain times of years are permitted to out-of-town groups. The plan identifies the basic conditions of each facility.

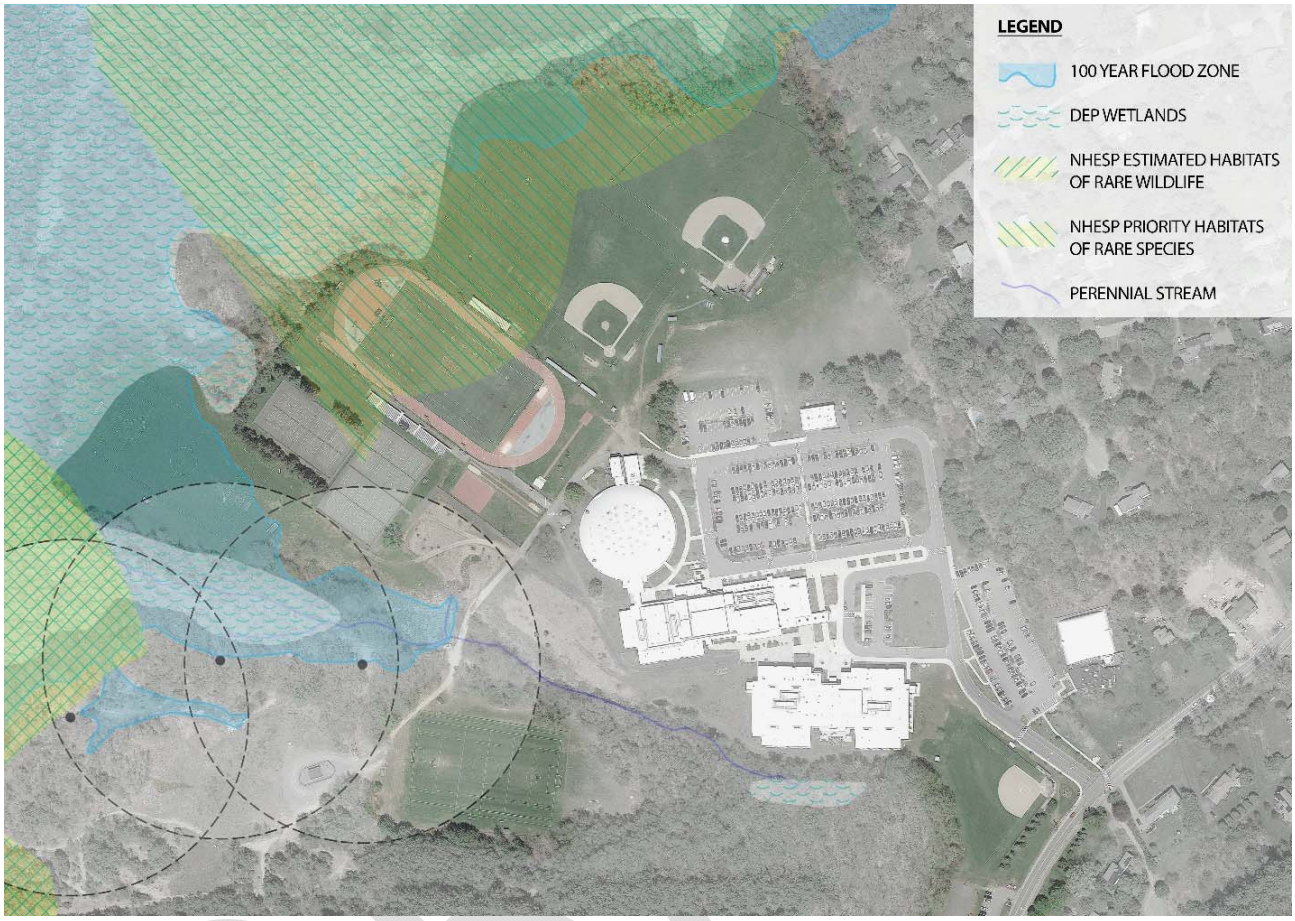
An additional summary of basic conditions is included below:

- Field conditions deteriorating
  Turf quality substandard
  Drainage facilities are lacking
  Grading substandard (lack of positive pitch to shed water)
  Irrigation systems are inadequate
  Ancillary facilities (dugouts, backstops, fence systems, players' benches, bleacher systems) are in poor or fair condition and/or are non-code compliant
- Track deteriorated (home meets potentially cancelled!)
- Bleachers at track/field non-code compliant / deteriorated
- Storage lacking site-wide
- ADA accommodations lacking
- Pathways connecting the school, field house and parking areas to sports and recreation facilities are lacking
- Tennis courts deteriorated (impacts to match scheduling)
- JV baseball field w/ safety issues (lip at infield creates bad hops)
- Softball field with poor solar orientation and undersized outfield

The plan below identifies the groups that make use of the various sports and recreation facilities at the Wayland High School property. Demand (as previously documented through various studies) far exceeds the capacity of the various facilities. High usage, poorly constructed facilities, poor weather and maintenance challenges all combine to create a largely untenable situation that causes many events to be cancelled and less than desirable playing conditions to prevail throughout.



The plan above identifies the various user groups (school and community).



The diagram above indicates the extent of sensitive environmental receptors (wetland resource areas, streams, rivers, habitats, and flood zones) as well as the 400' Zone 1 well head protection areas that surround each of the town's three public drinking supply wells.

Sensitive Environmental Characteristics

Lands that surround the developed Wayland High School property contain many sensitive resources that impact the direction of any renovation strategy. In summary, these resources include:

- Large expanses of wetlands that form part of the Sudbury River Watershed
- Habitat for rare species and wildlife
- 400' Zone 1 protection areas of the Happy Hollow wells
- Perennial stream
- 100-year floodplain

For any facility renovation project, a Notice of Intent (NOI) filing with the Wayland Conservation Commission will likely be required. This process generally leads to the issuance of an Order of Conditions (OOC). During the work of this master plan, it was determined that two outstanding Orders of Condition remain in effect for the Wayland High School property. One OOC dates to the construction of the synthetic turf field in 2007 and the other dates to the construction of the new high school in 2012. As part of a related effort, Weston & Sampson is working with town representatives to close out the two Orders of Conditions by complying with all Conservation Commission and/or Massachusetts Department of Environmental Protection (MA DEP) stipulations. (For the field project, the MA DEP issued a Superseding Order of Conditions, which means that verification of compliance and final sign-offs must be issued by them.

Much of the property lies within areas that fall within the jurisdictional purview of the Conservation Commission. Wetland resource areas surround much of the site and the Commission reviews projects that occur within the first 100-foot buffer zone associated with the wetlands. In addition, a 100-year floodplain also encompasses portions of the site and this is also regulated by the Commission.

Three major facilities lie within the Zone 1 protection areas associated with one or more of the three drinking water supply wells recently installed at the site. This includes much of the tennis court complex and portions of the multi-use fields located at the western (known to be seasonably wet) and southern (known to be rocky and difficult to access) edges of the property. While the DEP restricts development within Zone 1 protection areas (fields and courts would be prohibited) the two fields and courts are "grandfathered". However, with the protection of drinking water supply wells being of paramount concern, the master plan does not propose new capital improvements to these facilities. In fact, the preferred plan recommends the relocation of the hard surfaced, impermeable and badly deteriorated tennis courts to a location near the front of the property at Old Connecticut Path.

Public Hearings

To receive comment from key project stakeholders, a series of public meetings and informal staff meetings were convened. Public meetings included the following:

Meeting Type	Location	Date
General Public Hearing No. 1	Town Building	12.06.16
General Public Hearing No. 2	Town Building	01.18.17
Recreation Commission Meeting	Town Building	02.28.17
Recreation Commission Meeting	Town Building	03.21.17
Joint School Committee/Recreation Commission Meeting	Town Building	04.24.17
General Public Meeting No. 3	Town Building	05.23.17
Recreation Commission Meeting (to deliver this draft report)	Town Building	06.12.17

Meetings included a lot of discussion and input from town residents and representatives of various town boards and commissions. Comments received included the following topics:

- Drinking supply well head status
- Notice of Intent status and compliance with the corresponding Order of Conditions
- Natural turf vs. synthetic turf
- Concerns (environmental, health and safety) related to synthetic turf
- Backstop relationship to fields
- Concession stand requirements
- Track + field needs to be proximate to HS
- Improve access to facilities
- Tennis court relocation supported
- Need for improved condition of grass fields (turf, drainage + subsoil interventions)
- Storage accommodations are needed to eliminate haphazardly placed containers
- Softball field improvements needed
- Circulation improvements needed (pedestrian connections between facilities)

Preferred Improvement Plan

Four plans are included on the following pages as follows:

Preferred Plan (overall)
Enlargement Plan A

Enlargement Plan B
Enlargement Plan C

The preferred plan identifies the full scope of recommended improvements property wide. Geographically there are three basic groupings of improvements as follows:

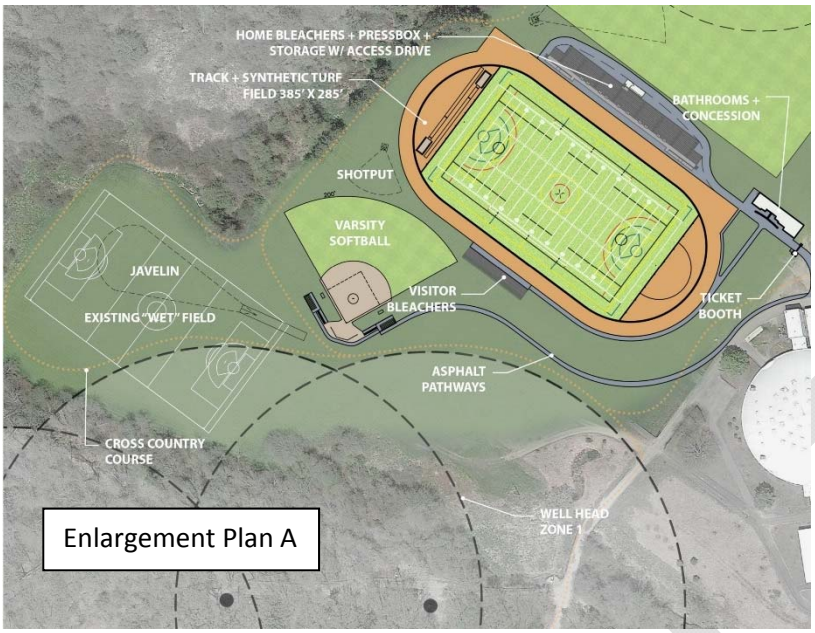
- Track and field, softball field- work within this zone would include installation of a new gateway leading to the track and field complex from the school, field house and parking area, new track and field, new bleachers (home and away) and enclosed storage space below the home bleachers. A concession building, formal pathways, softball field with new backstop, fencing, player's benches and other ancillary components would round the list of major improvements.

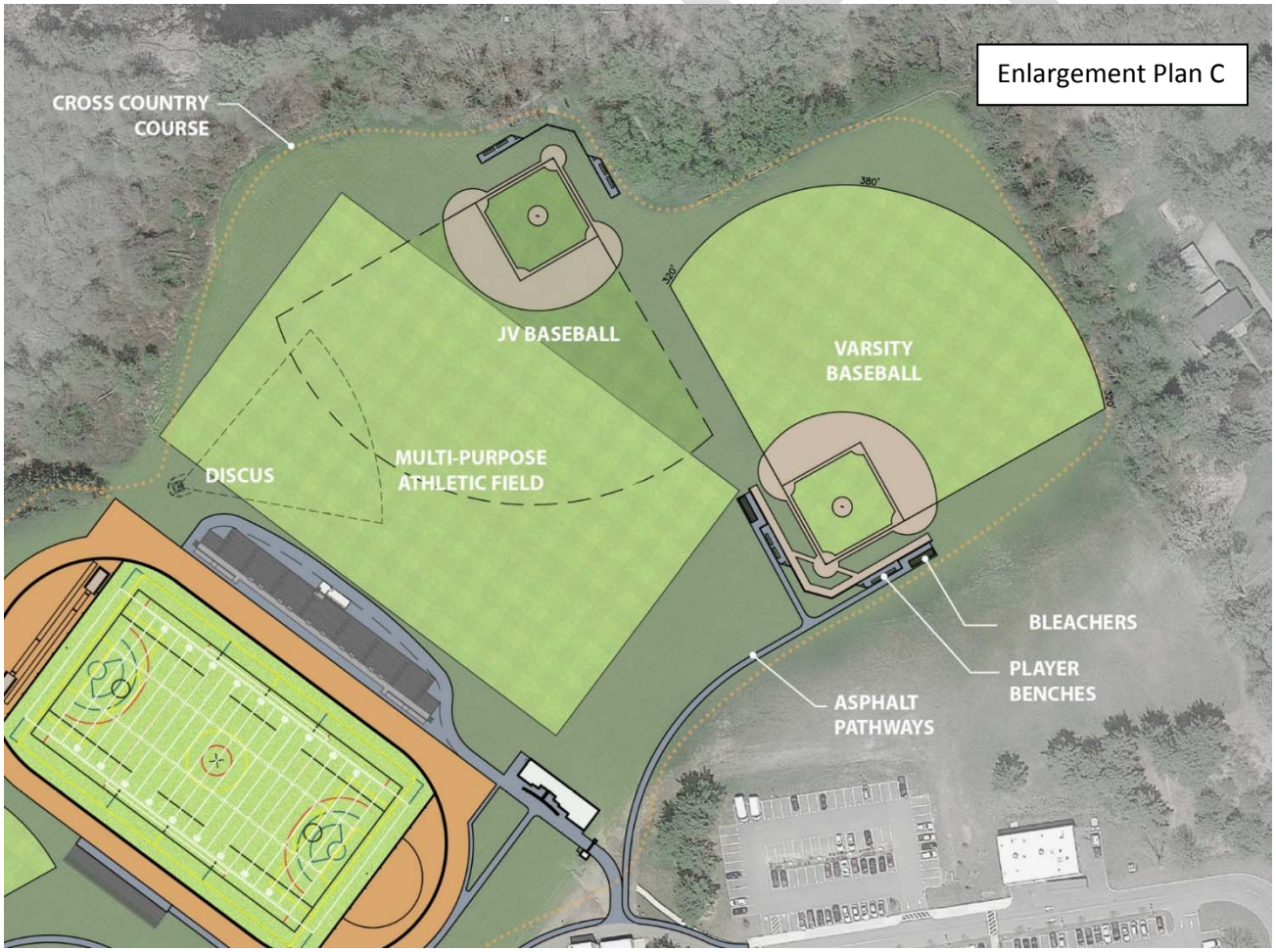
- Baseball fields and multi-use field- improvements include relocated or slightly reoriented baseball fields with new upgraded ancillary facilities (player's benches, bleachers, backstops, perimeter fencing, foul poles). New pathways would conveniently connect facilities to the school, field house and parking lot.

- Court complex- at the southern tip of the property, a new court complex would be created. This would better serve both school and community use by constructing 6 new high performing tennis courts at the site of the former substandard girls' softball field and 2 new basketball courts (which represents a net gain of 1 court).

The preferred plan shows the full array of reconstructed and renovated facilities within the three basic geographic zones referenced above.

Enlargement Plans A, B + C (see following page) present a more detailed view of the proposed site improvements.



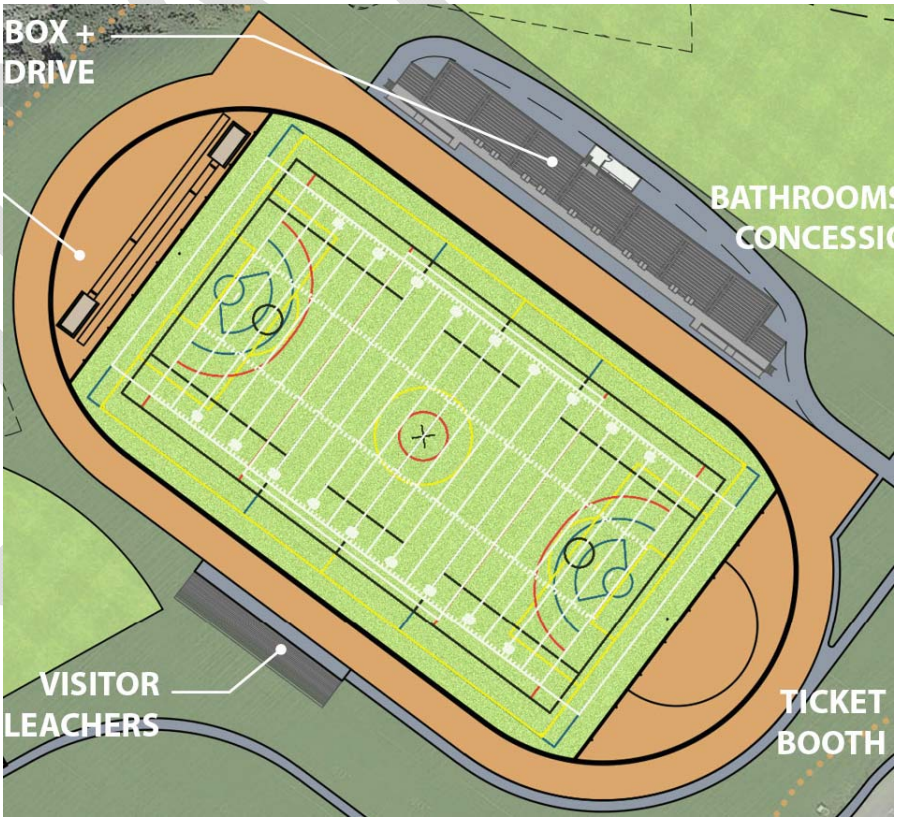


While Enlargement Plan C identifies one large multi-purpose field toward the center of the diagram, it should be noted that there are at least half a dozen field configurations that could be used within this area that accommodate a wide range of practices and games.

The recommended upgrades will help to achieve dramatically better playing conditions. Properly constructed sports and recreation facilities will also be more easily maintained and support greater programmed usage with far fewer impacts caused by normal heavy use. Implementing the preferred plan will provide enormous benefit to school and community users, reduce safety concerns, provide environmental benefit and accomplish the following:

- New facilities correct deteriorated conditions, deficiencies, code issues, ADA concerns
- Higher performance all facilities | relief to maintenance forces | increased use
- Improved track configuration
- Highly efficient lighting systems with less spillage and reduced operational costs
- Larger primary field footprint inside the track (+ ½ acre) and increased capacity
- Improved baseball field footprints + improved orientation
- Upgraded, dedicated softball field with perimeter fencing
- Tennis courts located to better support the community
- One additional basketball court
- Upgraded and more flexible multi-use field footprint
- Storage conundrum solved
- Pathways link to all facilities
- New gateway created to track + field
- State of the art irrigation systems and stormwater management systems that provide environmental benefit (more efficient watering, recharge of rainfall to soils below and protection of all surrounding environmental resource areas)
- Synthetic turf systems with improved infill options and performance characteristics

We also recommend that the existing synthetic turf field be replaced with a new synthetic turf field system. There have been many improvements since the last field was constructed a decade ago. We also believe that there should be a community conversation about the merits of the synthetic turf field and the type of infill to be used within the top fiber surface of the system. There are more than a dozen options that include rubber, organic and mineral.



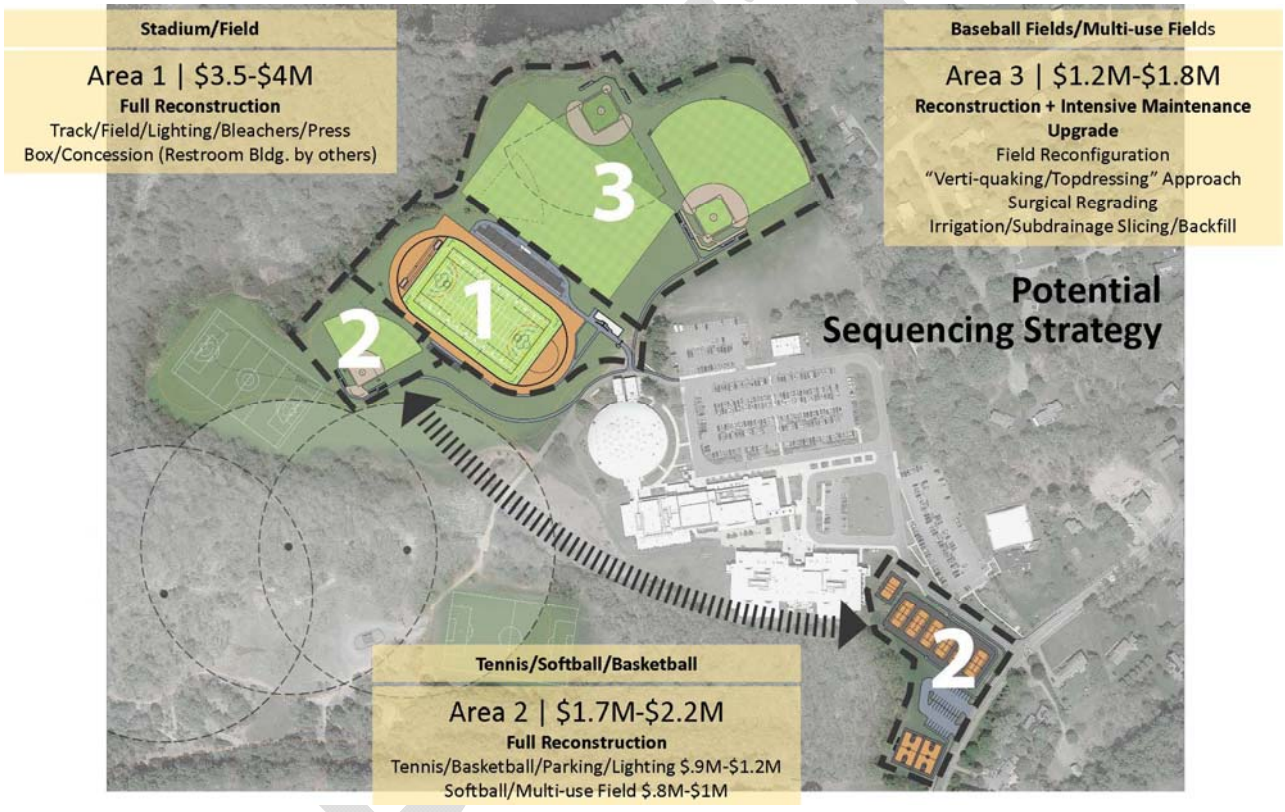
A synthetic turf field will support over 2,000 hours of use and play is nearly always available in the difficult to predict spring weather months, when so many crunches for field space occur. Most communities, many like Wayland, have determined that an inventory of mostly natural turf sports and recreation fields coupled with one or more synthetic turf fields have helped to solve critical playing field shortages. Wayland has an acute shortage that has caused many fields to prevail in less than desirable conditions due to heavy use, particularly heavy use during poor weather months.

Budget Considerations

The diagram below identifies the basic cost ranges, depending on final confirmed approaches to renovation, for each recommended sports and recreation facility improvement. As noted, a renovation approach might include one, two or three phases.

There are benefits to considering a single phased approach based on funding availability. Benefits include:

- It is less costly to undertake one phase vs. two or more phases due to reduced mobilization and demobilization and economy of scale.
- Inflation creeps in with project completed over multiple years.
- There would be less disruption with a single construction effort vs. multiple.
- Larger projects tend to attract more competitive bidding.
- Larger projects tend to attract more qualified general contractors



The table below summarizes the budget numbers identified in the plan above:

AREA	PROPOSED PLAN	LOWER RANGE	HIGHER RANGE
1	Stadium complex	$3.5M	$4M
2	Softball, tennis + basketball	$1.7M	$2.2M
3	Baseball fields, multi-purpose field (many configurations)	$1.2M	$1.8M
TOTAL		$6.4M	$8.0M

POTENTIAL FUNDING SOURCES: Local capital funding, CPC, User Fees, Donations

Phasing and Sequencing Strategies

There are many critical needs with current Wayland High School sports and recreation facilities, particularly related to the track, field and tennis court complex are urgent. This means that if improvements are not undertaken matches, meets and games may have to be relocated to other venues due to deteriorated and unsafe conditions that might prevail. To avoid this, a significant initial reconstruction effort is required. A minimal approach might include the reconstruction of designated areas 1 and 2, as shown above. This would allow, track, field and court deficiencies to be corrected. The town, through continued public dialogue, should adopt a strategy that works from a financial perspective. Once a Phase 1 program is established an approach to sequencing, which creates the least amount of disruption, should then be confirmed.

The diagram indicates how a single project could be potentially sequenced. It is also possible to construct improvements under a single phase or multiple phases.

Time is of the Essence- under any scenario, disruptions to certain sports will be likely, with events having to be scheduled at other locations in town (where available) or at away venues. And as discussed at numerous public meetings, the time to secure funding, then design, permit, bid and construct could approach 2 years. The chart below summarizes basic considerations related to timeline. Under an aggressive approach, new facilities would not likely be available for use until the spring of 2019.

Approximate Timeline for Corrective Action	
Task	**Time**
Secure Funding	6-12 Months
Design + Permit	6 Months +/-

Bidding Process	2-3 Months
Construction	6-12 Months

As the process moves forward, it will be important to note:

- Environmental compliance is a critical component
- Creative solutions are available to address site constraints
- Future designs to be fully vetted through continued community dialogue
- Physical conditions warrant immediate attention
- Events will need to be relocated | Inconveniences during construction
- Town-wide field study underway | Second synthetic turf field will be discussed

Conclusion

Most master planning participants supported the implementation of critical sports and recreation facility improvements at Wayland High School. While the costs may seem daunting, the upgrades needed are extensive and critical to prevent interruptions to scheduling certain activities. A lack of investment in recent decades has contributed to the deteriorated state of fields, courts, track and important ancillary elements at the property. This is not unique to Wayland and while many other towns have built new state-of-the-art high schools, their outdoor facilities had to be upgraded through different mechanisms (state school construction funding does not cover the construction/renovation of outdoor sports assets). This is also the case for Wayland which will need to evaluate the best approach to securing sufficient capital for improvements.

Some participants expressed reservations about the renovation approach. At each meeting, several individuals spoke against the use of synthetic turf fields with infill and many attendees expressed support for the protection of the town's drinking water supply assets and the surrounding wetland resource areas. We believe that the use of synthetic turf field is appropriate and that current systems are superior to those introduced a decade ago in important ways. We also believe that improvements can be undertaken in a way that protects and enhances the unique environmental character of the larger property and surrounding lands.

This Master Plan Summary Report is intended to help frame the ongoing conversation in Wayland about the most appropriate path to achieving improved playing conditions for school sports teams and community groups who rely heavily on these assets for competition, enjoyment and the maintenance of good health.