Lake Campus Development Baseball Ballpark

Princeton University, West Windsor Township, Mercer County, New Jersey

PREPARED FOR

Trustees of Princeton University
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PREPARED BY

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Table of Contents

1.1 Introduction

1.1.1 Project Description

This Environmental Impact Statement (EIS) has been prepared to assess the potential for significant adverse impacts to the environment to result from the construction of a new Baseball Ballpark (the "Proposed Project") within Princeton University's Lake Campus. The Proposed Project is located within Block 3, Lot 1.0113 on the West Windsor Tax Map, in the Planned Educational Development district (hereafter, the "Project Site"). While Block 3, Lot 1.013 totals 138.218 acres, the project limit of work area is approximately 8.76 acres. The boundaries defining the Proposed Project are indicated on the Environmental Constraints Map included in Appendix A.

A General Development Plan (GDP) for the Lake Campus, which outlined the phased development of Lake Campus, received approval from the West Windsor Township Planning Board on January 29, 2020, and a Resolution of Memorialization on April 29, 2020. An Environmental Inventory Report (EIR) dated June 10, 2019, was submitted and approved as part of the General Development Plan package. Where relevant, this EIS makes reference to the information already reviewed as part of the GDP and related EIR.

The Proposed Project will include a new baseball ballpark with press box, grandstand, dugouts, foul poles, scoreboard and light towers. Adjacent Lake Campus projects include Softball to the west, Cross-Country to the south, Rugby to the northeast, Racquet Center to the northwest and the storm water management facilities to the east. A previously approved geo-exchange bore field is under the Ballpark field footprint. The orientation of the Proposed Project is such that Harrison Street is to the north, Route 1 to the east, Washington Road to the south, and the canal to the west.

1.1.2 Permits and Approvals

The following permits and approvals are required in order to implement the Proposed Project.

Table 1 Lake Campus Government Licenses, Permits and Approvals

Agency	Permit or Approval	Date Submitted
West Windsor Township	Amended Final Site Plan Approval	December 2024
Mercer County Planning Board	Site Plan Approval Revision	TBD*
Mercer County Soil Conservation District	Soil Disturbance Re-Certification	TBD*
Delaware and Raritan Canal Commission	Zone B Major Project Review Modification	TBD*

* The approvals will be pursued along with or following the receipt of the Site Plan Approval.

1.2 Environmental Inventory

1.2.1 Topography and Steep Slopes

The Proposed Project sits within Lake Campus that is currently under construction. Prior to construction, the Project Site was generally flat and consisted of playing fields, cultivated farm field and portions of a private road ("Tiger Lane"). No part of the Proposed Project contained slopes over 10 percent.

1.2.2 Aquifer Recharge Potential

As detailed in the GDP EIR, the Project Site is located above the Northwest New Jersey sole-source aquifer. The Proposed Project is within a "high groundwater recharge" area, identified as a groundwater recharge Rank B, with a recharge rate of 11 to 15 inches per year. Depth to groundwater, when encountered, was 11.5-feet plus below the proposed field grade.

1.2.3 Depth of Seasonally High Water Table

Areas with a seasonally high groundwater table generally present a constraint to development. As noted in the GDP EIR, the Project Site is identified as having a typically greater than 10-feet depth to seasonal high groundwater with some areas being shallower. Stormwater management systems are compliant with high ground water levels.

1.2.4 Vegetation and Wildlife

As noted above, the Project Site sits within the Lake Campus project that is currently under construction. Prior to construction, the Project Site was generally flat and consisted of playing fields, cultivated farm field and portions of a private road ("Tiger Lane").

According to the NJDEP Landscape Project, Lake Campus is located in the Piedmont Plains Landscape, which is characterized by farmland, grasslands, fragmented woodlands, and productive tidal marshes.[1] According to NJDEP mapping Rank 1 (habitat specific requirement) a wildlife habitat patch is situated in the southern half of the Proposed Project; however, the database has not been updated since 2012 and is not indicative of current conditions. The adjacent landscape has been under development since 2022 and thus no longer maintains the previously designated cropland and pastureland characteristics.

1.2.5 Greenbelt

The West Windsor Township Greenbelt is "an interconnected system of woodlands, wetlands, and open space forming a continuous corridor throughout" West Windsor Township.[2] The greenbelt was created to improve quality of life for Township residents.

As depicted in Environmental Constraints Map in Appendix A, the proposed site plan for the Proposed Project is greater than 900-feet from the Greenbelt and thus will not disturb areas designated for the Greenbelt. Princeton University has dedicated a conservation easement over the Township's proposed Greenbelt within the GDP area in accordance with the goals of the Greenbelt program.

1.2.6 Environmentally Sensitive Areas

Environmentally sensitive areas within the Project Site include prime aquifer recharge areas, and wildlife habitat areas. The Environmental Constraints Map indicates that environmentally sensitive areas do not significantly overlap with the Project Site boundary for Lake Campus.

As is depicted on the Environmental Constraints Map in Appendix A, environmentally sensitive areas on Princeton's Lake Campus are found adjacent to the Delaware and Raritan Canal and are not within the Proposed Project.

1.2.7 Cultural Resources

There are no above ground historic or cultural resources within the Ballpark Project Site. No significant adverse impacts to above-ground resources are anticipated.

As noted in the previously approved GDP for Lake Campus, nearby cultural resources include the Lake Carnegie Historic District, the D&R Canal Historic District, and the Washington Road Elm Allée. Also located adjacent to the Lake Campus Project Site is the Penns Neck Cemetery, a state-listed and NRHP-eligible resource.

[1] New Jersey Department of Environmental Protection. *New Jersey Landscape Project, Version 3.3*. https://njdep.maps.arcgis.com/apps/Cascade/index.html?appid=6cd21ef042634609904beae390f34482

[2] West Windsor Township. *The West Windsor Township Greenbelt*. https://rucore.libraries.rutgers.edu/rutgers-lib/31808/PDF/1/play/

1.2.8 Wetlands

There are no wetlands or associated transition areas within the limits of the Proposed Project. Development of the Proposed Project will not disturb area wetlands.

1.2.9 Soils

The U.S. Department of Agriculture, SSURGO Soil Database has completed a Soil Survey Map for Mercer County. The following soils are identified as occurring within the Proposed Project:

- LbhB, Lansdale sandy loam, 2 to 6 percent slopes. The soil profile is comprised of sandy loam, sandy clay loam and channery sand. It is moderately well drained with a depth to seasonal groundwater more than 80 inches. The LbhB soils are considered prime farmland. It is not hydric, (HSG B).
- LbnC2, Lansdale channery loam, 6 to 12 percent slopes, eroded. The soil profile is comprised of sandy loam, sandy clay loam and channery sand. It is moderately well drained with a depth to seasonal groundwater more than 80 inches. The LbnC2 soils are considered of statewide importance. It is not hydric, (HSG B).

A report on subsoil conditions was performed by Carlin Simpson & Associates. The investigations performed found gravel and topsoil layers to be underlain by existing fill. The fill material generally consists of loose to medium dense sand with little to some silt and gravel.

1.2.10 Erosion Hazard

The Mercer County Soil Conservation District evaluates soil in terms of its relative potential for erosion. The GDP notes that areas of the anticipated development have a low to moderate erosion hazard potential, as mapped in the Soil Survey for Mercer County. An updated Erosion and Sediment Control Plan has been prepared as part of the Ballpark site plan submission. Construction would follow all erosion control measures in accordance with the approved Erosion and Sediment Control Plan. Soils will be decompacted in accordance with State requirements.

1.2.11 Land Suitability for Development

As shown on the Environmental Constraints Map in Appendix A, the Proposed Project has no flood hazards or wetland areas. The Proposed Project is consistent with the surrounding land use of the Lake Campus development.

1.3 Probable Impacts to the Environment

Site Development

The Proposed Project sits within the Lake Campus project, and has been disturbed as part of that construction, including installation of a geo-exchange well field. The construction projects preceding the Proposed Project have left the site in a condition that will limit required excavation for the building foundations, utility installations and setting the final perimeter grades. As part of a holistic design with Lake Campus, the Proposed Project has been designed to balance cut and fill to the maximum extent practicable. See Appendix B for a copy of the West Windsor Township Critical Environmental Areas map, with the Proposed Project indicated. As shown, the Proposed Project would not disturb critical environmental areas.

Water Supply

The proposed Project will be served by New Jersey American Water and would result in an increase in demand for potable water. The potable water demand generated by the use of the Ballpark and associated facilities (restrooms, etc.) would occur during sporting events.

Table 2 Baseball Field Estimated Water Demand

Use	Rate*	Demand Unit	Total
Irrigation	6,800 gallons per day per acre	4.5 acres	30,600 gpd*
Ballpark	3.3 gallons per seat per event	300 seats ±40 events per year	990± gallons per event equates to 109± gpd
Total			31,590 ± gpd

* Estimated Peak Day Irrigation flows provided by Landscape Architect (daily use is not anticipated)
** Ballpark includes the Press Box
*** Total Flow based on adjusting Sewer Generation flow by 10% to reflect consumptive uses.

According to Table 2, it is anticipated that Proposed Project will generate an approximate demand for 28,669± gpd of potable water.

Wastewater Management

The Proposed Project is expected to generate 99 ± gpd for use of the Ballpark.

Table 3 Baseball Field Estimated Sewer Flow Rates

Use	Rate*	Demand Unit	Total
Ballpark	3 gallons per seat per event	300 seats ±40 Events Per Year	900 ± gallons per event equates to 99± gpd

* Sewer flow criteria corresponds with sports stadium, as detailed in NJAC 7:14A-23.3
** Ballpark includes the Press Box

Solid Waste Management

Solid waste collection from the Proposed Project will be managed by the Princeton University Facilities Department and will be disposed of by Princeton University contract haulers. General trash and recycling will be collected by custodial staff. Based on existing university operations for similar uses on campus, it is estimated that the Baseball Ballpark is anticipated to be less than 100 pounds of solid waste per week.

Noise

Development of the Proposed Project would generate normal construction noise from heavy equipment during construction of the Project Site. During construction, noise levels would be within State and Township maximum limits. After construction, noise levels will comply with regulation limits. Design intent for the ballpark is a distributed speaker and PA sound system as coordinated with the requirements of the University Athletics Department.

Land Use

Development of the Proposed Project would result in an increased intensity of land use. The table below details what is reported in the Stormwater Report for the Proposed Project.

Table 4 Ballpark Proposed Land Use

Land Use	Square footage	Acreage
Total Area	381,779	8.76
Landscape	195,822	4.50
Field	135,373	3.11
Ballpark	21,888	0.50
Pavement	6,259	0.14
Porous Pavement	22,437	0.52
Total Impervious	185,957	4.27

1.4 Mitigation Measures

The Proposed Project has been designed to minimize potential impacts to the environment, including concentration of development away from environmentally sensitive areas identified in the GDP so as to avoid disturbance. In addition, the following mitigation measures have been identified to ensure that the Proposed Project would not result in significant adverse impacts:

- Implementation of the Soil Erosion & Sediment Control Plan to prevent erosion and sedimentation during construction of the Proposed Project.
- Noise levels during construction would be maintained within State and Township maximum limits and would be temporary. Hours of construction would be compliant with Township requirements.
- Low-flow fixtures would be installed in the ballpark to reduce demand for potable water throughout the Proposed Project. All plants used for landscaping of the Proposed Project would be native and therefore drought tolerant. This reduces the need for irrigation while supporting local ecosystems.
- Implementation of a stormwater management system to reduce peak runoff rates through use of green infrastructure stormwater management Best Management Practices consistent with the state and township regulations which will improve the water quality of stormwater being discharged from the Project Site through both filtration and recharge (see Stormwater Report for more details).

1.5 Adverse Impacts Which Cannot be Avoided

The construction and operation of the Proposed Project would result in certain unavoidable short-term and long-term adverse environmental impacts. The anticipated impacts have been identified and discussed in the previous sections and in the GDP for Lake Campus. All significant adverse impacts related to the Proposed Project would be mitigated to the maximum extent practicable.

Short Term Impacts

Short term impacts related to the Proposed Project would generally be related to construction activities. Unavoidable adverse impacts occurring in the short-term include traffic generation from construction workers and deliveries, noise, and air quality impacts from construction activities and traffic. As detailed above, a Soil Erosion & Sediment Control Plan would be employed to mitigate potential impacts from erosion as a result of construction activities.

Long Term Impacts

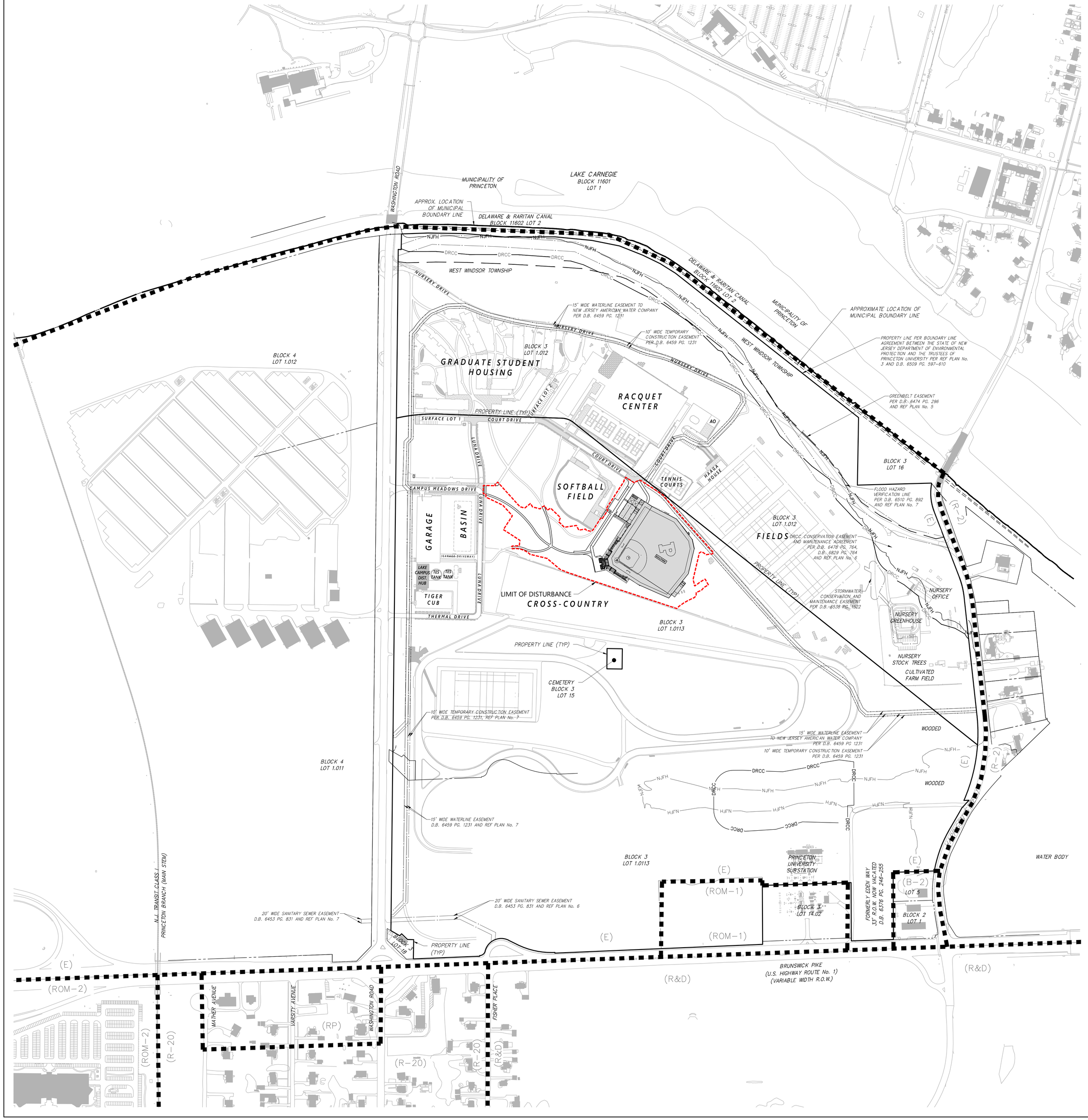
Potential long term adverse impacts would result from the operation of the Proposed Project. Long term impacts are those involving a permanent commitment of resources. While these impacts are unavoidable, they are not considered significant. Potential long-term impacts include increased demand for utilities and public services including water

consumption and wastewater flow. The Proposed Project makes a substantial effort to maintain open space and landscaped areas on the Project Site.

Overall, adverse impacts which cannot be avoided are minimal and mitigation measures have been designed to minimize the impacts.

Appendix A

ARCH E1 30" x 42"



LEGEND

- DENOTES LIMIT OF PROPOSED WORK BALLPARK
- DENOTES MUNICIPAL BOUNDARY
- DENOTES EASEMENT BOUNDARY
- DENOTES FRESHWATER WETLANDS TRANSITION AREA BOUNDARY
- DENOTES FRESHWATER WETLANDS BOUNDARY
- DENOTES DRCC STREAM CORRIDOR
- DENOTES NJ FLOOD HAZARD AREA DESIGN FLOOD
- DENOTES 100-YEAR FLOODPLAIN
- DENOTES ZONING DISTRICT
- DENOTES STREET NAME / LOT # / AREA DESCRIPTION / BUILDING LABEL

TOWNSHIP OF WEST WINDSOR ZONING KEY

E	EDUCATIONAL DISTRICT
ROM-1	RESEARCH / OFFICE / LIMITED MANUFACTURING
R-2	LOW DENSITY RESIDENTIAL

NOTES

WEST WINDSOR TOWNSHIP TAX MAP DATA

LOT 1.0113
BLOCK 3
TAP MAP SHEET No. 1.01, 1.02, 1.03, 1.04

INFORMATION SOURCES:

1. EXISTING CONDITIONS INFORMATION, OUTSIDE THE LIMITS OF LAKE CAMPUS DEVELOPMENT CURRENTLY UNDER CONSTRUCTION, AS PREPARED BY VNHA IN PLAN "EXISTING CONDITIONS SURVEY OF THE LAKE CAMPUS" DATED NOVEMBER 21, 2019.
2. THE LAKE CAMPUS DEVELOPMENT AREA CURRENTLY UNDER CONSTRUCTION SHOWN IS BASED ON THE PRINCETON UNIVERSITY LAKE CAMPUS SITE DEVELOPMENT FINAL CONSTRUCTION DOCUMENTS AND PROPOSED GEO-EXCHANGE CONSTRUCTION PROJECT.
3. THE PROPERTY LINES SHOWN WERE DETERMINED BY AN ACTUAL FIELD SURVEY CONDUCTED BY VNH, TITLED "OUTBOUND PROPERTY SURVEY OF BLOCK 3, LOT 1.0113 PREPARED FOR THE TRUSTEES OF PRINCETON UNIVERSITY" AND "OUTBOUND PROPERTY SURVEY OF BLOCK 3, LOT 1.0112 PREPARED FOR THE TRUSTEES OF PRINCETON UNIVERSITY." THE PROPERTY LINES ARE BASED ON AN ACTUAL FIELD SURVEY PERFORMED ON THE GROUND BY VNH ON MARCH 4, 2024.

PROPERTY OWNERSHIP INFORMATION PROVIDED BY:

STATE OF NEW JERSEY DEPARTMENT OF TREASURY
DIVISION OF TAXATION
NEW JERSEY PROPERTY TAX LIST SEARCH

ZONING KEY PROVIDED BY:

ZONING MAP OF WEST WINDSOR TOWNSHIP
DATED NOVEMBER 23, 2009

PARTIAL LIST OF CERTIFIED PROPERTY OWNERS WITHIN 200 FEET OF SURVEY PROJECT LIMIT

BLOCK	LOT	PROPERTY OWNER
3	16	DEPARTMENT OF ENVIRONMENTAL PROTECTION
3	14.02	PUBLIC S E & GAS CO - TAX DEPT T-6B
3	18	3717 ROUTE 1, LLC C/O ROSS & ROSS

0 100 200 400 Feet
SCALE: 1" = 200'

PENDULUM

Princeton University
Baseball Ballpark

West Windsor, NJ 08540

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Landscape Architect
Field Operations
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Vladimir Wojno-Oranski
Professional Engineer
License Number: 24GE04287700
NJ Certificate of Authorization #: 24GA27957200
Vanasse Hangen Brustlin (VHB)
One Penn Plaza, Suite 715, New York, NY 10119

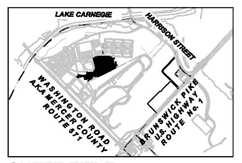
WEST WINDSOR TOWNSHIP
MAJOR SITE PLAN
APPLICATION BASEBALL
BALLPARK

Date: **07-08-2024**

ISSUE/REVISION

I/R	DATE	DESCRIPTION
6	12-10-2025	Reduced Building Size
5	03-12-2025	Revised per WWT Technical Compliance Review
4	02-05-2025	WWT Resolution Compliance
3	11-22-2024	Issued to DRCC and MCPB
2	10-09-2024	Revised per Technical Review Committee Meeting
1	07-08-2024	WWT Preliminary Final Major Site Plan Application

KEY PLAN



SHEET TITLE

ENVIRONMENTAL CONSTRAINTS MAP

SHEET NUMBER

APP. A

Last Plotted: 2025-12-05 By: Chris DiSarcina
Filename: \\vhb.com\gbl\proj\NewYork\cfy\22301.00 Princeton Baseball\cad\dt\Planset\04-Construction Documents\22301.00-ENV-CONSTRAINTS.dwg

Appendix B

CRITICAL ENVIRONMENTAL AREAS MAP

LOCATED IN

WEST WINDSOR TOWNSHIP

MERCER COUNTY, N.J.

GEORGE R. FRIES - Township Engineer
JAGJIT P. PARVEESH - Assistant Twp. Engineer

SCALE: 1 inch = 3500 feet