

Environmental Impact Assessment  
prepared for  
**Penn Medicine Princeton Health  
Cancer Center**

Township of Plainsboro  
Middlesex County, New Jersey  
Block 1701, Lot 3.01



Prepared For:

**Princeton HealthCare System**  
**A New Jersey Nonprofit Corporation**  
**d/b/a Penn Medicine Princeton Health**  
1 Plainsboro Road  
Plainsboro, NJ 08536

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July 31, 2024 | FPA No. 06C028T.003  
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## SECTION A - PROJECT DESCRIPTION

The Penn Medicine Princeton HealthCare System Campus has been designated as an area for redevelopment in Plainsboro Township, and the township has adopted the Amended Redevelopment for the Princeton HealthCare System at Plainsboro Site, dated March 13, 2013, which establishes the zoning requirements for the project. Penn Medicine Princeton Health (“PMPH” “Applicant”) has identified a need for a Cancer Center and Imaging Center (CCIC) facility and associated parking garage. The project site for the CCIC and Parking Garage is in the Hospital Medical Office Complex (HMOC) district within the Redevelopment Plan. The parking garage has been approved and is currently under construction. A temporary surface parking lot has been approved and constructed on vacant Lot 4.04 located in the Office and Residential Complex (ORC) Zone to account for the on-site parking displaced during construction of the parking garage.

The proposed CCIC is a permitted use and conforms to the HMOC use standards under the Amended Redevelopment Plan. The proposed facility consists of a four-story structure with a mechanical level. that will consolidate primary cancer treatment into one comprehensive building. The surface parking surrounding the new CCIC will be reconfigured to provide for vehicular access, drop off and parking for the new facility. The proposed project conforms to the land use plan and bulk design standards set forth in the Plan. The building orientation, massing, materials and landscape design will be consistent with the Plan requirements and will maintain the same high-quality standards within the healthcare campus. See Figure 1 for an overall site plan depicting the location of the current and approved projects.

The following Environmental Impact Assessment (“EIA”) has been prepared on behalf of the Applicant in accordance with Plainsboro Township Land Use ordinance, Chapter 20, Section 10. This EIA provides a description of the proposed project and site, an inventory of existing environmental conditions and assessment of probable impacts, a list and evaluation of adverse environmental impacts which cannot be avoided and a discussion of alternatives to the proposed project.

## SECTION B - SITE DESCRIPTION AND INVENTORY

### 1) Environmentally Sensitive Areas

#### Wetlands

Based on recent site visits and a review of the NJDEP GeoWeb Wetlands Mapping (see Figure 2), there are no freshwater wetlands located within the area of the proposed site improvements.

#### Floodplains

According to the FEMA Flood Insurance Rate Maps, the project site is not located within a flood hazard area (see Figure 3).



### Aquifer Recharge

Over the past 15 years, the soil conditions of the property have been heavily disturbed and compacted where the soil is not providing infiltration of the groundwater. FPA has performed several soil logs to an approximate depth of 10 feet below the surface throughout the property to assess the subsurface soil conditions, estimate the seasonal high-water table and perform soil percolation testing of the surface soils. Seasonal high-water table was not encountered in any of the soil excavations, which is consistent with the findings of the subsurface soil conditions performed for the Regional Detention Basin located at the rear of the property. Also, on-site percolation testing was performed at each soil log excavation at depths from 7" to 14" below the surface, and all percolation testing failed during the pre-soak where the water elevation either did not drop at all or insignificantly after 1 hour. The on-site percolation testing results indicated that the existing surface soil conditions do not provide any infiltration of stormwater runoff into the groundwater. Therefore, the annual pre-construction groundwater recharge is zero and the requirement for post-construction recharge would be the same. Since there is no groundwater recharge under the existing conditions, the project meets the recharge requirements of N.J.A.C. 7:8 New Jersey Stormwater Management Rules or a waiver is hereby requested. See the Stormwater Management Report prepared by FPA for Soil Logs and on-site percolation testing results.

### Woodland and Wildlife Habitat

The project area consists of only urban land. According to the NJDEP GeoWeb, the site does not contain any wildlife habitats of specific priority (see Figure 6).

### Agricultural Land

The project site, which is the focus of this report, does not contain area that is currently being farmed.

### Archaeological and Historic Sites

According to the NJDEP GeoWeb, the project site does not contain any historical and/or archeological significant areas within the area of the proposed site improvements (see Figure 7).

### Intermittent Streams

There are no existing streams located on the subject property. A Tributary to Millstone River is located approximately 0.24 miles southeast of the proposed building (see Figure 8).

## **2) Soil Classifications**

Three soil types are found on the project site which can be found in Appendix A. Below are the soil types found within the project area.

### **a. NknB: Nixon loam, 2 to 5 percent slopes**

This soil type is most likely to be found on flat land. It has a moderate available water capacity of about 6.4 inches. This soil does not experience frequent flooding or ponding.

### **b. NkrA: Nixon moderately well drained variant loam, 0 to 2 percent slopes**



This soil type is most likely to be found on flat land. It has a moderate available water capacity of about 5.3 inches. This soil does not experience frequent flooding or ponding.

### **3) Topography**

The topography of the overall project generally slopes in a southeasterly direction from elevation 91 feet at the north side of the proposed improvement area to elevation 81 at the south parking lot improvements. No major elevation changes or drainage pattern alterations will occur as a result of this project.

### **4) Geology**

The existing project area is underlain by the Stockton Formation (see Figure 9). According to the NJDEP GeoWeb, the Stockton Formation is composed of Triassic siltstone, shale, sandstone, conglomerates, and mudstone.

### **5) Vegetation**

The area proposed for the new Cancer Center and Imaging Center is currently developed with a building (former Fitness Center), parking, drive aisles, sidewalks and maintained landscaped areas.

### **6) Existing Development Features**

The project area is part of the Penn Medicine Healthcare Campus and currently contains a building once utilized as a fitness center, an existing parking lot, access driveway, site lighting, stormwater structures and other associated improvements.

### **7) Ground, Surface, Potable Water**

The site currently has an existing man-made retention pond that is used to detain and treat stormwater runoff. Much of the stormwater runoff is directed to the man-made retention pond through overland flow and a storm sewer system. Potable water is currently provided to the site through an existing New Jersey American Water Company water main.

### **8) Sewerage Facilities**

The site is currently serviced with a 12" sanitary sewer pipe that runs on the north and south sides of the existing buildings.

### **9) Drainage**

The site currently has an existing man-made retention pond that is used to detain and treat stormwater runoff. The majority of the stormwater runoff is directed to the man-made retention pond through overland flow and a storm sewer system.



## **10) Depth to Seasonally High Groundwater**

The entire project site has been previously developed and seasonal high groundwater was not encountered at the project site. We don't anticipate encountering the seasonally high groundwater during the construction of the proposed site improvements.

## **11) Erosion Hazards**

Currently the site is a stable, developed facility with pervious and impervious areas mixed throughout the property. There are minimal amounts of steep slopes on the project site.

## **12) Traffic**

The project site is located at the intersection of Route 1 and Plainsboro Road with two main access locations to the healthcare campus. Punia Boulevard is the main "spine" entry roadway into the Healthcare Campus. Punia Boulevard starts at Plainsboro Road and proceeds northward to connect to Hospital Drive. Hospital Drive is the secondary entry roadway that links Punia Boulevard to Campus Road to the east.

# **SECTION C - ANTICIPATED ENVIRONMENTAL IMPACT**

## **1) Land Use**

The Penn Medicine Princeton HealthCare System Campus has been designated as an area for redevelopment in Plainsboro Township and the township has adopted the Amended Redevelopment for the Princeton HealthCare System at Plainsboro Site, dated March 13, 2013, which establishes the zoning requirements for the project. The project site for the Cancer Center and Imaging Center is in the Hospital Medical Office Complex (HMOC) district within the Redevelopment Plan.

The proposed Cancer Center and Imaging Center is a permitted use and conforms to the HMOC use standards under the Amended Redevelopment Plan. The proposed project conforms to the land use plan and bulk design standards set forth in the Plan. The building orientation, massing, materials and landscape design will be consistent with the Plan requirements and will maintain the same high-quality standards within the healthcare campus.

## **2) Ground, Surface, Potable Water**

Ground water is not anticipated to be encountered during the construction of the proposed site improvements. The proposed Cancer Center and Imaging Center will be designed to comply with the Township Stormwater Management requirements, which include stormwater quantity reductions using Green Infrastructure (GI) elements. Please refer to the Stormwater Management Report for specific details. Potable water will be supplied to the new Cancer Center and Imaging Center building by service connections to the existing 8" NJAW water mains located on the project site.



### **3) Air Quality**

The level of air quality in the State of New Jersey is monitored on a regular basis by the NJDEP at several stations located throughout the State. The closest station to the site is located at Rider University, which is in close proximity to the site. Since this monitoring station is located in an area that is similar to the project site, it is reasonable to assume that the ambient air quality at the site is similar to the monitoring station. Monitor readings taken at various days between June 19, 2024, and June 28, 2024, were recorded for the site to have “GOOD” air quality,<sup>5</sup> see Appendix B. The project site will not impact the air quality of the Township of Plainsboro in terms of traffic congestion and auto emissions build-up sufficient to exceed NJDEP Air Quality Standards. A minor temporary increase in air pollution can be expected from dust during construction operations but will quickly dissipate upon construction completion.

### **4) Wildlife Habitat**

As stated earlier, the site is currently developed and does not contain any wildlife habitats of specific priority according to the NJDEP GeoWeb.

### **5) Social and Economic Aspects of the Community**

The construction of this facility will benefit the Community, surrounding areas and Township by providing additional medical services on the HMOC site.

### **6) Noise**

Table 1 displays common noise levels associated with a range of indoor and outdoor activities. Levels of 70 decibels (dBA) or above have been generally accepted as interfering with normal conversation. Noise levels in the range of 45 to 55 dBA can be disruptive to normal sleep patterns. Actual on-site measurements of noise levels were not conducted for this EIA. Temporary increased noise levels will be generated at the site due to the short-term activity involving the construction of the proposed site improvements.

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<sup>5</sup> Obtained from the NJDEP Bureau of Air Quality Monitoring website (<https://www.njaqinow.net/>). See Appendix A.



**TABLE 1<sup>1</sup>****COMMON NOISE LEVELS**

<b>COMMON OUTDOOR NOISE LEVELS</b>	<b>NOISE LEVEL (DbA)</b>	<b>COMMON INDOOR NOISE LEVELS</b>
Jet Flyover at 1,000 feet	110	Rock Band
Gas Lawn Mower at 3 feet	100	Inside Subway Train
Diesel Truck at 50 feet	90	Flood Blender at 3 feet
Noisy Urban Daytime	80	Garbage Disposal at 3 feet Shouting at 3 feet
Gas Lawn Mower at 100 feet	70	Vacuum Cleaner at 10 feet
Heavy Traffic at 300 feet	60	Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Small Theater
Quiet Rural Nighttime	30	Bedroom at Night Concert Hall (background)
	20	Broadcast and Recording Studio
	10	Threshold of Hearing

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<sup>1</sup> Source: Bolt, Beranek & Newman, Inc. Fundamentals and Abatement of Highway Traffic Noise, Office of Environmental Policy, Federal Highway Administration, U.S. Department of Transportation, Washington D.C., 1973.



## **7) Solid and Other Waste**

Currently a private waste management service handles and removes the solid waste in accordance with local and state regulations for the existing medical center use. The existing facilities will be utilized for waste management for the CCIC. No change to the existing waste management facility is proposed.

## **8) Cultural Activities**

The proposed site improvements will not impact the cultural activities of the community.

## **9) Aesthetics of the Project Area**

The proposed project conforms to the Hospital Medical Office Complex (HMOC) use standards under the amended Redevelopment Plan. The location of the proposed CCIC will be landscaped with the high quality of plantings consistent with the Healthcare Campus landscaping.

The proposed development complies with the Open Space requirements of the Amended Redevelopment Plan and does not impact the existing open space areas on the hospital site. The open space areas located on the project site will remain, which includes the healing gardens, educational gardens and landscape areas on the hospital site. The existing Public Park on the south side of Plainsboro Road will not be impacted by the proposed development and pedestrian access to the passive park will be maintained. The area surrounding the Cancer Center and Imaging Center will be landscaped and seating areas will be added.

## **10) Archaeological and Historic Sites**

According to the NJDEP GeoWeb, the project site does not contain any historical and/or archeological significant areas within the area of the proposed facility and site improvements. Therefore, there shall be no adverse impact to archaeological or historic sites as a result of the proposed project.

## **11) Traffic**

The proposed Cancer Center and Imaging Center will utilize the existing driveways for vehicular access to the proposed patient drop-off areas and reconstructed P2, P3 and P4 parking areas. Please refer to the traffic impact analysis prepared by others for a detailed analysis.

## **12) Drainage**

The proposed Cancer Center and Imaging Center will be designed to comply with the Township Stormwater Management requirements, which include stormwater quantity reductions using Green Infrastructure (GI) elements. A rain garden will be provided to manage and control the stormwater in accordance with the Township requirements.



### **13) Erosion Hazard**

The project proposes soil erosion and sediment control measures in accordance with the current standards for soil erosion and sediment control in New Jersey. The applicant will apply to the Freehold Soil Conservation District for soil erosion and sediment control for certification of our plan.

### **14) Other Environmental Impacts**

We do not anticipate any other environmental impacts associated with the proposed site improvements that have not already been discussed herein.

## **SECTION D - CUMULATIVE AND/OR LONG TERM ENVIRONMENTAL EFFECTS**

### **1) Surface Water Runoff**

The proposed stormwater management plan is consistent with the NJDEP Stormwater Management rules and Township requirements. The project is compliant with the N.J.A.C. 7:8, New Jersey Stormwater Management Rules.

### **2) Displacement of People and Businesses**

The CCIC will not displace any people or businesses, a portion of the floor area that was previously a fitness center will be demolished for the new CCIC, but that business previously vacated the premises. The proposed Cancer Center and Imaging Center will result in approximately 110 new permanent jobs (over time) for the operation of the facility. The construction estimate for the project is an investment of approximately \$200 million which is anticipated to create approximately 300 jobs throughout the construction period of this project.

## **SECTION E - EVALUATION OF UNAVOIDABLE IMPACTS**

It is our opinion, that any impacts that are unavoidable as a result of this project, will not compromise the integrity of the area and the betterment of the uses on the HMOC site which will provide a benefit to the community.

## **SECTION F - METHODS OF MITIGATING ADVERSE ENVIRONMENTAL IMPACTS**

Various mitigating measures will be implemented to reduce the minor environmental impacts that will occur from the development of the site. Certain steps will be taken to ensure the impacts that do occur are minimal and that the proposed project is compatible with the surrounding environment.



## 1) Noise

Construction noise, which is a temporary impact, can be mitigated by the proper selection of construction equipment. The ambient noise level may slightly increase during construction; however, it should not generally be uncomfortable or objectionable. Some of the methods of reducing noise impact during this phase may include the following:

- a. Use of Site Barriers: Erecting temporary barriers around the construction site can help to contain and reduce noise levels. These barriers are made from materials such as polyethylene designed to absorb or dampen construction sound.
- b. Schedule Construction Activities: Plan construction activities to minimize noisy tasks during sensitive times, such as off hours or weekend work.
- c. Equipment Selection: Select construction equipment and machinery that are specifically designed to be quieter. Modern equipment often comes with noise reduction features and insulation if needed or required for that specific task.
- d. Regular Maintenance: Ensure that construction equipment and vehicles are well-maintained. Poorly maintained equipment can produce more noise due to wear and tear.
- e. Employee Training/Orientation: During the orientation and onboarding process the team may discuss with construction workers noise control measures and the importance of minimizing noise pollution.
- f. Alternative Construction Methods: This project team may utilize alternative construction methods that are inherently quieter, such as modular construction or prefabricated building components.
- g. Strategic Planning: Organize the construction site layout to separate noisy activities from quieter areas or sensitive receptors in close proximity to the existing hospital.
- h. Communication with Surrounding Facilities: Keep lines of communication open with owner. Inform them about the construction schedule and measures being taken to minimize noise.

By implementing these strategies, construction noise may be reduced.

## 2) Surface Water Runoff

Mitigation through stormwater management measures have been incorporated into the design of the site, including a rain garden to manage and control stormwater runoff. A Soil Erosion and Sediment Control Plan will be required since the disturbance area is greater than 5,000 square feet. Some of the erosion control procedures may include:

- a. Silt Fencing and Barriers: Install silt fences or barriers around the perimeter of the onstruction site to trap sediment and prevent it from entering storm drains and waterways.
- b. Construction Entrances and Exits: Establish stabilized construction entrances and exits using gravel or crushed stone.
- c. Diversion Channels/Control: Implement diversion channels or swales to redirect stormwater runoff away from areas of active construction to stabilized areas where sediment can settle out.
- d. Regular Inspection and Maintenance: Conduct regular inspections of erosion and sediment control measures to ensure they are functioning effectively. Maintain and repair control measures.



- e. Mulching and Vegetative Cover: Apply mulch or establish vegetative cover on exposed soil to reduce erosion.
- f. Construction Phasing: Plan construction activities to minimize disturbance to large areas of soil at once. Implement phased construction to allow for stabilization of cleared areas before proceeding with further work.
- g. Compliance with Regulations: The team is going to ensure compliance with local, state, and federal regulations regarding erosion and sediment control during construction activities.

### **3) Air Quality**

Construction work will also have a minimal, temporary impact on air quality. This impact will occur mainly from truck and construction equipment exhaust emissions and dust associated with the construction of the proposed improvements. Impacts, besides being temporary, can be mitigated by reducing vehicular idling time, and using accepted construction techniques.

## **SECTION G - ALTERNATIVES TO THE PROPOSED PROJECT**

In considering alternatives to the project, three scenarios were considered:

### **1) No-Build/Postponement**

No-Build/Postponement - The no-build/postponement alternative is not considered a viable option since the proposed project will benefit the community by providing needed medical services.

### **2) Alternative Location**

The property and location are best suited for the project because it is an approved use within the Amended Redevelopment Plan. The CCIC project area has already been disturbed.

### **3) Alternative Design**

Various designs were considered for the proposed site. The current design was determined to best suit the property constraints and meet environmental objectives while still satisfying the overall goals of the project.

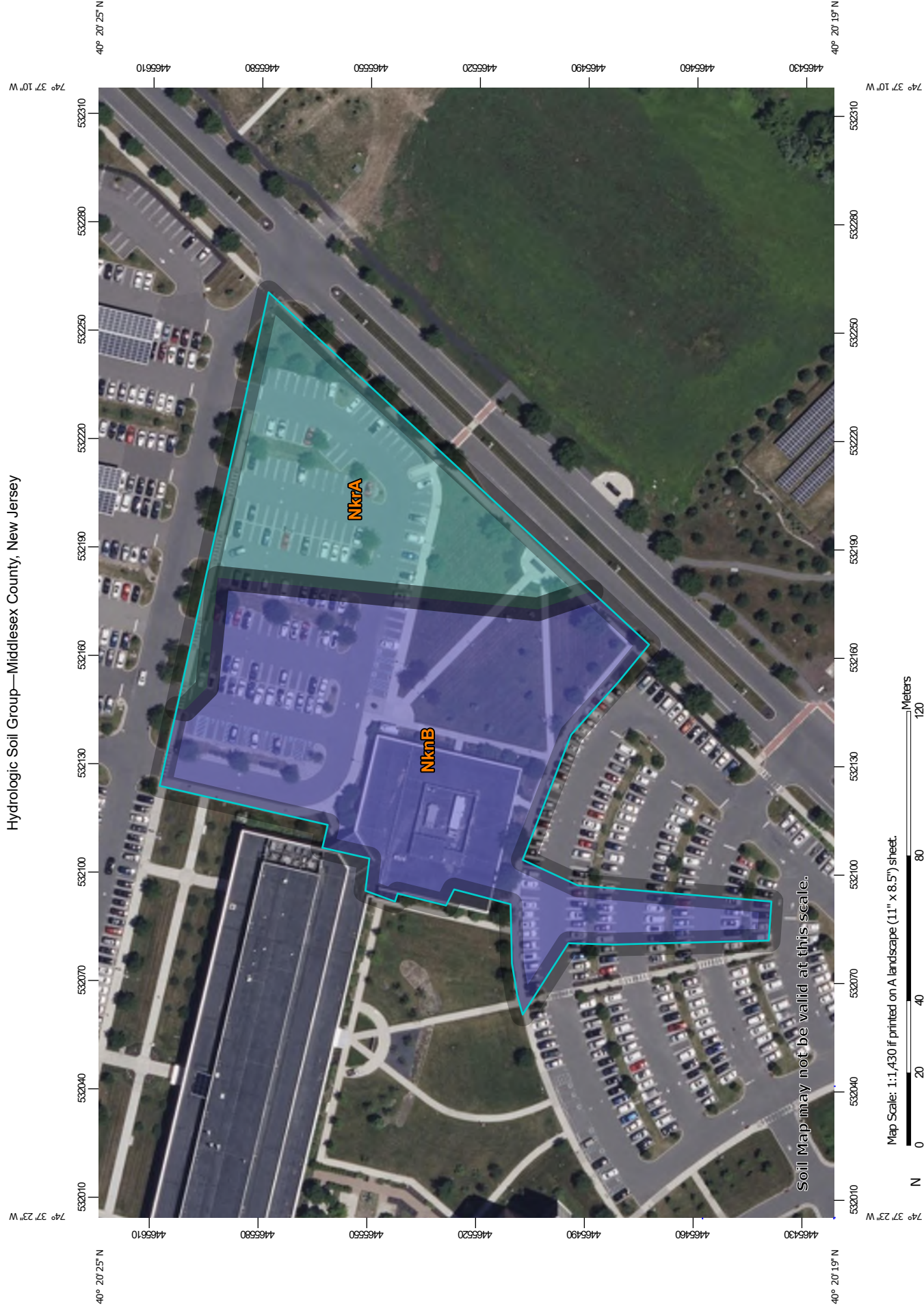




## Appendix A

# **NRCS Web Soil Map and Descriptions**







## Component Text Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the selected area. The component descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit. A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the associated soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas (components) for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The "Map Unit Component Nontechnical Descriptions" report gives a brief, general description of the soil components that occur in a map unit. Descriptions of nonsoil (miscellaneous areas) and minor map unit components may or may not be included. This description is written by the local soil scientists responsible for the respective soil survey area data. A more detailed description can be generated by the "Map Unit Description" report.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

## Report—Component Text Descriptions

### Middlesex County, New Jersey

**Map Unit:** NknB—Nixon loam, 2 to 5 percent slopes

**Description Category:** GENSOIL

Nixon: 85 percent

The Nixon component makes up 85 percent of the map unit. Slopes are 2 to 5 percent. This component is on flats on North atlantic coastal plains. The parent material consists of old fine-loamy alluvium derived from arkose and/or shale. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.



**Description Category: GENSOIL**

Lansdowne: 5 percent

Generated brief soil descriptions are created for major soil components. The Lansdowne soil is a minor component.

**Description Category: GENSOIL**

Woodstown: 5 percent

Generated brief soil descriptions are created for major soil components. The Woodstown soil is a minor component.

**Description Category: GENSOIL**

Sassafras: 5 percent

Generated brief soil descriptions are created for major soil components. The Sassafras soil is a minor component.

**Map Unit:** NkrA—Nixon moderately well drained variant loam, 0 to 2 percent slopes

**Description Category: GENSOIL**

Nixon, moderately well drained: 85 percent

The Nixon, moderately well drained component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on piedmonts. The parent material consists of old fine-loamy alluvium derived from arkose and/or shale. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

**Description Category: GENSOIL**

Fallsington, bedrock substratum, rarely flooded: 5 percent

Generated brief soil descriptions are created for major soil components. The Fallsington, bedrock substratum, rarely flooded soil is a minor component.

**Description Category: GENSOIL**

Woodstown: 5 percent

Generated brief soil descriptions are created for major soil components. The Woodstown soil is a minor component.



**Description Category: GENSOIL**

Sassafras: 5 percent

Generated brief soil descriptions are created for major soil components. The Sassafras soil is a minor component.

**Map Unit:** SacC—Sassafras sandy loam, 5 to 10 percent slopes, Northern Coastal Plain

**Description Category: GENSOIL**

Sassafras: 80 percent

The Sassafras component makes up 80 percent of the map unit. Slopes are 5 to 10 percent. This component is on fluviomarine terraces on uplands coastal plains. The parent material consists of loamy fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria.

**Description Category: GENSOIL**

Downer: 4 percent

Generated brief soil descriptions are created for major soil components. The Downer soil is a minor component.

**Description Category: GENSOIL**

Woodstown: 4 percent

Generated brief soil descriptions are created for major soil components. The Woodstown soil is a minor component.

**Description Category: GENSOIL**

Fallsington, drained: 4 percent

Generated brief soil descriptions are created for major soil components. The Fallsington, drained soil is a minor component.

**Description Category: GENSOIL**

Ingleside: 4 percent

Generated brief soil descriptions are created for major soil components. The Ingleside soil is a minor component.



**Description Category:** GENSOIL

Aura: 4 percent

Generated brief soil descriptions are created for major soil components. The Aura soil is a minor component.

**Data Source Information**

Soil Survey Area: Middlesex County, New Jersey

Survey Area Data: Version 18, Aug 30, 2022





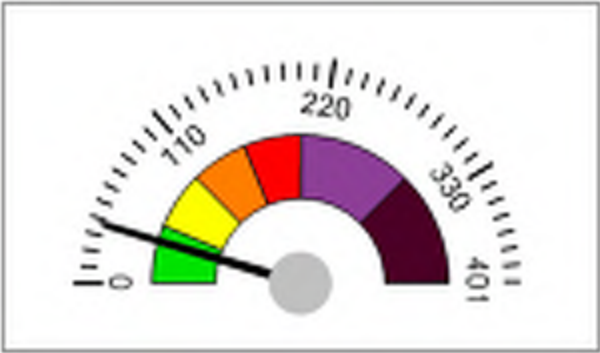
## Appendix B

# Air Quality Readings



Station Information

Rider University



 [Download API](#)

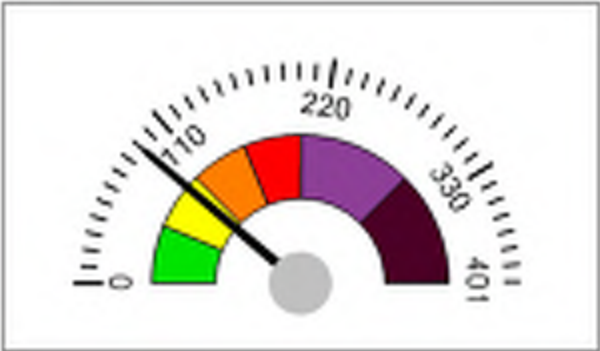
**Index Value** : 37  
**Pollutants** : O3,PM 2.5  
**Dominant Pollution** : O3


<i>Last Received</i>	<i>RH</i>	<i>TEMP</i>	<i>O3</i>	<i>WSPD</i>	<i>WDIR</i>	<i>BP</i>	<i>PM2.5</i>
	%	DegF	ppm	mph	Deg	in Hg	ug/m3(L)
6/19/2024 11:00 AM	55.3	82	0.049	2.4	253	30.23	7.8



Station Information

Rider University



 [Download API](#)

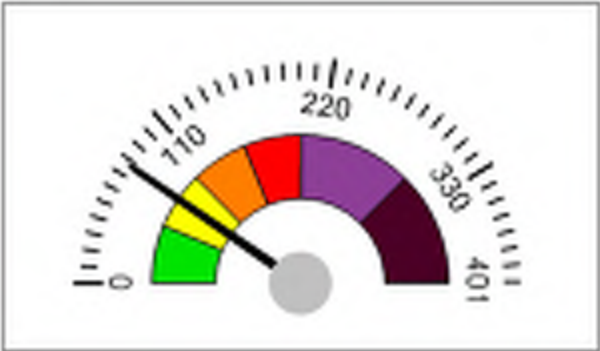
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**Pollutants :** O3,PM 2.5  
**Dominant Pollution :** O3

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	%	DegF	ppm	mph	Deg	in Hg	ug/m3(L)
6/20/2024 2:00 PM	41.7	90	0.082	3.1	246	30.15	13.9



Station Information

Rider University



 [Download API](#)

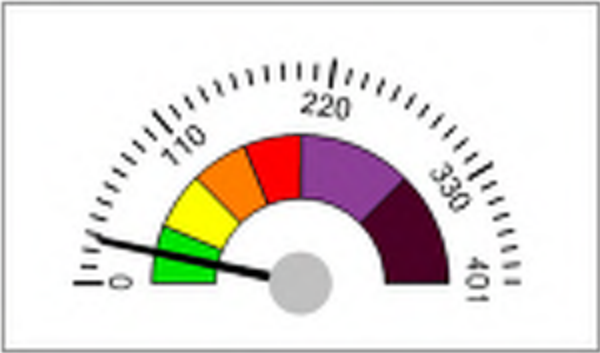
**Index Value :** 77  
**Pollutants :** O3,PM 2.5  
**Dominant Pollution :** O3


<i>Last Received</i>	<i>RH</i>	<i>TEMP</i>	<i>O3</i>	<i>WSPD</i>	<i>WDIR</i>	<i>BP</i>	<i>PM2.5</i>
	%	DegF	ppm	mph	Deg	in Hg	ug/m3(L)
6/26/2024 2:00 PM	38.8	91	0.075	3.8	214	29.60	17.1



Station Information

Rider University



 [Download API](#)

**Index Value** : 27

**Pollutants** : O3,PM 2.5

**Dominant Pollution** : PM 2.5

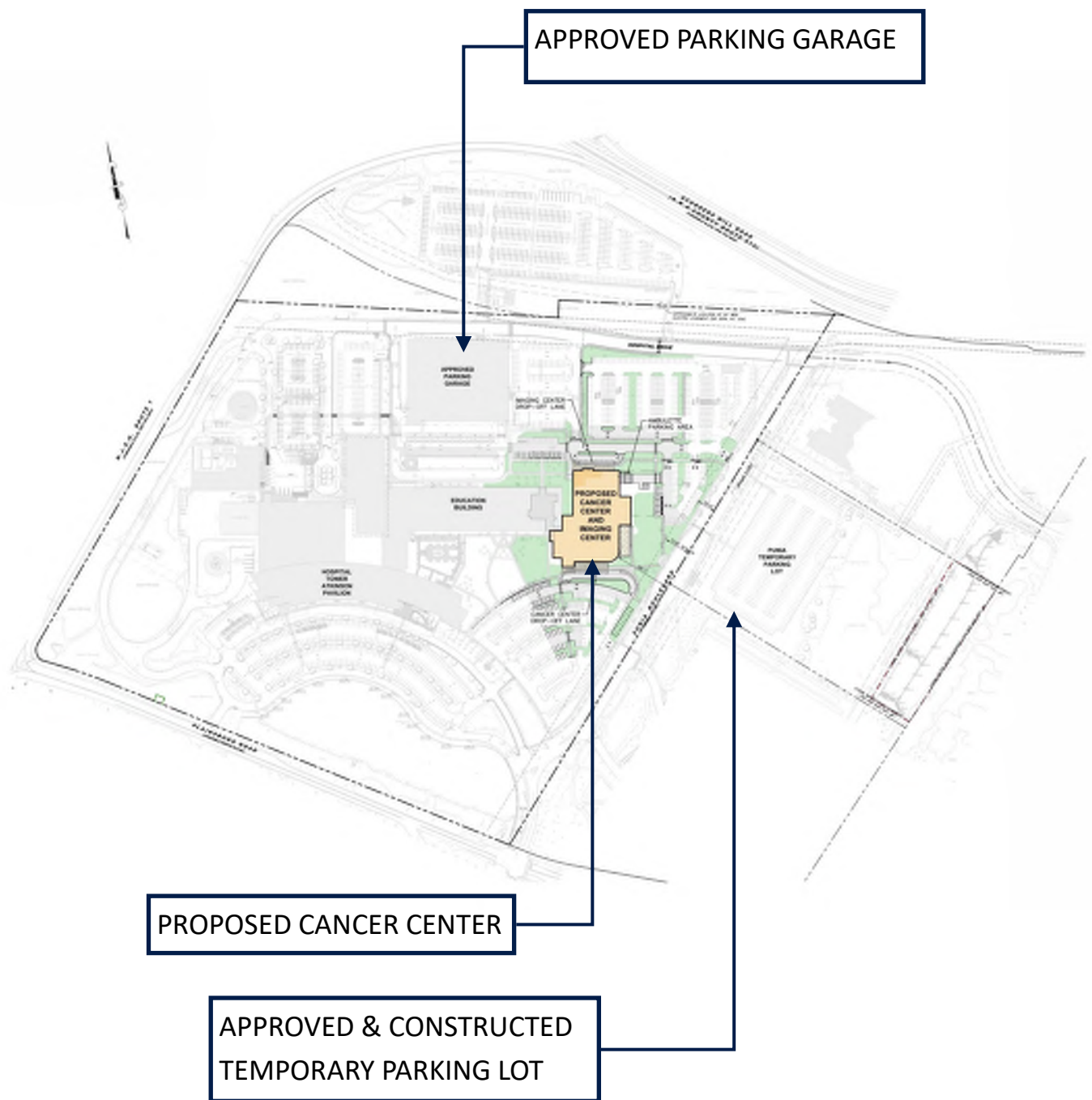
<i>Last Received</i>	<i>RH</i>	<i>TEMP</i>	<i>O3</i>	<i>WSPD</i>	<i>WDIR</i>	<i>BP</i>	<i>PM2.5</i>
	%	DegF	ppm	mph	Deg	in Hg	ug/m3(L)
6/28/2024 8:00 AM	50.2	67	0.025	3.1	188	30.02	2.0





## Appendix C Figures





## OVERALL SITE MAP PENN MEDICINE PRINCETON HEALTH

Township of Plainsboro  
Middlesex County, New Jersey

SCALE: **AS SHOWN**

DATE: **JULY 2024**

JOB No.: **06C028T.003**

DRAWING **FIGURE 1**



APPROVED PARKING GARAGE

NJ-GeoWeb Wetlands



11/17/2022, 4:31:04 PM

Wetlands (2012)

☐ Parcels Data (Block and Lot) Wetlands (2007)

NJDEP | NJDEP, Bureau of Energy and Sustainability Edition 20190327 | NJDEP, Division of Fish and Wildlife (DFW), Office of Fish and Wildlife Information Systems, | NJ Office of Information Technology, Office of ITS (NJOOITS)

New Jersey Department of Environmental Protection

Office of Information Technology, Office of CTS (NJD000):

1,902.8

0 315 630 1,260 ft

0 95 190 380 m

Measure

## PROPOSED CANCER CENTER

APPROVED & CONSTRUCTED  
TEMPORARY PARKING LOT



**NJDEP WETLANDS MAP**  
PENN MEDICINE PRINCETON HEALTH

Township of Plainsboro  
Middlesex County, New Jersey

SCALE: **AS SHOWN**

DATE: **JULY 2024**

JOB No.: **06C028T.003**

DRAWING **FIGURE 2**



APPROVED PARKING GARAGE

## National Flood Hazard Layer FIRMette



### Legend

SEE FIRM REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

<b>SPECIAL FLOOD HAZARD AREAS</b>	Without Base Flood Elevation (BFE) <i>Zone A, X, APF</i>
	With BFE or Depth <i>Zone AE, AH, AO, VE, VE1, AR</i>
	Regulatory Floodway
<b>OTHER AREAS OF FLOOD HAZARD</b>	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
	Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
	Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
	Area with Flood Risk due to Levee <i>Zone D</i>
<b>OTHER AREAS</b>	No SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
	Effective LOMRs
	Area of Undetermined Flood Hazard <i>Zone D</i>
<b>GENERAL STRUCTURES</b>	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall
<b>OTHER FEATURES</b>	Cross Sections with 1% Annual Chance Water Surface Elevation
	Coastal Traverset
	Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary
	Coastal Traverset Baseline
	Profile Baseline
	Hydrographic Feature
<b>MAP PANELS</b>	Digital Data Available
	No Digital Data Available
	Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/17/2022 at 4:23 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

PROPOSED CANCER CENTER

APPROVED & CONSTRUCTED TEMPORARY PARKING LOT



**FEMA FIRM**  
PENN MEDICINE PRINCETON HEALTH

Township of Plainsboro  
Middlesex County, New Jersey

SCALE: **AS SHOWN**

DATE: **JULY 2024**

JOB No.: **06C028T.003**

DRAWING **FIGURE 3**

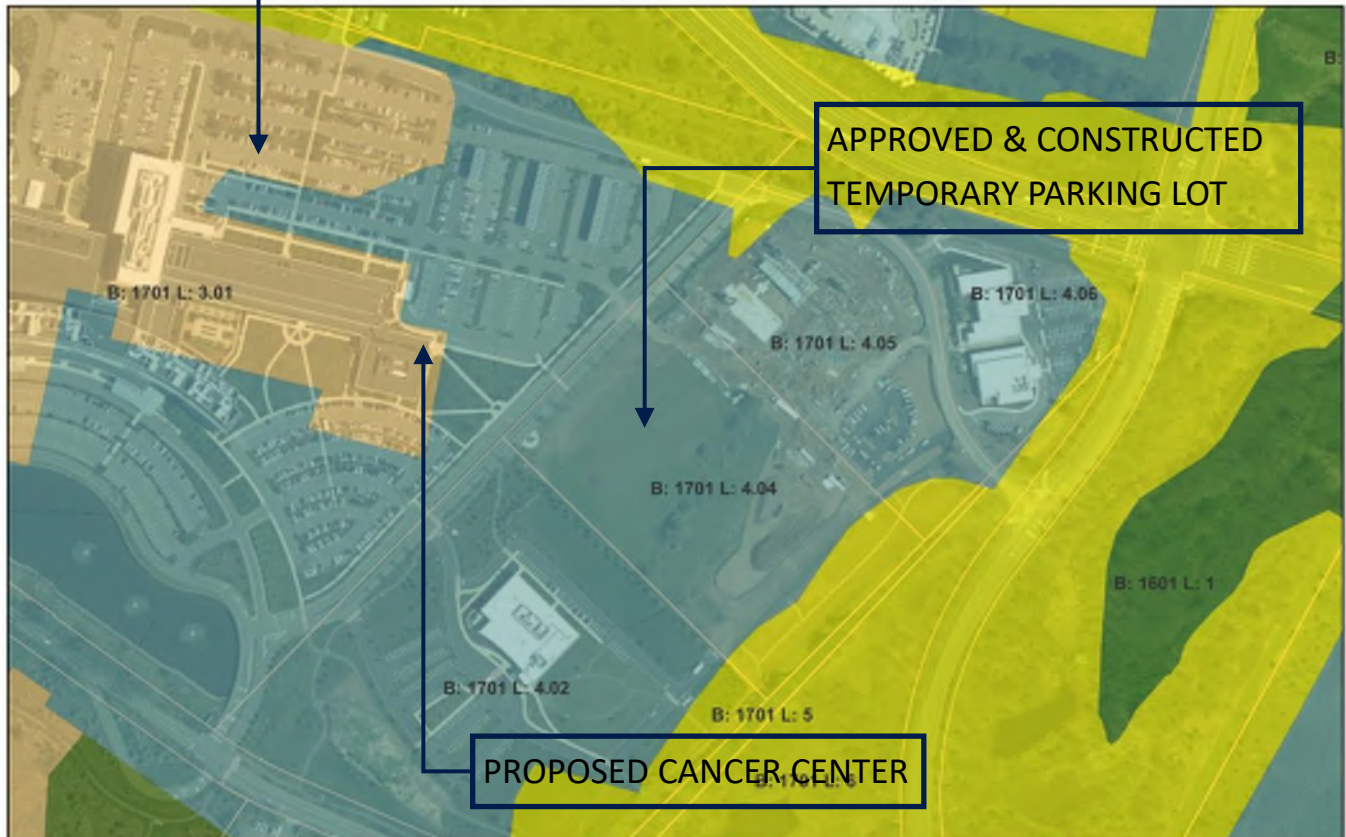


APPROVED PARKING GARAGE

NJ-GeoWeb Ground Water Recharge

APPROVED & CONSTRUCTED  
TEMPORARY PARKING LOT

PROPOSED CANCER CENTER



12/1/2022, 10:01:56 AM

County Boundaries  
Ground-Water Recharge Areas  
11 to 15 in/yr  
8 to 10 in/yr  
1 to 7 in/yr  
0 in/yr  
wetlands and open water  
Parcels Data (Block and Lot)

Esri Community Maps Contributors, Merger County, NJ, New Jersey Office of GIS, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METNAXA, USGS, EPA, NPS, US Census Bureau, USGS, NJDEP, NJDEP, Bureau of Energy

1:4,514  
0 0.03 0.06 0.11 mi  
0 0.04 0.09 0.18 km  
Esri Community Maps Contributors, Merger County, NJ, New Jersey Office of GIS, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METNAXA, USGS, EPA, NPS, US Census Bureau, USGS, NJDEP, NJDEP, Bureau of Energy



## GROUND WATER RECHARGE MAP PENN MEDICINE PRINCETON HEALTH

Township of Plainsboro  
Middlesex County, New Jersey

SCALE: **AS SHOWN**

DATE: **JULY 2024**

JOB No.: **06C028T.003**

DRAWING **FIGURE 4**



Scale 1:100,000



Miles



Location

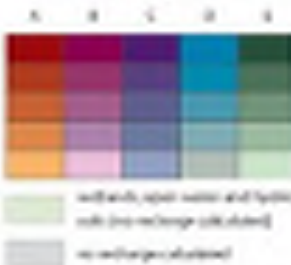


APPROXIMATE PROJECT  
AREA



Explanation

Water Table/Aquifer Level



Ground Water  
Recharge Rate

A. 40 to 45  
B. 35 to 40  
C. 30 to 35  
D. 25 to 30  
E. 20 to 25  
F. 15 to 20  
G. 10 to 15  
H. 5 to 10  
I. 0 to 5

Recharge  
Recharge Rate

A. 40 to 45  
B. 35 to 40  
C. 30 to 35  
D. 25 to 30  
E. 20 to 25  
F. 15 to 20  
G. 10 to 15  
H. 5 to 10  
I. 0 to 5

Recharge  
Recharge Rate

A. 40 to 45  
B. 35 to 40  
C. 30 to 35  
D. 25 to 30  
E. 20 to 25  
F. 15 to 20  
G. 10 to 15  
H. 5 to 10  
I. 0 to 5

Aquifer-Recharge Potential for Middlesex County, New Jersey



## AQUIFER RECHARGE MAP PENN MEDICINE PRINCETON HEALTH

Township of Plainsboro  
Middlesex County, New Jersey

SCALE: **AS SHOWN**

DATE: **JULY 2024**

JOB No.: **06C028T.003**

DRAWING **FIGURE 5**



APPROVED PARKING GARAGE

## NJ-GeoWeb Landscape Project



11/17/2022, 4:38:23 PM

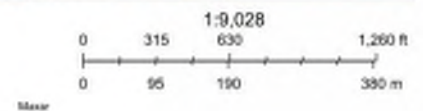
☐ Parcels Data (Block and Lot)

SBH - Piedmont Plains - Landscape Project

 Rank 1 - Habitat specific requirements

Rank 2 - Special Concern

Rank 4 - State Endangered



New Jersey Department of Environmental Protection  
Office of Information Technology, Office of CTS (NJDOITC)

## PROPOSED CANCER CENTER

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TEMPORARY PARKING LOT



**NJDEP LANDSCAPE PROJECT MAP**  
PENN MEDICINE PRINCETON HEALTH

Township of Plainsboro  
Middlesex County, New Jersey

SCALE: **AS SHOWN**

DATE: **JULY 2024**

JOB No.: **06C028T.003**

DRAWING

**FIGURE 6**



## APPROVED PARKING GARAGE

NJ-GeoWeb Historic Preservation

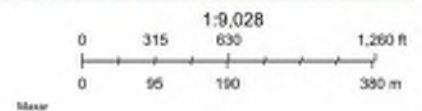


11/17/2022, 4:41:48 PM

Historic Districts   Historic Properties   Eligible HD

Listed   Listed HD   Identified INDV

NR Eligible   Eligible INDV   Parcels Data (Block and Lot)



New Jersey Department of Environmental Protection  
Office of Information Technology, Office of CITS (NJOCITS)

## PROPOSED CANCER CENTER

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TEMPORARY PARKING LOT



**NJDEP HISTORIC PRESERVATION MAP**  
PENN MEDICINE PRINCETON HEALTH

Township of Plainsboro  
Middlesex County, New Jersey

SCALE: **AS SHOWN**

DATE: **JULY 2024**

JOB No.: **06C028T.003**

DRAWING

FIGURE 7



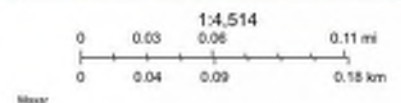
APPROVED & ONSTRUCTED  
TEMPORARY PARKING LOT

NJ-GeoWeb



6/19/2024, 11:17:01 AM

Parcels Data (Block and Lot) Artificial Path Pipeline  
Streams Connector  
Stream/River



New Jersey Department of Environmental Protection  
NJDEP | NJ Department of Community Affairs, Local Planning Services

PROPOSED CANCER CENTER



## NJDEP STREAMS MAP PENN MEDICINE PRINCETON HEALTH

Township of Plainsboro  
Middlesex County, New Jersey

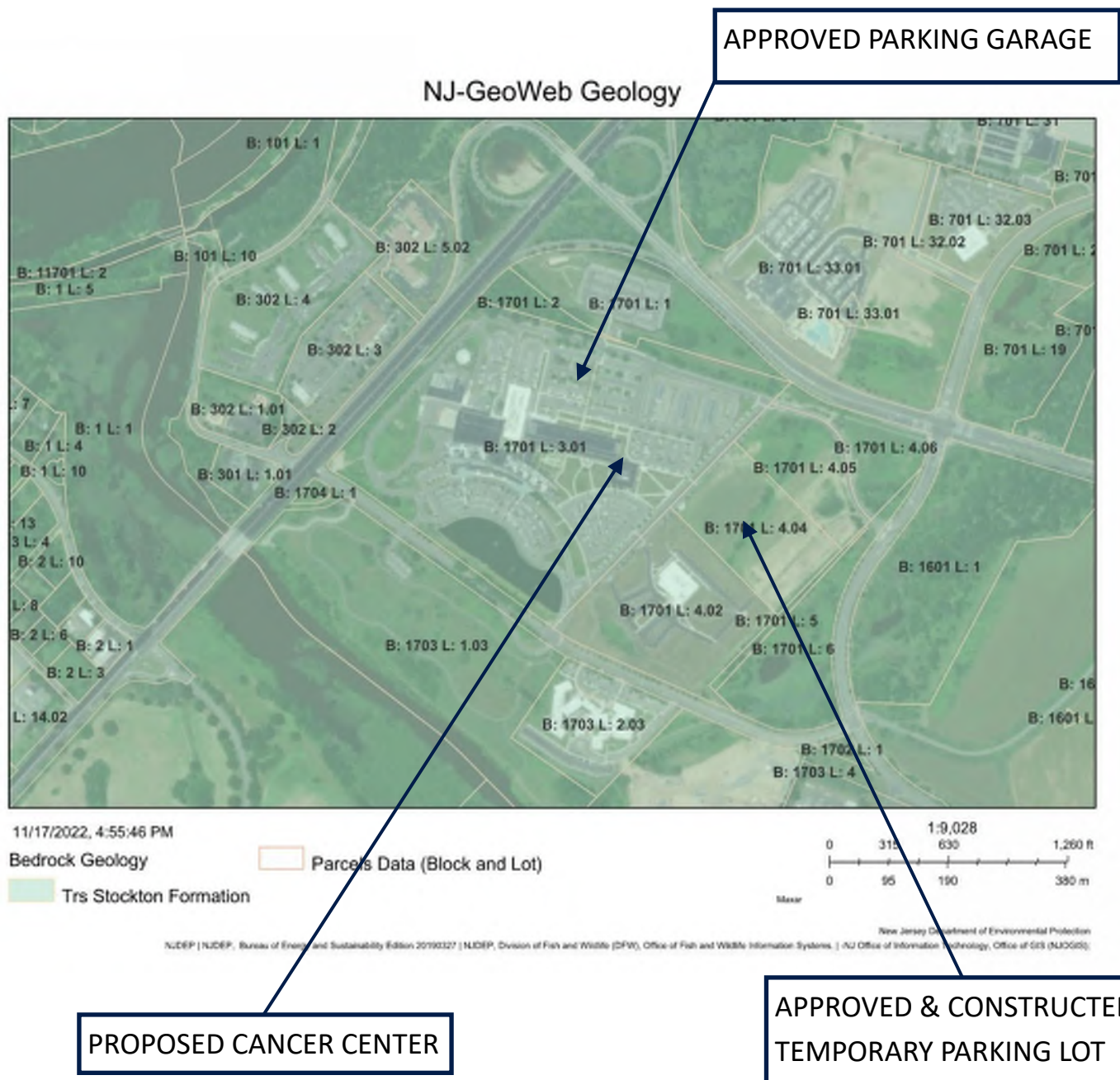
SCALE: **AS SHOWN**

DATE: **JULY 2024**

JOB No.: **06C028T.003**

DRAWING **FIGURE 8**





## NJDEP GEOLOGY MAP PENN MEDICINE PRINCETON HEALTH

Township of Plainsboro  
Middlesex County, New Jersey

SCALE:	AS SHOWN	DATE:	JULY 2024	JOB No.:	06C028T.003	DRAWING	FIGURE 9
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