

# SITE ALTERNATIVES STUDY

February 2015 Rev. May 2015



www.swimwinchester.org www.facebook.com/SwimWinchester winchesterswims@gmail.com



#### Summary

Swim Winchester is a 501 (c)(3) organization seeking to develop a swim and fitness facility for the residents of Winchester and neighboring communities. Working toward this goal, Swim Winchester has hosted community meetings, solicited input from the Board of Selectman, School Committee and Field Management Committee and met with Town officials and School Department staff. Our 2014 feasibility study with national aquatics consultant Counsilman-Hunsaker suggests a facility size of approximately 25,000 square feet to ensure independent financial stability, with a corresponding development area of 1.5-3 acres. The goal of establishing such a facility receives near-universal support; the most challenging question is location - where would the ideal site be located to encourage community use and support by the broadest range of residents.

To determine potential sites for development of the Swim Winchester recreation facility, the Swim Winchester Board researched previous pool development and recreation center initiatives, reviewed the site selection process from the recent high school redevelopment project and sought input from members of the community at large. This process led to the identification of 17 candidate sites throughout the Town with sufficient potential to support the Swim Winchester program. Each site was assessed for its ability to support the proposed facility's programs using criteria developed through the feasibility study process. Some sites - while highly desirable and meeting many of the development criteria - are not viable options as they support existing community infrastructure; for the purposes of exploration these have been included in the overall assessment process.

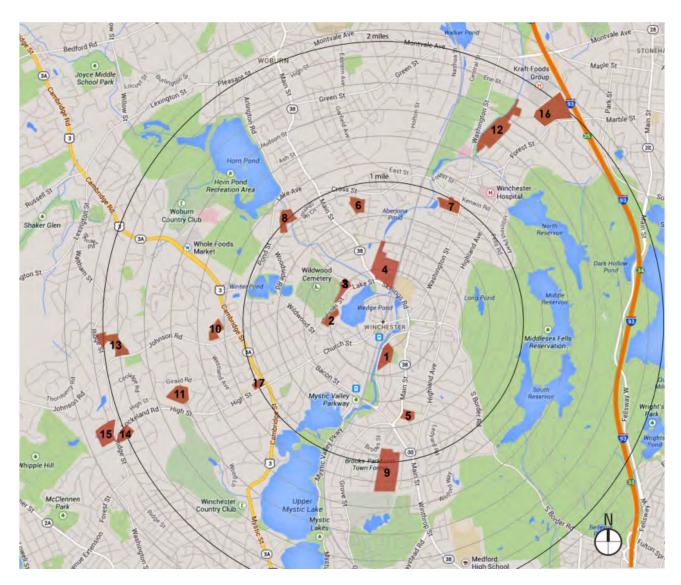
Candidate sites include the following locations:

1	Manchester Field	Mystic Valley Parkway
2	Packer-Ellis Tennis Courts	Palmer Street
3	Middlesex Park	Palmer Street
4	Ciarcia Field	Skillings Road
5	Mystic School	Main Street
6	MacDonald Field	Wendell Street
7	Leonard Field	Washington Street
8	Well Field   Lynch	Brantwood Road
9	Brooks - Parkhurst Forest	North Gateway
10	Nutile Field	Wildwood Street
11	Parkhurst School	Andrews Road
12	Kraft Sunset Road	Sunset Road
13	Vinson-Owen Science Park	Johnson Road
14	Mullen Field	Lockeland Road
15	Wright-Locke Farm	Ridge Street
16	Kraft Forest Street	Forest Street
17	Sanborn Hill	High Street



#### Site Map

Candidate sites listed above are numbered proximate to the Town center and are effectively within 2 miles of downtown as shown on the site map. The site distribution reaches to the edges of the community, although not all neighborhoods have a representative potential site.





3 Swim Winchester | Site Alternatives Study February 2015

## Site Assessment Criteria

Candidate sites were toured, researched and assessed using the following criteria for suitability:

- A Location | remoteness a central location provides the broadest access to all age groups using the facility, limits peak time traffic through neighborhoods, and complements the businesses and community services in the downtown area.
- B Independent Parking sites hosting, or adjacent to, school and/or other public facilities may offer shared parking opportunities which can significantly reduce the overall development footprint of the Swim Winchester facility. The feasibility study developed for the project recommends parking for 35-50 vehicles during school hours, with a weekend seasonal parking requirement of 160-180 vehicles. A site supporting shared parking requires 1-1.5 acres less area than a stand-alone facility location which must support the full parking requirement that will in turn be under-utilized during the majority of the year.
- C Adjacencies some sites offer particularly advantageous proximity to other community and/ or school facilities, enhancing opportunities for cross-programming and reducing vehicle tripends. Other sites suffer from incompatible adjacencies which limit development or position the Swim Winchester facility as a nuisance.
- D Floodplain | wetlands given Winchester's natural waterways, sites may be adversely impacted by floodplains, wetlands and/or seasonal water. Sites outside floodplain areas may be subject to steep topography or ledge conditions.
- E Parkland some parcels of open public land within the Town are designated as parkland and are restricted from development; revising this designation may require action at the State legislature level.
- F Residential impact local parks and community spaces may be situated within dense residential neighborhoods or on roads incapable of supporting potential traffic loads.
- G Amenity impact some parcels identified as potential site currently support community infrastructure and may be unsuitable for additional development.
- H Unique considerations similar to above, some parcels offer site-specific conditions which may support or inhibit development.
- I Infrastructure sites were reviewed for access to water, sewer, three-phase power, natural gas and other utility infrastructure.



## 1 | Manchester Field

Despite a number of location and adjacency advantages Manchester Field is readily excluded as a viable site by nature of its fixed amenities including Knowlton Football Stadium, the new track and field, and basketball courts. These amenities aside, the entire site is within the Aberjona floodplain.





5 Swim Winchester | Site Alternatives Study February 2015

#### 2 | Packer-Ellis Courts

Similar to Manchester Field, Packer-Ellis offers a central location on a 5.3 acre site, plus the added attraction of Borggaard Beach and the splash pad. Proximity to Wedge Pond places the entire site with the floodplain. Despite being close to the Town center this site would require fully independent parking for Swim Winchester. The heavily-used clay tennis courts and their unique setting would be impossible to replicate elsewhere.





#### 3 | Middlesex Park

This parcel sits on approximately 4 acres incorporating existing open space at Middlesex Park, at the heavily sloped, south east corner of the Wildwood Cemetery property. While the location is central within town, the site requires a full independent parking area to support the Swim Winchester program. A large parking component on this site could relieve difficult existing parking conditions along Palmer Street with shared access to Borggaard Beach and the Packer-Ellis courts.





Skillings Field offers open, ample space for development provided adequate field arrangements can be designed to accommodate high school and recreation uses. The 16 acre area is largely within the Aberjona floodplain and subject to culvert redevelopment, with the east side of the fields least impacted by these issues. The location is ideal, close the Town center, Jenks Center and adjacent to the High School.





8 Swim Winchester | Site Alternatives Study February 2015

## 5 | Mystic School

The Mystic School on Main Street is home to the Winchester Recreation Department and adjacent to the Winchester Community Music School, creating opportunities for combined programming on a connected campus. The location is removed from the Town center and open space is limited on the parcel. Development on the site may require renovation of some parts of the Mystic School, and the shared siting assumes operation by the Recreation Department.





9 Swim Winchester | Site Alternatives Study February 2015

## 6 | McDonald Field

This 5 acre neighborhood park provides ball diamonds, tennis, basketball and playground amenities bounded by residential abutters. While the area is sufficient to support the Swim Winchester program and independent parking, development on this scale would require the loss of both ball diamonds and would impose an adverse impact on the neighborhood, including a significant increase in vehicle traffic.





## 7 | Leonard Field

This 12.7 acre neighborhood park provides multiuse fields, tennis, basketball and playground amenities. While there are residential abutters the site is located on main traffic routes from Washington and Cross streets. The area is sufficient to support the Swim Winchester program and independent parking with the loss of significant field space, impacting recreation programs and the immediate neighborhood. Some of the site is within the Aberjona floodplain and its potential status as park land remains to be verified.





## 8 | Well Field | Lynch

The play field and wooded area adjacent to Lynch School present wetland and floodplain challenges; the wooded area - Cutters Pond - has limited access and vehicle traffic to the broader Lynch area is significantly congested through the adjacent residential neighborhoods. Proximity to the recreation trails at Horn Pond offers combined program opportunities however the site is remote from the Town center and other public amenities.





#### 9 | Brooks-Parkhurst

The Town Forest parcel is a heavily wooded 28.9 acre site surrounded by residential abutters and adjacent Mystic River Reservation land in Medford. Despite proximity to Main Street a Swim Winchester facility and parking at this location would impose significant traffic impacts as there is limited roadway access. Deed restrictions and a park land designation add significant challenges to any development of this site.





## 10 | Nutile Field

This 7.5 acre field fits four baseball/softball diamonds with little remaining space. The site is remote from other Town amenities, is readily accessed off Wildwood Street and is surrounded primarily by commercial property with limited residential abutters. Development to accommodate the Swim Winchester program and parking would eliminate 2-3 ball diamonds. A potential park land designation remains to be determined.





# 11 | Parkhurst

The former school and parking area cover much of this terraced 4.1 acre parcel, which is remote in both distance and access from the Town center. The site is surrounded by residential abutters and vehicle traffic enters via winding steep roads through the neighborhood; Swim Winchester traffic would impose a significant impact. Development is limited to the upper section of the site which would eliminate the existing baseball/ softball diamond.





## 12 | Kraft Sunset Road

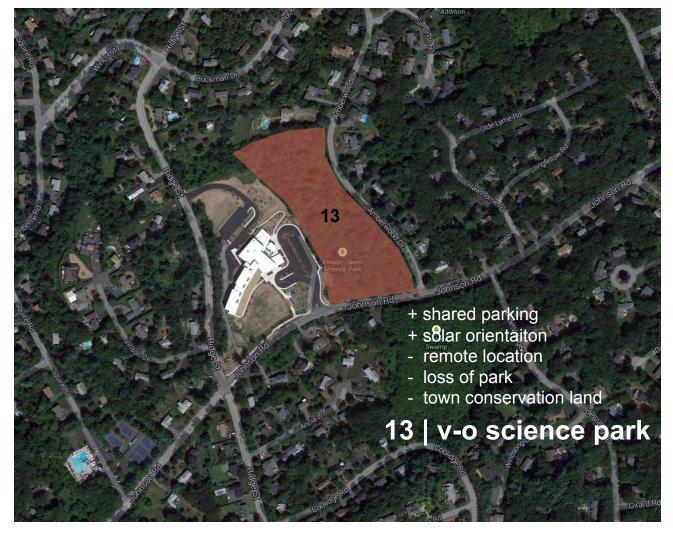
This 16.4 acre commercial parcel is readily accessible from Washington Street. Its remote location dictates a stand-alone development limited combined programming opportunity with existing Town amenities. The parcel is surrounded by residential abutters, with the neighborhood along Sunset Road at risk of significant pass-through traffic to this site. The entire site is within the Aberjona floodplain.





## 13 | Vinson-Owen Science Park

The 7.5 acres of established woods adjacent to the Vinson-Owen school offers shared parking opportunities and a unique setting for Swim Winchester, with direct access off Johnson Road and limited residential abutters on Amberwood Drive. The location is remote from the Town center and other amenities. Traffic during morning program hours would significantly impact the already congested Johnson Road /Ridge Street intersection. The Science Park is designated conservation land along with the adjacent Sachem Swamp.





#### 14 | Mullen Field

Mullen Field currently supports 2 baseball/softball diamonds, flexible field space and a playground on 9.5 acres. While a large parking area exists it is frequently full and the remote location requires a full independent parking area if developed for a Swim Winchester facility. Limited combined programming may be developed with recreation trails at the adjacent Wright-Locke farm and Whipple Hill conservation land. A potential park land designation remains to be determined.





## 15 | Wright-Locke Farm

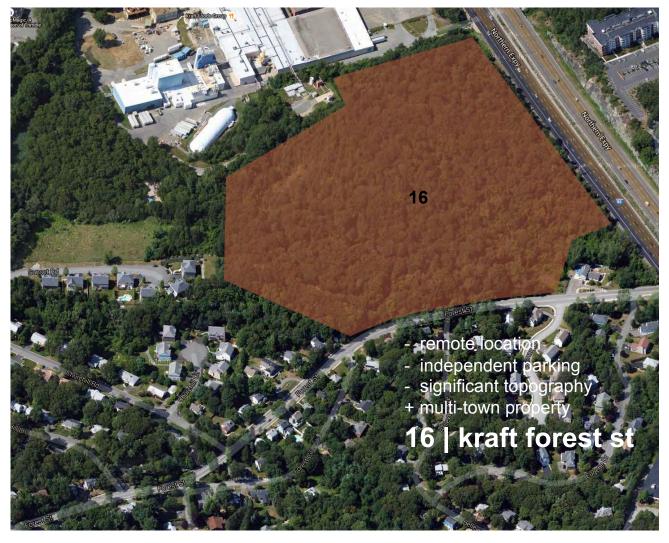
Wetlands, topography, limited infrastructure and limited access present planning and financial challenges for development of a large footprint building on the rear section of this parcel. The remote location requires a full independent parking area to support the Swim Winchester program. Similar to Mullen Field, limited combined programming may be developed with recreation trails at the adjacent Whipple Hill conservation land.





## 16 | Kraft Forest Street

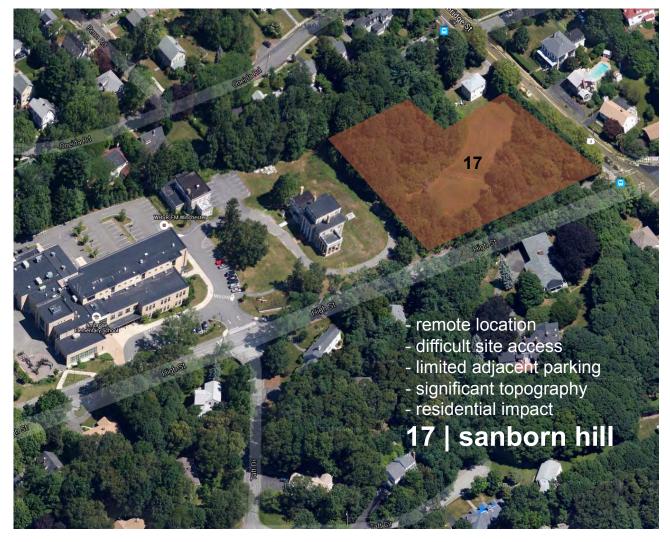
This commercial parcel is an undeveloped portion of the 57 acre Kraft Foods property; Kraft has announced the facility will close by the end of 2016. Its remote location dictates a stand-alone development and independent parking. While the site may be accessed from Winchester, the majority of the parcel is located in Woburn, which may increase the draw area for an aquatic center. The parcel is elevated above the Aberjona floodplain and has significant grade rising along Forest Street.





#### 17 | Sanborn Hill

This 2-2.25 acre site is located at the busy intersection of High and Cambridge Streets with access challenges based on heavy traffic patterns and the rising grade of High Street. The Ambrose School driveway is a likely access point and connects with approximately 65 existing parking spaces. The site does not support space for an additional 100+ vehicles, and it's layout is not suitable for any exterior pool development. Adjacent residential properties and the historic Sanborn House would be impacted by development on the parcel.





## Site Selection Scoring

Assessment criteria are applied on a non-hierarchical basis, with scoring on a 0-2 scale:

- 0 not advantageous | significant impact
- 1 limited impact
- 2 advantageous | minimal impact

The resulting raw scores for the candidate sites are noted below with sites following their original geographic order.

	criteria	Α	В	С	D	E	F	G	Н	I	total
1	Manchester Field	2	1	2	1	2	2	0	0	1	11
2	Packer-Ellis Courts	2	0	1	1		1	0	0	1	6
3	Middlesex Park	2	0	1	2	1	1	1	0	1	9
4	Skillings Field	2	2	2	0	2	2	1	2	1	14
5	Mystic School	1	1	1	2	2	0	2	0	1	10
6	MacDonald Field	1	0	0	2	0	0	0	2	1	6
7	Leonard Field	1	0	1	1	0	1	1	2	1	8
8	Well Field   Lynch	0	1	0	1	1	0	1	2	1	7
9	Brooks-Parkhurst Forest	1	0	0	2	0	0	0	0	0	3
10	Nutile Field	0	0	0	2	0	2	1	2	0	7
11	Parkhurst School	0	0	0	2	2	0	2	1	1	8
12	Kraft Sunset Rd	0	0	0	0	0	0	0	0	0	0
13	V-O Science Park	0	2	1	2	0	1	0	0	1	7
14	Mullen Field	0	0	0	2	0	1	1	1	1	6
15	Wright-Locke Farm	0	0	0	2	2	1	0	0	0	5
16	Kraft Forest Street	0	0	0	2	2	1	1	0	0	6
17	Sanborn Hill	0	1	0	2	2	0	0	0	1	6
		location   remoteness	parking	adjacencies	floodplain   wetlands	park land	residential impact	amenity impact	unique considerations	infrastructure	total
										0	



The candidate site list ordered by total assessed score:

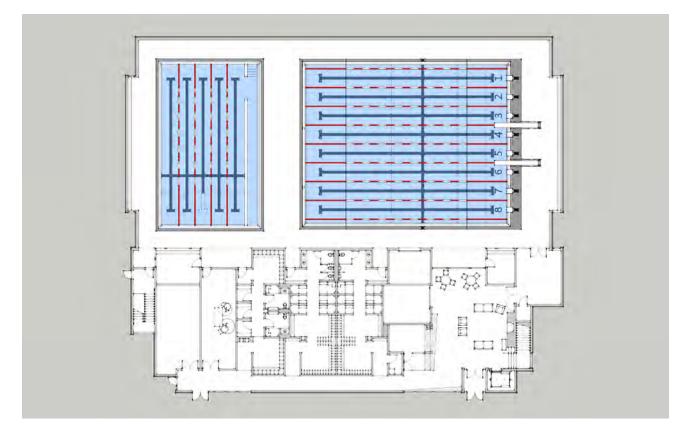
	<u>criteria</u>	Α	В	С	D	E	F	G	Н	I	total
4	Skillings Field	2	2	2	0	2	2	1	2	1	14
1	Manchester Field	2	1	2	1	2	2	0	0	1	11
5	Mystic School	1	1	1	2	2	0	2	0	1	10
3	Middlesex Park	2	0	1	2	1	1	1	0	1	9
7	Leonard Field	1	0	1	1	0	1	1	2	1	8
11	Parkhurst School	0	0	0	2	2	0	2	1	1	8
13	V-O Science Park	0	2	1	2	0	1	0	0	1	7
8	Well Field   Lynch	0	1	0	1	1	0	1	2	1	7
10	Nutile Field	0	1	0	1	1	0	1	2	0	6
14	Mullen Field	0	0	0	2	0	1	1	1	1	6
6	MacDonald Field	1	0	0	2	0	0	0	2	1	6
2	Packer-Ellis Courts	2	0	1	1		1	0	0	1	6
16	Kraft Forest Street	0	0	0	2	2	1	1	0	0	6
17	Sanborn Hill	0	1	0	2	2	0	0	0	1	6
15	Wright-Locke Farm	0	0	0	2	2	1	0	0	0	5
9	Brooks-Parkhurst Forest	1	0	0	2	0	0	0	0	0	3
12	Kraft Sunset Rd	0	0	0	0	0	0	0	0	0	0
		location   remoteness	parking	adjacencies	floodplain   wetlands	park land	residential impact	amenity impact	unique considerations	infrastructure	total

The five top scoring sites include Manchester Field, home of the recently developed turf field and track facility; while this site has historically been identified as a candidate for facility development it is not a viable option and



## A Pool Planning Module

A planning module has been developed to assess the impact of the Swim Winchester program on potential sites. This includes all program elements identified in the feasibility and is used to establish an approximate footprint area for the project. The module is not a concept design, simply a tool to study how the required program may sit on any given site; as such it does not adapt to the particular geometries of a specific site.



The planning module footprint measures approximately 20,700 square feet and includes program areas likely to require first floor access:

entry and community rooms membership and check-in desk pool storage and mechanical space swimming pools and pool deck locker rooms pool and life safety offices



# 11 | Parkhurst

The planning module fills a large portion of the Parkhurst field area. The east-west orientation allows the deep end of the lap pool to take advantage of the terraced site. The footprint is against the northern edge of the parcel to provide maximum parking opportunities and will directly impact the adjacent residential properties. This remote site does not support the parking requirements for the facility; parking will cover the remainder of the open area and is only sufficient for 80-100 vehicles.



An alternate location orients the module against the west side of the parcel leaving a larger potential area for parking development. The full parking requirement may be more likely to fit on the site using two terraced lots if the existing parking lot, playground and building annex were removed.



## 7 | Leonard Field

The planning module is sited adjacent to the existing tennis courts and above the FEMA floodplain on this parcel. This location provides the largest remaining contiguous area for field use and parking development; an efficient parking layout may allow a single soccer field to remain. Vehicle access is limited into the site and significant trip-end counts may preclude a direct connection to Washington Street. Residential properties abutting the field will be impacted by the building location, parking and vehicular traffic.



Alternately the module can be located parallel to Washington Street with an entrance at street level, using the existing grade to facilitate pool well construction. Parking could be adjacent to the facility leaving a remaining north-south oriented field. Aligning this alternate location with Grayson Road reduces potential parking efficiency while minimizing the development impact on adjacent residential properties.



Ν

#### 3 | Middlesex Park

Topography and screening buffers are primary planning concerns on this parcel. A building entry elevation will need to balance over 30 feet of grade change across the site. The planning module footprint places the building into the natural grade of the site, minimizing the overall building height and pool well excavation requirements. Maintaining effective physical and natural buffers to adjacent residential properties and uphill toward Wildwood Cemetery will be critical to establishing an independent site for Swim Winchester.



Expansion on the site will be defined to the extent open space is required at Middlesex Park; the Park ould serve future Town or Swim Winchester recreation programs as needed.



## 5 | Mystic School

The south edge of the site on Marshall Road offers buildable area on this parcel; the planning module footprint impact eliminates either the current parking lot or the classroom and office annex to the existing building. Both locations impact current outdoor program areas. The location closer to Main Street avoids the steep topography of the property's eastern edge but reduces parking efficiency as the grade increases.



An alternate consideration for this parcel is to incorporate the Swim Winchester program as an addition to the Mystic School building, renovating classrooms and bathroom spaces into public areas and locker rooms, with new construction supporting the swimming pools. This approach may provide additional parking opportunities on the site for 50-70 vehicles, still far short of the parking requirements for the Swim Winchester facility.



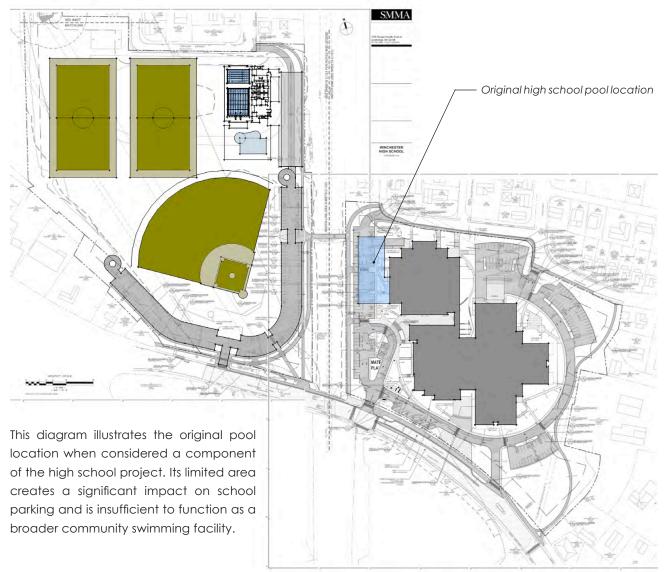
The development of this parcel is influenced by flood plain issues, culvert locations and multiple field requirements for the adjacent high school. This site study has focused on the northeast section of the site to minimize impacts from existing site constraints and best accommodate field and building programming. The planning module footprint sits within the center area of the existing running track and is oriented parallel to the railroad tracks.



While this orientation appears arbitrary within the existing conditions of the parcel, it allows the Swim **N** Winchester facility to become an integral component with envisioned redevelopment of the Skillings Field site including the baseball diamond and new parking arrangement.



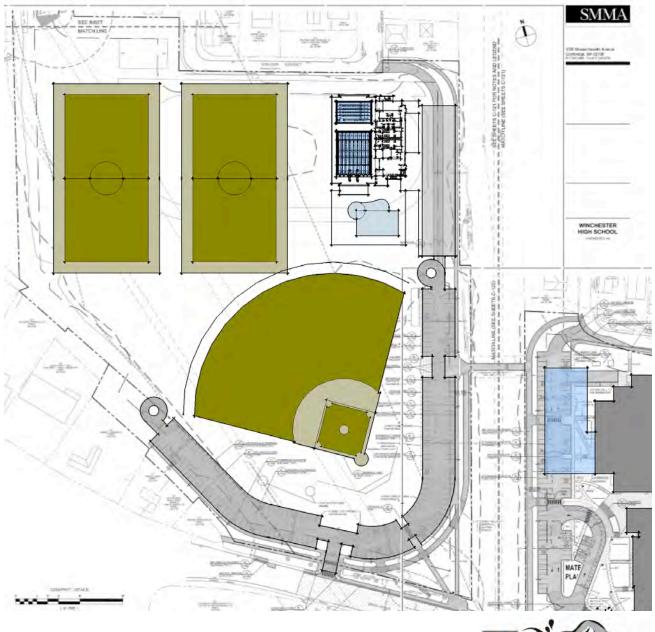
The new parking scheme designed for Skillings Field follows a the edges of the site to surround the rebuild baseball diamond; the eastern leg of parking can extend further north along the planned secondary access route creating an additional 60 parking spaces. An emergency vehicle turning circle can be developed at the north end of the parking area. The planning module footprint sits adjacent to this new parking with field space to the immediate west.



High School and Skillings Field base plans courtesy of SMMA.



The planning module location allows for two north-south fields; this diagram uses a 340' x 190' field - these could measure up to 210' wide in this arrangement. The Swim Winchester facility essentially fits into this field dimension, including space to develop an exterior swimming pool as requested by the community. The facility can readily be positioned facing north to the adjacent neighborhood or south as may best suit the overall field development concept.



#### Conclusion

Skillings Field is the highest scoring site for a recreational facility based on the site assessment criteria. Advantages of the Skillings site include:

- Shared school parking minimizes the need to pave open space
- Building occupies only a small portion of available land
- Adjacent to the high school and athletic fields
- Proximity to town center businesses and the Jenks Center
- Accessible by vehicle from a major road (Skillings Rd.)
- Promotes a "high school campus" concept
- Provides opportunities for high school student employment and school-based internships
- Can serve athletic storage needs

The Skillings site does present several challenges, most notably the loss of field space and the need for environmental and flood mitigation work on the site. The proposed redevelopment of the field creates an opportunity for a facility to be part of an integrated athletics program on the Skillings. A multi-purpose turf field with lights would provide double the playing time of a traditional grass field and would reduce the impact of field loss. The effect of the environmental and flood mitigation work is unclear.

Alternate sites with some potential are Mystic School, Middlesex Park, Leonard Field, and Parkhurst School. In all cases, a significant drawback is the amount of green-field parking that would need to be built (160-180 spaces or 1.5 acres). In the case of the Mystic School site, additional parking would be required along Main St. and one wing of the existing building would need to be demolished. Wildwood provides the best area for parking development, however there are significant grading issues to resolve. The Leonard Field site would require vehicle access from Washington St. and may require compensatory town park land. At the Parkhurst School site, the pool complex would take up all of the available open space and would significantly increase vehicular traffic on residential streets.

Of the alternate sites Middlesex Park meets the majority of advantages noted for Skillings Field, including proximity to the town center, high school and Jenks Center. The site is readily accessible by a major road and with proper pedestrian connections can develop a recreation campus incorporating the Packer-Ellis courts, Borggaard Beach and the splash pad.

