

Natural Grass and Synthetic Turf Examples

Prepared by:



June 12, 2025

This document, "Natural Grass and Synthetic Turf Examples," has been prepared for the City Council, the Joint Building Committee (JBC), and the School Board in Dover, NH, to inform discussions regarding potential upgrades to the athletic facilities at Dover High School.

The document presents a visual comparison of various natural grass and synthetic turf playing surfaces across New England, encompassing facilities used for youth sports, college athletics, and professional competitions. The included photos, gathered from the website NearMap, document the evolution of these surfaces over several years. In some instances, the images showcase natural grass fields adjacent to synthetic turf fields, while others illustrate the conversion of natural surfaces to synthetic ones. The intent of these images and the broader document is to provide insight into how different playing surfaces withstand the ever-changing New England environment, characterized by both wet seasons and severe drought years, and the level of maintenance required for natural grass fields to remain safe and playable for athletes.

The aerial images contained herein highlight the various challenges associated with natural grass fields, including severe drought damage, bare spots, and compaction. Maintaining safe and playable natural grass surfaces often necessitates constant irrigation and frequent re-sodding. Furthermore, these challenges are compounded by issues such as drainage failures, uneven surfaces, and chronic bald patches, which often indicate inadequate maintenance capacity for heavy demand.

For additional detailed insights into these issues and comprehensive recommendations, please refer to the Engineering Technical Memorandum prepared by the Dover City Engineering Office on May 22, 2025, in response to the JBC Report dated May 21, 2025.

The fields included in this document were selected based on a variety of factors including the types of surfaces present at the facility, the ownership of the facility, and whether or not the field was used as an example of a synthetic or natural grass field during a public hearing in Dover, NH. The fields included herein are as follows:

Field	Page(s)
Lower Giles Field (Milton, MA)	3
Barnes Memorial Park (Dedham, MA)	4-11
Gonzalez Field (Dedham, MA)	11-15
Winnacunnet HS (Hampton NH)	16-22
Derryfield Park (Manchester, NH)	23-33
Ardsley High School (Ardsley, NY)	34-41
Governor's Academy (Byfield, MA)	42-51
Troy Softball League (Private Field - Stamford, CT)	52-57
Marblehead High School (Marblehead, MA)	58-68
Seaside Park (Marblehead, MA)	69-83
Natural Grass Turf (Mt. Greylock, MA)	84-88
Natural Grass Turf (Shaws Lane Dover, NH)	89-94
Natural Grass Turf (DHS Dover, NH)	95-101
Dunaway Field Natural Grass Turf (DHS Dover, NH)	102-109
Natural Grass Turf Baseball Field (DHS Dover, NH)	110-117
Natural Grass Turf (Woodman Park School Dover, NH)	118-123
Natural Grass Turf (Fenway Park - Boston, MA)	124-133
Natural Grass Turf (Livingston Park/NMHLittle League North Soccer League - Manchester, NH)	134-144
Natural Grass/Synthetic Turf (Derryfield School - Manchester, NH)	145-154
Natural Grass Turf (Southern NH University Hooksett, NH)	155-164
Natural Grass/Synthetic Turf (UMass Amherst - Amherst, MA)	165-178

Lower Giles Field (Milton, MA)



Barnes Memorial Park

SITE DATA SUMMARY

Address	150 Eastern Avenue
Classification	Community
Neighborhood or District	Dedham Square
Zone	GR-General Residence
Acreage	14.9 Acres
Wetlands	Yes, West Side of the property along Wigwam Brook
Easements or ROW	Yes, Stormwater easement through north baseball outfield.
Flood Zone	Special Flood Hazard Zone
Parking Quantity & Materials	Asphalt approximately 40 spaces with 3 handicapped spaces
User Groups	Dedham Youth Soccer, Dedham Pop Warner, Dedham High School Baseball and Softball, hub softball, Dedham Youth Baseball, Adult Baseball DPR
Utilities and Infrastructure	Three areas drains were observed on the east side of the property. Pipe types sizes and inverts unknown, manholes were observed full. Additional storm easement runs through the baseball and soccer field. Athletic Fields have no observed subdrainage. Site lighting includes lighting for baseball, softball and an area for football. Lighting exists for baseball and is Musco Light Structure II age is unknown. Lighting of softball and football is aged and needs replacement.
Irrigation	Irrigation covers only up to the main baseball outfield, softball and football. Water supply is from a well. Irrigation extension completed for both fields in 2013.

Gonzalez Field

SITE DATA SUMMARY

Address	50 Eastern ave
Classification	Community Park
Neighborhood or District	East Dedham/Dedham Square area
Zone	Central Business
Acreage	6.3 Acres
Wetlands	Wigam Brook
Easements or ROW	RK Associates and MBTA
Flood Zone	None
Parking Quantity & Materials	Asphalt approximately 44 stalls including 4 handicapped spaces.
User Groups	Dedham Youth Soccer, Dedham Youth Lacrosse, Dedham High School (field hockey, soccer, lacrosse), Pop Warner Football, DPR
Utilities and Infrastructure	See construction documents for Gonzalez Field in Appendix.
Irrigation	Irrigation installed in 2017.
Facilities and Features	See construction documents for Gonzalez Field in Appendix
Structures and Supporting Amenities	See construction documents for Gonzalez Field in Appendix

Barnes Memorial Field
Eastern Avenue
Dedham, MA 02026



Barnes Memorial Field
Eastern Avenue
Dedham, MA 02026



**Barnes Memorial Field
Eastern Avenue
Dedham, MA 02026**



**Barnes Memorial Field
Eastern Avenue
Dedham, MA 02026**



**Barnes Memorial Field
Eastern Avenue
Dedham, MA 02026**



Barnes Memorial Field
Eastern Avenue
Dedham, MA 02026



Barnes Memorial Field
Eastern Avenue
Dedham, MA 02026

Gonzalez Field
High Street
Dedham, MA 02026



**Gonzalez Field
High Street
Dedham, MA 02026**



**Gonzalez Field
High Street
Dedham, MA 02026**



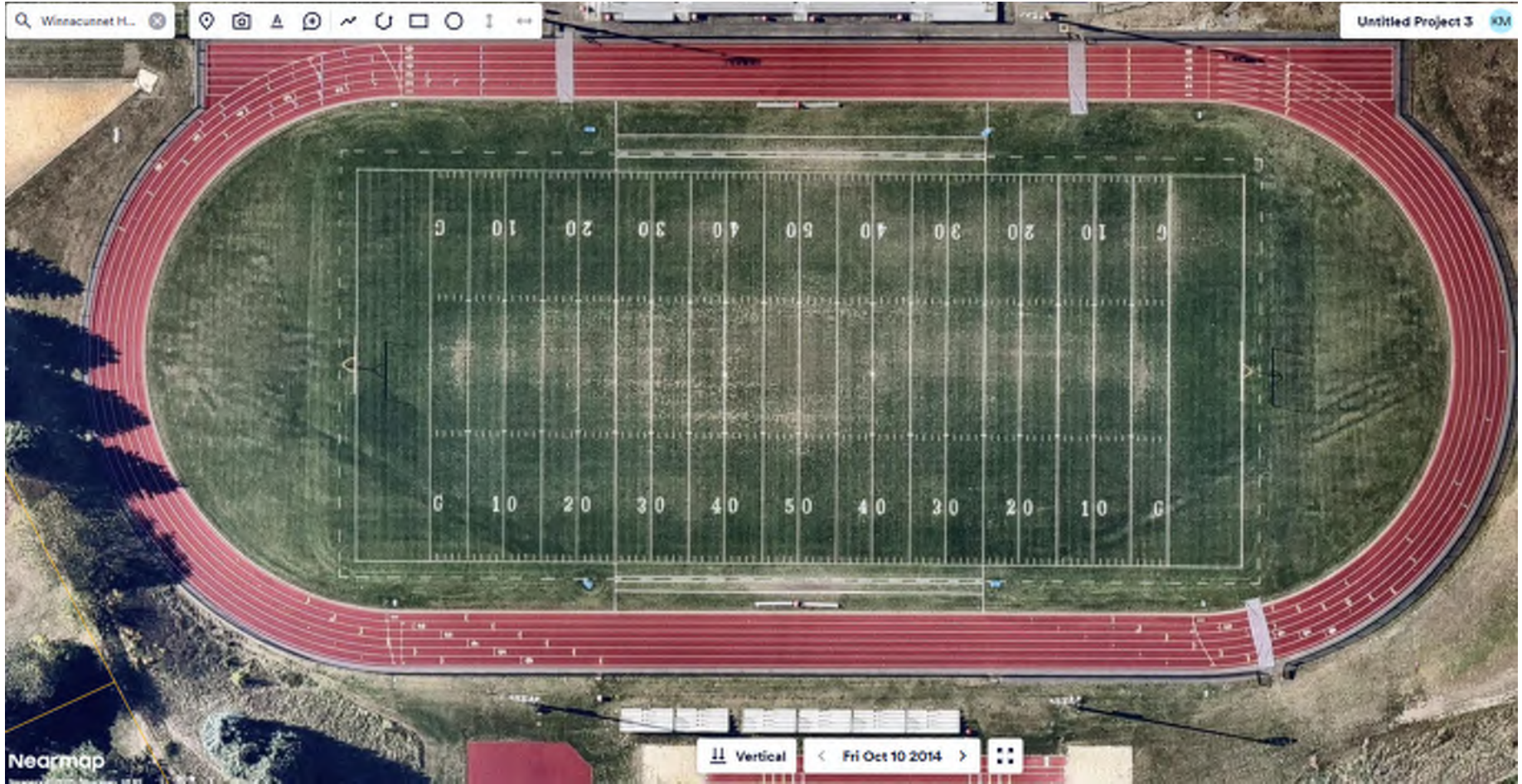
Gonzalez Field
High Street
Dedham, MA 02026



Gonzalez Field
High Street
Dedham, MA 02026



Winnacunnet HS (Hampton NH)



Winnacunnet HS (Hampton NH)



Winnacunnet HS (Hampton NH)



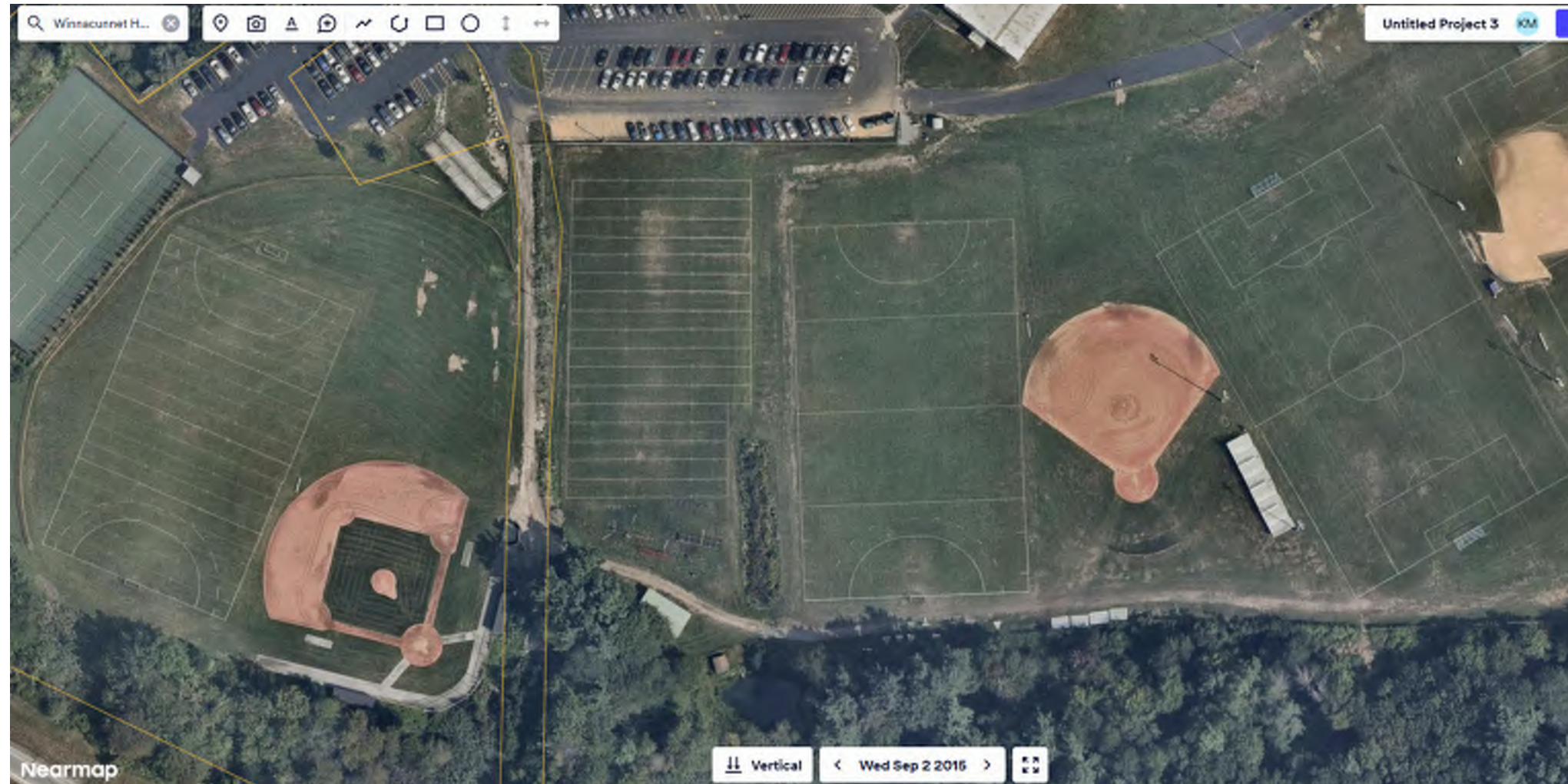
Winnacunnet HS (Hampton NH)



Winnacunnet HS (Hampton NH)



Winnacunnet HS (Hampton NH)



Winnacunnet HS (Hampton NH)



Trinity High School - Derryfield Park

Multi-Purpose Stadium and Sports Facility

Huntress Sports provided master planning, engineering, design and permitting for the new multi-purpose stadium construction for Trinity High School in Manchester, New Hampshire. HAI reviewed the athletic program needs, developing a Conceptual Master Plan and preliminary costs estimate for the new facilities.

The athletic program includes:

- Multi-purpose synthetic turf field
- Two softball fields
- Sports lighting
- 750 seat grandstand
- Sound system
- Parking lot and associated walkways
- Storage building
- Planting design

The project team secured all local permitting including NHDES Alteration of Terrain Permits and Conservation Commissions through the City of Manchester. The \$2.5m project was opened on time and within budget in October of 2019.

LOCATION: Manchester, New Hampshire

CLIENT: City of Manchester

SERVICES PROVIDED: Master Planning, Engineering, Design, and Permitting



Derryfield Park (Manchester, NH)



Derryfield Park (Manchester, NH)



Derryfield Park (Manchester, NH)



Derryfield Park (Manchester, NH)



Derryfield Park (Manchester, NH)



Derryfield Park (Manchester, NH)



Derryfield Park (Manchester, NH)



Derryfield Park (Manchester, NH)



Derryfield Park (Manchester, NH)



Derryfield Park (Manchester, NH)



Ardsley High School (Ardsley, NY)



Ardasley High School (Ardasley, NY)



Ardasley High School (Ardasley, NY)



Ardsley High School (Ardsley, NY)



Ardsley High School (Ardsley, NY)



Ardasley High School (Ardasley, NY)



Ardasley High School (Ardasley, NY)



Ardasley High School (Ardasley, NY)



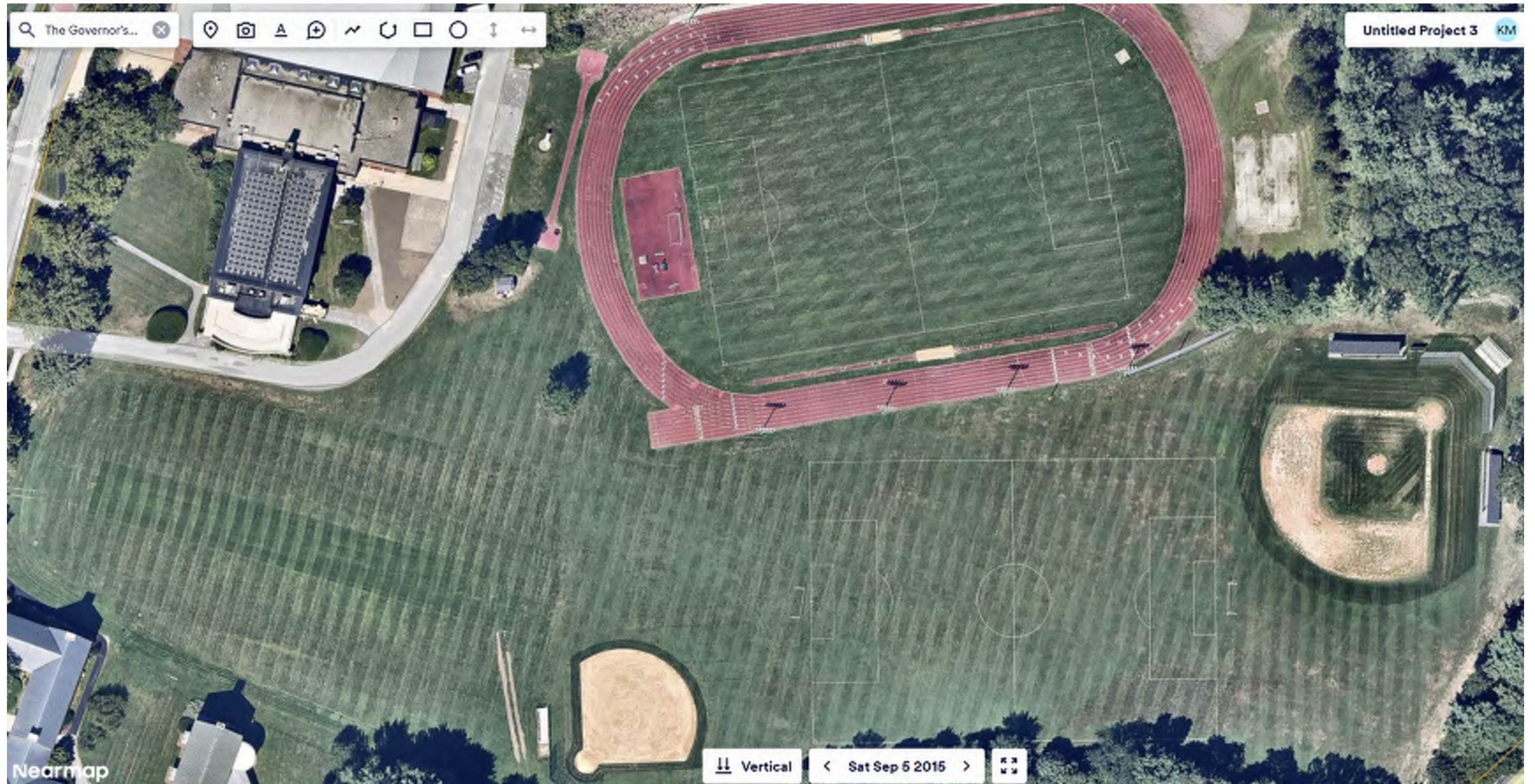
Governor's Academy (Byfield, MA)



Governor's Academy (Byfield, MA)



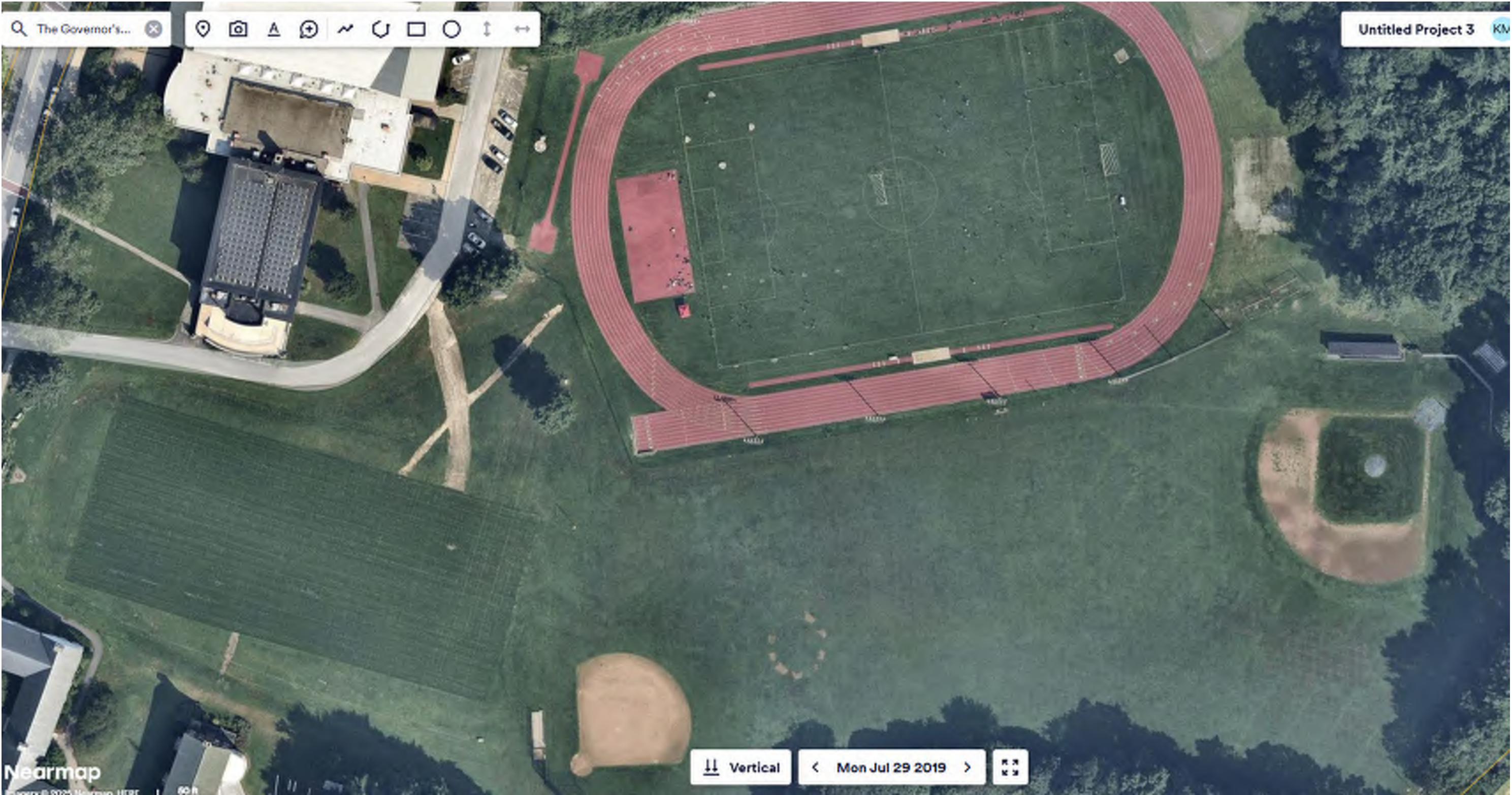
Governor's Academy (Byfield, MA)



Governor's Academy (Byfield, MA)



Governor's Academy (Byfield, MA)



Governor's Academy (Byfield, MA)



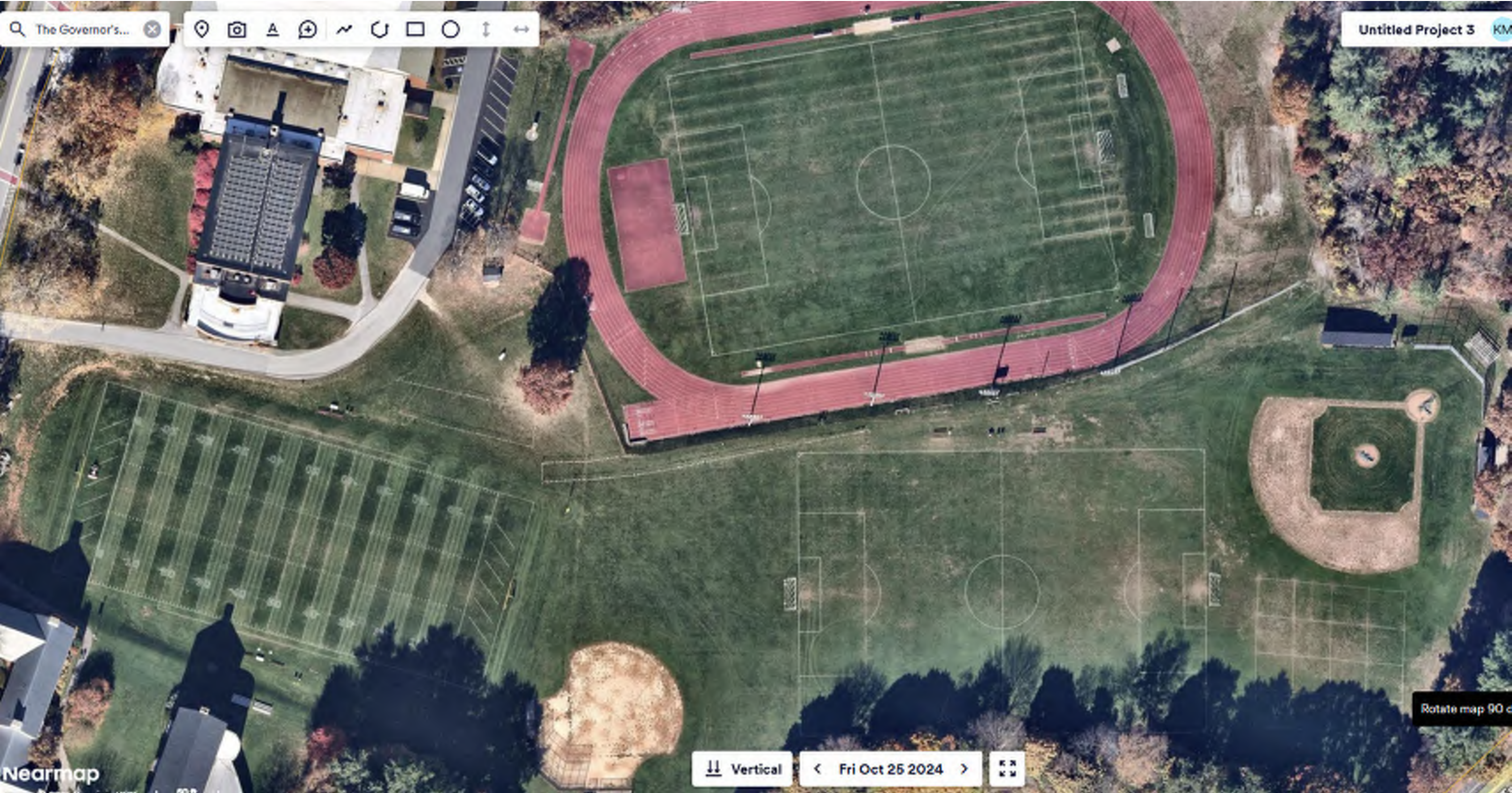
Governor's Academy (Byfield, MA)



Governor's Academy (Byfield, MA)



Governor's Academy (Byfield, MA)



Governor's Academy (Byfield, MA)



Troy Softball League (Private Field - Stamford, CT)



Troy Softball League (Private Field - Stamford, CT)



Troy Softball League (Private Field - Stamford, CT)



Troy Softball League (Private Field - Stamford, CT)



Troy Softball League (Private Field - Stamford, CT)



Troy Softball League (Private Field - Stamford, CT)



Marblehead High School (Marblehead, MA)



Marblehead High School (Marblehead, MA)



Marblehead High School (Marblehead, MA)



Marblehead High School (Marblehead, MA)



Marblehead High School (Marblehead, MA)



Marblehead High School (Marblehead, MA)



Marblehead High School (Marblehead, MA)



Marblehead High School (Marblehead, MA)



Marblehead High School (Marblehead, MA)



Marblehead High School (Marblehead, MA)



Marblehead High School (Marblehead, MA)



Seaside Park (Marblehead, MA)



Seaside Park (Marblehead, MA)



Seaside Park (Marblehead, MA)



Seaside Park (Marblehead, MA)



Seaside Park (Marblehead, MA)



Seaside Park (Marblehead, MA)



Seaside Park (Marblehead, MA)



Seaside Park (Marblehead, MA)



Seaside Park (Marblehead, MA)



Seaside Park (Marblehead, MA)



Vertical

< Sun Oct 4 2020 >



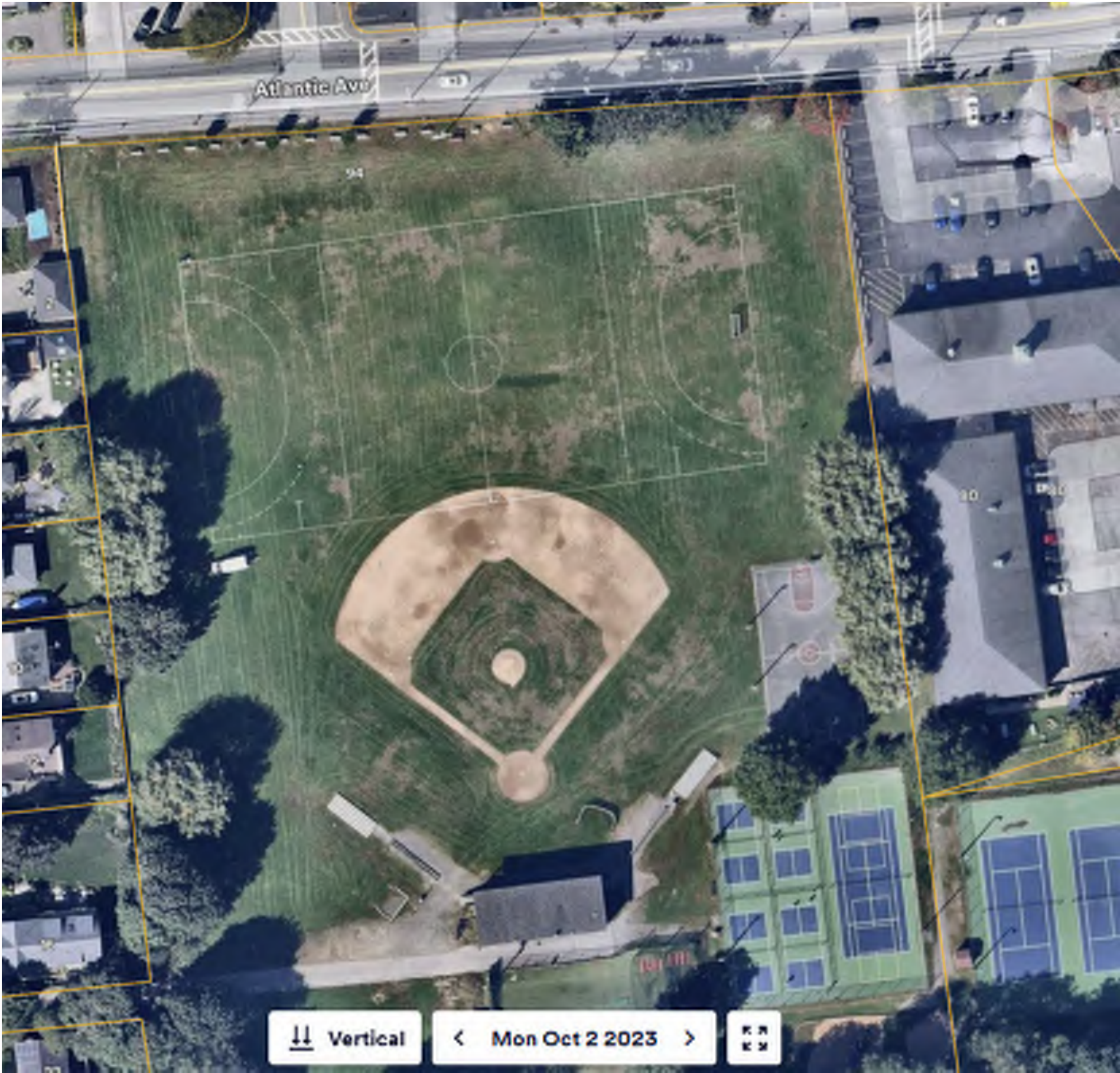
Seaside Park (Marblehead, MA)



Seaside Park (Marblehead, MA)



Seaside Park (Marblehead, MA)



Seaside Park (Marblehead, MA)



Seaside Park (Marblehead, MA)



Natural Grass Turf (Mt. Greylock, MA)



Natural Grass Turf (Mt. Greylock, MA)



Natural Grass Turf (Mt. Greylock, MA)



Natural Grass Turf (Mt. Greylock, MA)



Mount Greylock Track Complete

Olivia Perez and Jaclynn Kastrinakis
November 19, 2024

Mount Greylock Track Complete
Photo courtesy of Oliver Bingemann

The new track at Mount Greylock Regional School was recently completed, lines and all. The Mount Greylock Regional School Committee showed unanimous support for the project on November 17, 2022 at the meeting with the Track and Field Project Committee. The construction began in the spring of 2024, and is now ready to be used for the 2025 spring season.

In the past, there was never a need for a community track. Most residents would use the external track closest to them, usually the Williams College track in Williamstown or the Taconic High School Track in Pittsfield. In addition, the facilities provided by Williams College allowed track and field athletes to practice without the school having its own equipment. “We never originally pursued a track because Williams built the Steinbrenner [track] in 1987 and we were able to use it frequently,” said track and field coach Brian Gill. “This set us on a path of not seeing a need for our own because we could use Williams.” In recent years, however, Williams College programs have improved and become more competitive. As a result, it has become harder to find training and competition times for Mount Greylock that work with the Williams schedule.

In addition, the new Mount Greylock track makes things a lot easier for the track and field team and coaching staff. In the past, the team would not be able to train for some events on the grass track because it was often wet. Now, with the new track, student athletes can train without worrying about weather. “We practice every day, no matter the weather. There is always something we can do to get better – weight room, speed work in the gym, etc.,” said Gill. Gill added that the coaches are “so excited to not have to move all of our equipment – shots, discs, javs and starting blocks – every day back and forth from Williams.



Natural Grass Turf (Shaws Lane Dover, NH)



Natural Grass Turf (Shaws Lane Dover, NH)



Natural Grass Turf (Shaws Lane Dover, NH)



Natural Grass Turf (Shaws Lane Dover, NH)



Natural Grass Turf (Shaws Lane Dover, NH)



Natural Grass Turf (Shaws Lane Dover, NH)



Natural Grass Turf (DHS Dover, NH)



Natural Grass Turf (DHS Dover, NH)



Nearmap

Imagery © 2020 Nearmap, Inc.

100 ft

Vertical

< Fri May 7 2021 >

Full Screen

Natural Grass Turf (DHS Dover, NH)



Natural Grass Turf (DHS Dover, NH)



Natural Grass Turf (DHS Dover, NH)



Natural Grass Turf (DHS Dover, NH)



Natural Grass Turf (DHS Dover, NH)



Dunaway Field Natural Grass Turf (DHS Dover, NH)



Dunaway Field Natural Grass Turf (DHS Dover, NH)



Dunaway Field Natural Grass Turf (DHS Dover, NH)



Dunaway Field Natural Grass Turf (DHS Dover, NH)



Dunaway Field Natural Grass Turf (DHS Dover, NH)



Dunaway Field Natural Grass Turf (DHS Dover, NH)



Dunaway Field Natural Grass Turf (DHS Dover, NH)



Dunaway Field Natural Grass Turf (DHS Dover, NH)



Natural Grass Turf Baseball Field (DHS Dover, NH)



Natural Grass Turf Baseball Field (DHS Dover, NH)



Natural Grass Turf Baseball Field (DHS Dover, NH)



Natural Grass Turf Baseball Field (DHS Dover, NH)



Natural Grass Turf Baseball Field (DHS Dover, NH)



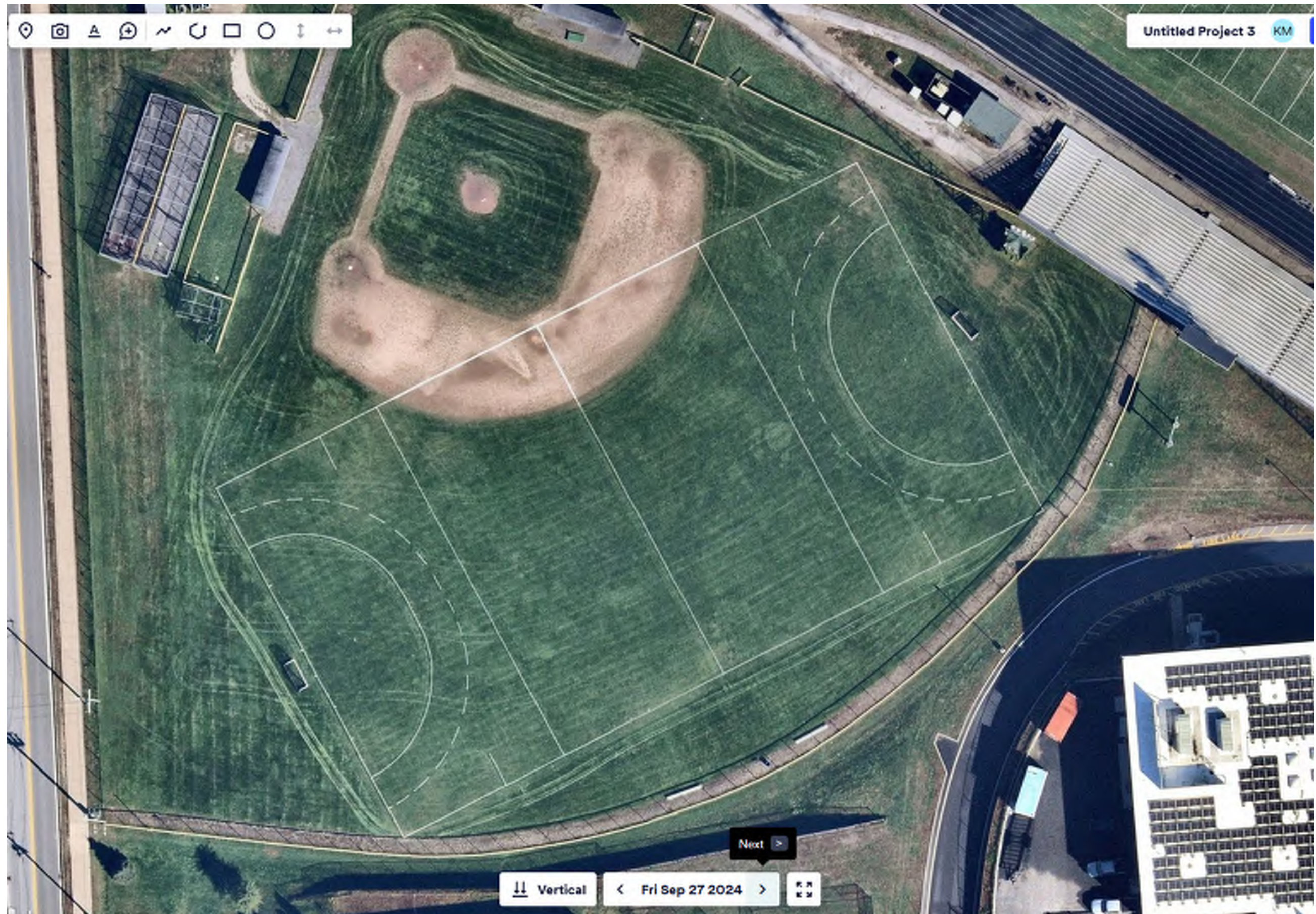
Natural Grass Turf Baseball Field (DHS Dover, NH)



Untitled Project 3 KM

Vertical < Mon May 13 2024 > KM

Natural Grass Turf Baseball Field (DHS Dover, NH)



Natural Grass Turf Baseball Field (DHS Dover, NH)



Natural Grass Turf (Woodman Park School Dover, NH)



Natural Grass Turf (Woodman Park School Dover, NH)



Natural Grass Turf (Woodman Park School Dover, NH)



Natural Grass Turf (Woodman Park School Dover, NH)



Natural Grass Turf (Woodman Park School Dover, NH)



Natural Grass Turf (Woodman Park School Dover, NH)



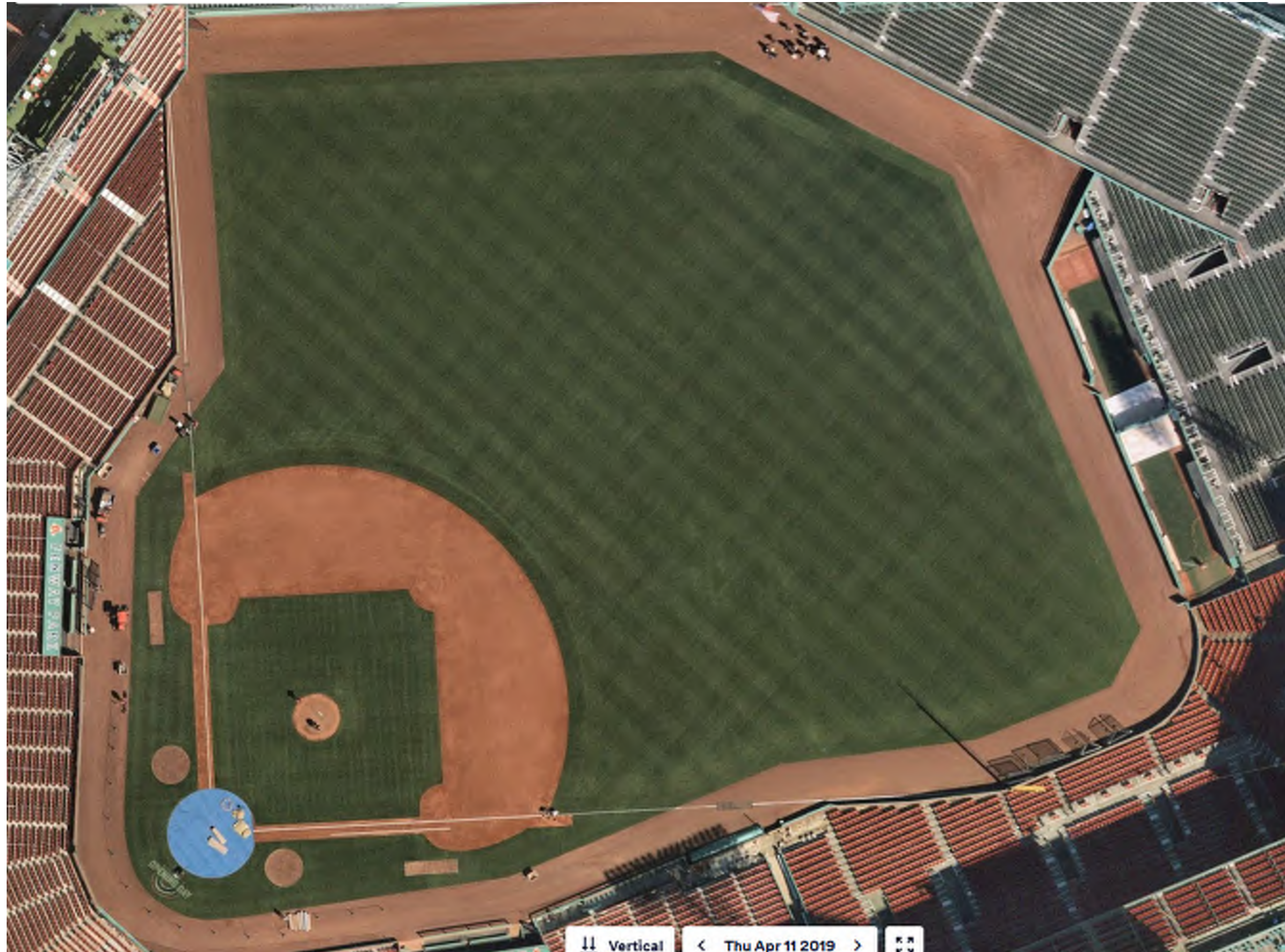
Natural Grass Turf (Fenway Park - Boston, MA)



Natural Grass Turf (Fenway Park - Boston, MA)



Natural Grass Turf (Fenway Park - Boston, MA)



Natural Grass Turf (Fenway Park - Boston, MA)



Natural Grass Turf (Fenway Park - Boston, MA)



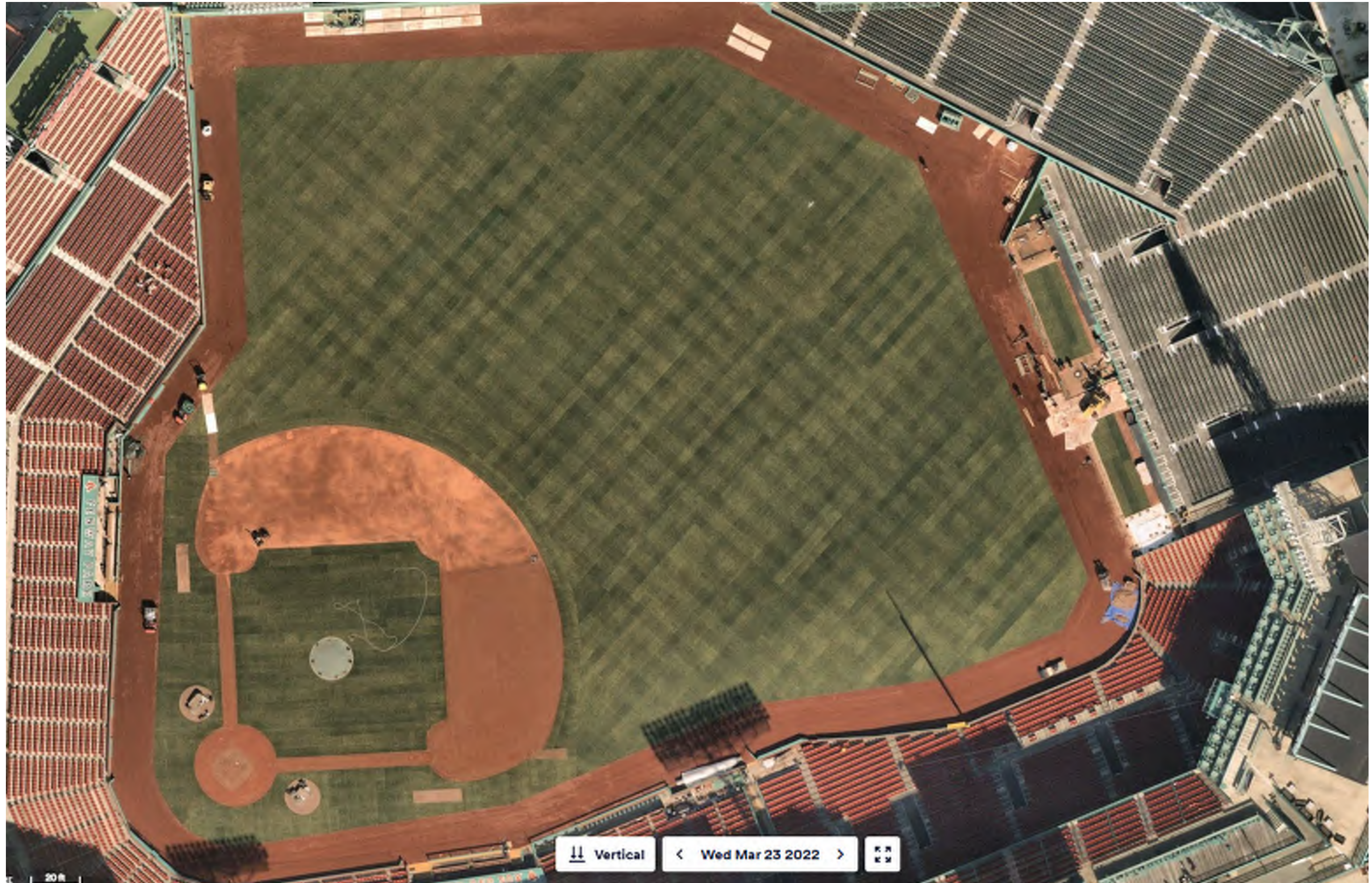
Natural Grass Turf (Fenway Park - Boston, MA)



Natural Grass Turf (Fenway Park - Boston, MA)



Natural Grass Turf (Fenway Park - Boston, MA)



Natural Grass Turf (Fenway Park - Boston, MA)



Vertical

< Thu Nov 24 2022 >



Natural Grass Turf (Fenway Park - Boston, MA)



Natural Grass Turf (Livingston Park/North Little League/North Soccer League - Manchester, NH)



Natural Grass Turf (Livingston Park/North Little League/North Soccer League - Manchester, NH)



Vertical

< Sun May 3 2015 >

KE
NM

Natural Grass Turf (Livingston Park/North Little League/North Soccer League - Manchester, NH)



Natural Grass Turf (Livingston Park/North Little League/North Soccer League - Manchester, NH)



Natural Grass Turf (Livingston Park/North Little League/North Soccer League - Manchester, NH)



Vertical

< Sun Apr 23 2017 >

KK
KX

Natural Grass Turf (Livingston Park/North Little League/North Soccer League - Manchester, NH)



Natural Grass Turf (Livingston Park/North Little League/North Soccer League - Manchester, NH)



Vertical

< Fri Oct 8 2021 >



Natural Grass Turf (Livingston Park/North Little League/North Soccer League - Manchester, NH)



Natural Grass Turf (Livingston Park/North Little League/North Soccer League - Manchester, NH)



Natural Grass Turf (Livingston Park/North Little League/North Soccer League - Manchester, NH)



Vertical

< Fri Aug 2 2024 >

Full Screen

Natural Grass Turf (Livingston Park/North Little League/North Soccer League - Manchester, NH)



Natural Grass/Synthetic Turf (Derryfield School - Manchester, NH)



Natural Grass/Synthetic Turf (Derryfield School - Manchester, NH)



Natural Grass/Synthetic Turf (Derryfield School - Manchester, NH)



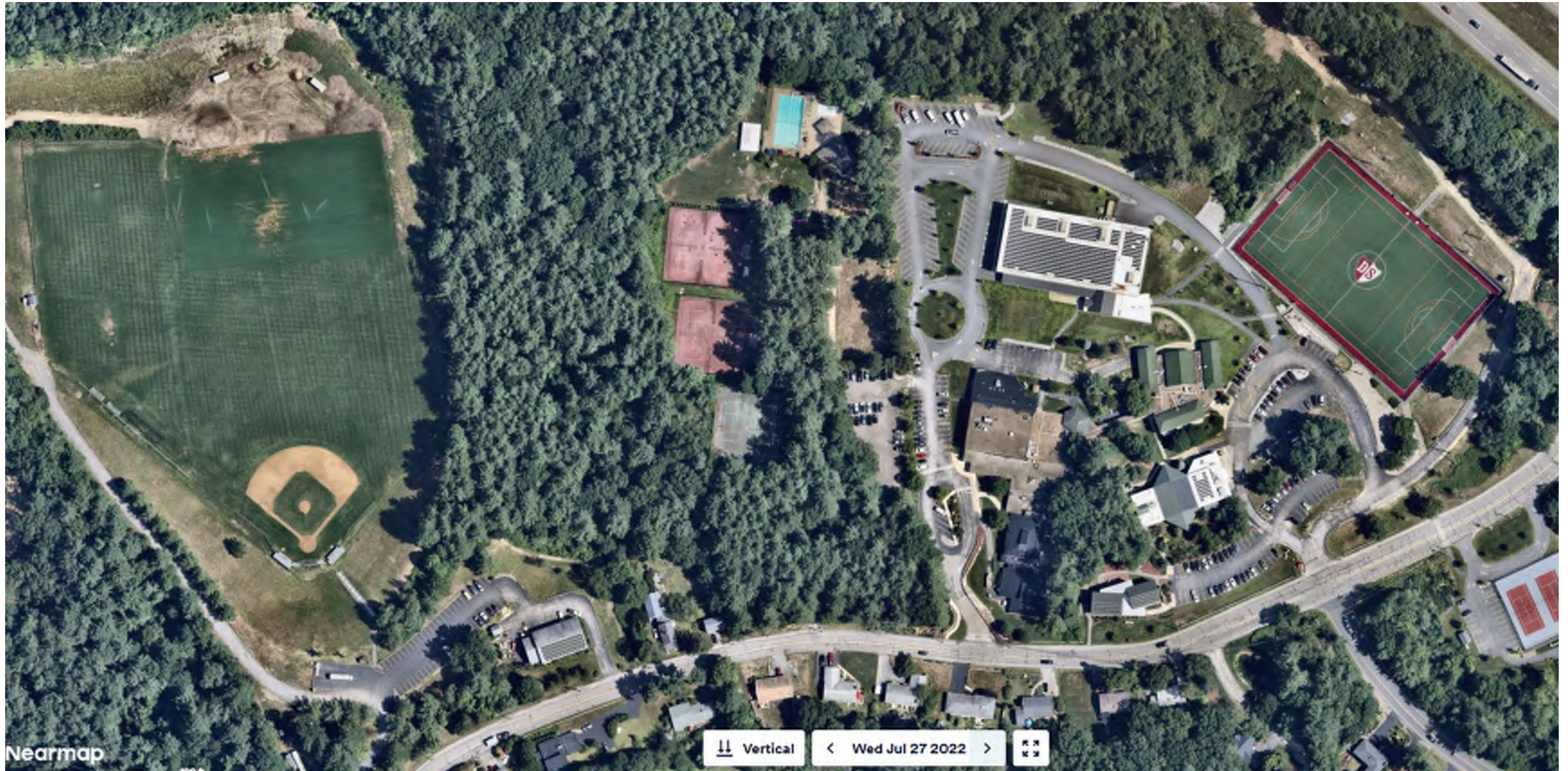
Natural Grass/Synthetic Turf (Derryfield School - Manchester, NH)



Natural Grass/Synthetic Turf (Derryfield School - Manchester, NH)



Natural Grass/Synthetic Turf (Derryfield School - Manchester, NH)



Natural Grass/Synthetic Turf (Derryfield School - Manchester, NH)



Natural Grass/Synthetic Turf (Derryfield School - Manchester, NH)



Natural Grass/Synthetic Turf (Derryfield School - Manchester, NH)



Natural Grass/Synthetic Turf (Derryfield School - Manchester, NH)



Natural Grass Turf (Southern NH University Hooksett, NH)



Natural Grass Turf (Southern NH University Hooksett, NH)



earmap

Vertical

< Sun May 3 2015 >

Map

Natural Grass Turf (Southern NH University Hooksett, NH)



Natural Grass Turf (Southern NH University Hooksett, NH)



Natural Grass Turf (Southern NH University Hooksett, NH)



Natural Grass Turf (Southern NH University Hooksett, NH)



Natural Grass Turf (Southern NH University Hooksett, NH)



Natural Grass Turf (Southern NH University Hooksett, NH)



Natural Grass Turf (Southern NH University Hooksett, NH)



Natural Grass Turf (Southern NH University Hooksett, NH)



Natural Grass/Synthetic Turf (UMass Amherst - Amherst, MA)



Natural Grass/Synthetic Turf (UMass Amherst - Amherst, MA)



Natural Grass/Synthetic Turf (UMass Amherst - Amherst, MA)



Natural Grass/Synthetic Turf (UMass Amherst - Amherst, MA)



Natural Grass/Synthetic Turf (UMass Amherst - Amherst, MA)



Natural Grass/Synthetic Turf (UMass Amherst - Amherst, MA)



Natural Grass/Synthetic Turf (UMass Amherst - Amherst, MA)



Natural Grass/Synthetic Turf (UMass Amherst - Amherst, MA)



Natural Grass/Synthetic Turf (UMass Amherst - Amherst, MA)



Natural Grass/Synthetic Turf (UMass Amherst - Amherst, MA)



Natural Grass/Synthetic Turf (UMass Amherst - Amherst, MA)



Natural Grass/Synthetic Turf (UMass Amherst - Amherst, MA)



Natural Grass/Synthetic Turf (UMass Amherst - Amherst, MA)



Natural Grass/Synthetic Turf (UMass Amherst - Amherst, MA)

