



ENVIRONMENTAL ASSESSMENT REPORT

Sabella Park
1233 Cozzens Lane,
North Brunswick,
Middlesex County,
New Jersey

January 10, 2025

Prepared For:

Township of North Brunswick
710 Hermann Road
North Brunswick, New Jersey 08902

Prepared By:

BRS, Inc.
PO Box 2293
Medford Lakes, New Jersey 08055
Telephone: 856-964-6456 | Fax: 732-782-0404

Prepared by:

Dhruv Jaitly, BRS

Reviewed by:

Jennifer Taylor, P.E.

www.brsinc.com

CONTENTS

1. Description of The Proposed Project.....	3
A. TOTAL DEVELOPMENT PROJECT DESCRIPTION	3
B. OBJECTIVES OF THE PROJECT	5
C. MULTI-PHASE PROJECTS DESCRIPTION	5
2. Description of The Environment	5
A. VEGETATION	5
B. WILDLIFE	6
C. GEOLOGY, TOPOGRAPHY AND SOILS.....	7
D. WATER RESOURCES/HYDROLOGY	7
E. HISTORIC/ARCHEOLOGICAL RESOURCES.....	7
F. TRANSPORTATION/ACCESS TO SITE	8
G. ADJACENT LAND USES/DESCRIPTION OF THE SURROUNDING NEIGHBORHOOD	8
3. Environmental Impact Analysis Of Proposed Action.....	8
A. DISCUSSION OF ALL AFFECTED RESOURCES AND IMPACT SIGNIFICANCE	8
B. DISCUSSION OF SHORT-TERM AND LONG-TERM PROJECT IMPACTS	8
C. DISCUSSION OF ANTICIPATED INCREASE IN RECREATION AND OVERALL USE OVER TIME	9
D. IDENTIFY ADJACENT ENVIRONMENTAL FEATURES AFFECTED	9
E. LIST OF REQUIRED PERMITS FOR PROJECT AND STATUS	9
F. DEVELOPMENT OF UNDISTURBED PORTIONS OF THE PROJECT SITE	9
G. DISCUSS SEA LEVEL RISE IMPACTS AND RELATED DESIGN CONSIDERATIONS	9
4. Alternatives To The Proposed Action	10
A. IDENTIFY ALTERNATE SITES	10
B. DISCUSS ALTERNATE LEVELS AND TYPES OF DEVELOPMENT	10
C. COMPARE ENVIRONMENTAL IMPACTS OF EACH ALTERNATIVE	10
D. CONCLUSION	11
5. Mitigating Measures.....	11
6. Author(s) and Qualifications	12



TABLES AND FIGURES

Figure 1. Site Location..... 4

Figure 2. Wetlands 6

Figure 3. Habitat..... 7

Table 1. Species List..... 6



BRS, Inc. has performed an Environmental Impact Assessment at Sabella Park located at 1233 Cozzens Lane, North Brunswick, Middlesex County, New Jersey (known as the “site”) in conformance with the scope and limitations of the New Jersey Department of Environmental Protection (NJDEP) Green Acres Program funding requirements. This work was conducted on behalf of the Township of North Brunswick and included a review and consideration of the applicable Landscape Project maps and reports, developed by the DEP’s Division of Fish and Wildlife.

1. DESCRIPTION OF THE PROPOSED PROJECT

Sabella Park is located at 1233 Cozzens Lane in North Brunswick, Middlesex County, New Jersey. The property, currently owned by the Township of North Brunswick (population, 43,128), is situated between Six Mile Run creek and Sabella Park Drive. The entire park consists of 28.199 acres made up of 6 parcels: Block 17, Lot 156.01 (7.536 acres); Block 17, Lot 157.01 (13.79 acres); Block 17, Lot 158.01 (0.313 acres); Block 17.02, Lot 159.01 (5.836 acres); Block 17.02, Lot 160.34 (0.724 acres); and Block 17.02, Lot 160.36 (0.733 acres) on the Township’s Tax Maps. As the owner of the property, the Township of North Brunswick developed Sabella Park beginning in 1979 and it is included in the Township's updated Recreational and Open Space Inventory (ROSI). Sabella Park is one of the largest and most used parks in the Township with amenities including a playground; walking paths; a field house building with public restrooms, a kitchen, meeting space, and storage; pavilion/picnic area; parking area; a synthetic turf soccer and football field; lights; flagpole; and basketball courts.

In addition to Green Acres funding, the Township is applying for funding from the Jake’s Law program to redesign the existing playground using universal design to create opportunities for intergenerational and social connections, sensory stimulation, physical exercise, access to nature, and a space where everyone can play, regardless of ability, age, or language. This would be the first playground of this type for the Township.

a. Total Development Project Description

Regular maintenance has been performed over the years by the North Brunswick Township Department of Public Works. However, after decades of use, elements of Sabella Park require significant rehabilitation, augmentation, or replacement. The two proposed projects will focus on (1) enhancing the park’s playground to be inclusive for all and (2) replacing the park field house service building, both of which are critical to the park’s functionality and user experience. Site work for the playground will include removing outdated playground equipment and replacing it with inclusive and universally accessible equipment, upgrading the surface to a durable Rubber Bond ELEVATE system, and addressing safety concerns by installing a fence and a new sidewalk connection to the playground. Additionally, the outdated field house service building, which has suffered flood damage, will be demolished and replaced with a flood-resilient structure featuring similar amenities. The new building will be relocated to an area less prone to flooding in the park and raised up with metal siding. The cleared area will be regraded and replanted to reduce flooding and erosion risks (Figure 1).





Figure 1. Site Location
(top: image of Sabella Park, bottom: image of flood zones and proposed project sites within park)¹

¹ NJ Floodmapper, Sabella Park, North Brunswick, NJ.. <https://www.njfloodmapper.org/map/oBiBPUOiFtM7vbV>.

b. Objectives of the Project

Sabella Park is a highly utilized facility that serves as a hub for the North Brunswick community, hosting numerous recreational activities, sports events, and community gatherings. The primary objective of this project is to enhance the health, safety, and comfort of all park users by addressing critical infrastructure needs. The existing playground equipment has exceeded its useful lifespan and poses safety concerns, while the current building is outdated and frequently damaged by flooding. Additionally, the lack of a playground fence and uneven terrain leading to the playground create safety risks for visitors. These improvements aim to ensure that Sabella Park remains an inclusive, safe, and welcoming space for community members of all ages and abilities.

c. Multi-Phase Projects Description

Not applicable. All planned improvements for Sabella Park are expected to begin in 2026 and will be completed in a single phase.

2. DESCRIPTION OF THE ENVIRONMENT

The existing environmental features of Sabella Park are described in the sections below. According to available geological and environmental information, the park is in a region characterized by a mix of natural and developed features. The area surrounding the park includes Six Mile Run Creek and various ecosystems that contribute to the park's natural aesthetics and environmental significance. While Sabella Park serves as an essential community recreation hub, its existing vegetation and environmental conditions have been influenced by decades of recreational use and development activities.

a. Vegetation²

During the preparation of the environmental assessment, BRS reviewed maps and reports from the New Jersey Department of Environmental Protection (NJDEP) to evaluate potential wildlife habitats at Sabella Park. The park's landscape is primarily characterized by maintained lawns, scattered mature trees, and riparian vegetation along Six Mile Run Creek, which runs the site. The proximity of Six Mile Run Creek supports riparian vegetation that enhances the environmental value of the surrounding area. Notably, a Great Blue Heron, classified as a species of special concern, was observed foraging in the area in 2014, highlighting the ecological importance of maintaining these natural habitats. Wetlands are located on site adjacent to the creek, as shown in Figure 2. These natural features play a role in the overall ecological health of the area and will be preserved during the planned improvements. However, some trees will be removed as part of the planned work, and efforts will be made to minimize impacts on the park's ecological value.

² New Jersey Department of Environmental Protection. Accessed online at [NJ-GeoWeb](https://www.nj.gov/dep/geo/),

December 28, 2024

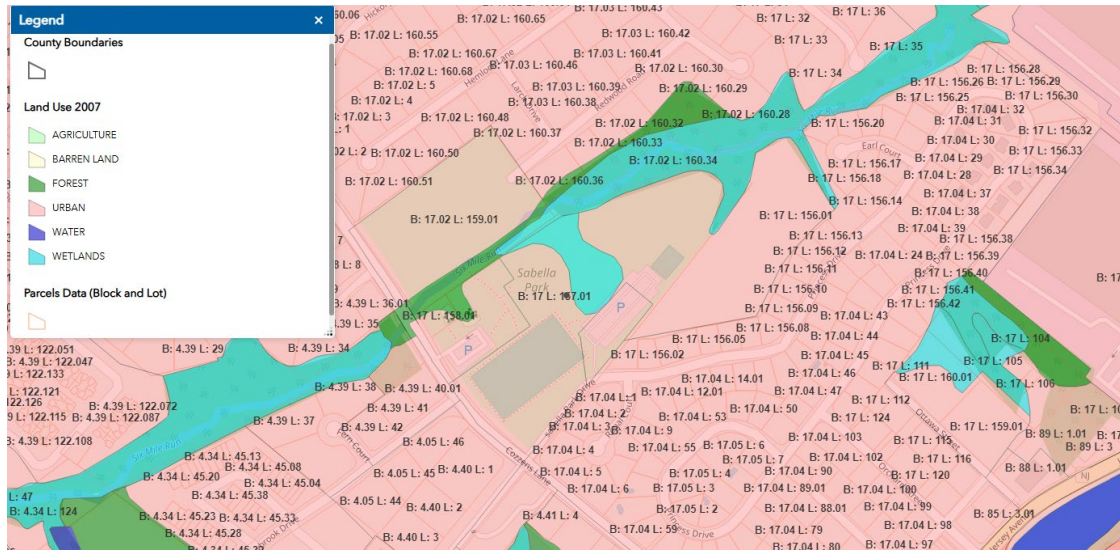


Figure 2. Wetlands³

b. Wildlife⁴

BRS reviewed various NJDEP Landscape Project maps and reports during the preparation of the environmental assessment to evaluate wildlife species occurrence at Sabella Park. Wildlife habitat for species listed as State threatened or of special concern is located within the wetlands adjacent to Six Mile Run Creek. A Great Blue Heron, classified as a species of special concern, was observed foraging in the area in 2014, highlighting the ecological importance of maintaining these natural habitats (Table 1 and Figure 3). These habitats contribute to the ecological value of the region and underline the importance of preserving nearby riparian zones.

Table 1. Species List

Status	Species	Feature Label	Year	Count
Federal	No records	No records	No records	No records
State Endangered	No records	No records	No records	No records
State Threatened	No records	No records	No records	No records
Special Concern	Great Blue Heron	Foraging	2014	1

³ New Jersey Department of Environmental Protection. Accessed online at <https://dep.nj.gov/njgws/technical/historical-technical-reports/#final-report-series>, December 29, 2024.

⁴ NJDEP Division of Fish and Wildlife Landscape Project mapping. Accessed online at www.nj.gov/dep/fgw/ensp/landscape/index.htm, December 28, 2024.



Figure 3. Habitat

c. Geology, Topography and Soils⁵

North Brunswick and the surrounding area geology consists of soft shales with a few sandstone layers with quartzite conglomerate beds along the northwest border of formation. Sabella Park lies in an area of North Brunswick characterized by gently rolling terrain with elevations averaging approximately 15 feet above mean sea level. The underlying geology consists primarily of alluvial deposits influenced by Six Mile Run Creek, with soils typical of riparian environments. This soil is moderately well-drained and suitable for recreational uses, but proximity to the creek necessitates consideration of flood risk during development activities.

d. Water Resources/Hydrology

Six Mile Run Creek runs through Sabella Park between Lots 159.01 and 157.01, providing significant ecological and hydrological features. The creek supports riparian vegetation and serves as an essential natural resource for the area. The creek's presence necessitates careful management of stormwater and erosion control during park improvements. Sabella Park lies within the Millstone River watershed, which connects to the larger Raritan River basin, emphasizing its role in regional water management.

e. Historic/Archeological Resources

No historic or archaeological significance has been attributed to Sabella Park based on the New Jersey Historic Preservation Office's databases and resources (e.g., LUCY mapping tool). The

⁵ USGS AASG National Geologic Map Database
https://ngmdb.usgs.gov/Geolex/UnitRefs/BrunswickRefs_677.html#:~:text=Brunswick%20shales.,Middlesex%20Co.%5D%2C%20NJ, December 29, 2024.

property is not listed as a historic site and does not include any structures or features of archaeological interest. However, any ground-disturbing activities will comply with state regulations to avoid impacts on undiscovered cultural resources.

f. *Transportation/Access to Site*

Sabella Park is located at 1233 Cozzens Lane, North Brunswick, and is bound by Six Mile Run creek to the north and west, Cozzens Lane to the south, and Sabella Park Drive and Princess Drive to the east. It is accessible via Sabella Park Drive and Cozzens Lane. The site includes an on-site parking lot and connects to nearby residential neighborhoods through local roadways. These access points ensure the park remains convenient for community use and recreation.

g. *Adjacent Land Uses/Description of the Surrounding Neighborhood*

Sabella Park is immediately surrounded by residential neighborhoods to all sides, and Six Mile Run Creek runs through the site. These adjacent communities frequently utilize the park for recreational activities, making it a central hub for events and outdoor gatherings in North Brunswick Township. Further to the east and south are mixed commercial and industrial uses.

3. ENVIRONMENTAL IMPACT ANALYSIS OF PROPOSED ACTION

Impacts are defined as direct or indirect changes in the existing environment, whether beneficial or adverse, that are anticipated as a result of the proposed action or related future actions and uses. Any off-site impacts, such as increased traffic on neighborhood roads or increased noise levels in surrounding areas, are described below:

a. *Discussion of All Affected Resources and Impact Significance*

The Great Blue Heron, a species classified as of Special Concern, was observed foraging in the area in 2014. Wildlife habitat for species listed as State threatened or species of special concern are located in on-site wetlands as well of Sabella Park. The proposed improvements will temporarily impact wildlife in these areas due to noise and human activity during construction. However, the improvements are expected to increase park usability and community safety while maintaining ecological integrity. Precautions will be taken to limit impacts to natural elements, and all work will be completed in compliance with required NJDEP permits.

As one of the most visited parks in North Brunswick, Sabella Park serves as a critical recreational area for the Township. Enhancements to the park's infrastructure, such as ADA-compliant pathways, improved vegetation, and updated field house building will benefit the local community, including vulnerable populations in the adjacent residential neighborhoods.

b. *Discussion of Short-Term and Long-Term Project Impacts*

Short-term impacts include limited access to sections of the park and increased noise during construction. These inconveniences will be mitigated by scheduling and maintaining safe pedestrian zones. The long-term benefits include improved flood resilience, safety, aesthetics, and accessibility, encouraging greater park use and fostering community health. Construction activities may disrupt wildlife temporarily but will not introduce permanent disruptions or changes to habitats on-site.



c. Discussion of Anticipated Increase in Recreation and Overall Use over Time

The proposed improvements will likely result in increased park use, especially for those with disabilities. The enhanced playground, sidewalks, updated field house building to reduce flood concerns, improved riparian vegetation for flood resilience, and ADA-compliant infrastructure will attract diverse user groups, including families, seniors, and individuals with disabilities. The park's proximity to residential neighborhoods and schools will further amplify its role as a hub for community engagement and recreation.

d. Identify Adjacent Environmental Features Affected

The project will minimally affect adjacent environmental features. Temporary impacts may include increased truck traffic and construction-related noise. This project is not proposing any new lighting or traffic patterns that could potentially be local sources of noise and light pollution. However, the use of dark-sky-compliant LED lighting minimizes long-term light pollution, preserving the area's natural ambiance and wildlife activity in neighboring wetlands.

e. List of Required Permits for Project and Status

The following permits may be required:

- **Soil Conservation Permit:** Issued by the Freehold Soil Conservation District for soil erosion and sediment control. The contractor will submit this application before construction begins.
- **Letter of Interpretation (LOI):** Evaluation of the neighboring freshwater wetlands for resource value classification to determine buffer requirements.
- **NJDEP Permits:** Permits may be required for construction activities near waterbodies, wetlands and wetland buffer zones or riparian areas. Applications will be submitted as applicable.

f. Development of Undisturbed Portions of the Project Site

The project does not significantly impact previously undeveloped areas of Sabella Park and focuses on enhancing existing facilities. No previously undeveloped portions of the site are impacted by this project. The field house service building will be constructed on the grass-covered area of the land adjacent to an existing concrete pad, ensuring minimal disruption to the park's layout and natural features.

g. Discuss Sea Level Rise Impacts and Related Design Considerations

North Brunswick and Sabella Park are not along a coastline, therefore sea level rise is not a major concern for the project design. Sabella Park lies approximately 15 feet above current mean sea level is within the Millstone River watershed, which connects to the larger Raritan River basin that flows into the Raritan Bay. While the region is not immediately at risk of inundation, rising sea levels and storm surges may increase localized flooding risks over time. The design incorporates sustainable materials and erosion control measures to mitigate these possible impacts and ensure the park's longevity amidst climate change scenarios.



4. ALTERNATIVES TO THE PROPOSED ACTION

a. *Identify Alternate Sites*

The Township of North Brunswick has several recreational facilities, including Babbage Park, Veterans Park, and Community Park, each offering diverse amenities such as walking trails, sports fields, and playgrounds. While these parks provide significant recreational opportunities, Sabella Park was prioritized for this project due to its central location and high utilization by the local community, particularly residents of nearby neighborhoods. Additionally, its close proximity to schools and other community facilities makes it an ideal site for investment. The failure to address the deteriorating infrastructure at Sabella Park would limit access and reduce the quality of recreational opportunities in the area, creating a deficit in available amenities.

b. *Discuss Alternate Levels and Types of Development*

Initial planning for Sabella Park considered a larger-scale redevelopment, including the installation of new sports facilities, turf field replacement, expanded parking areas, and additional amenities such as ADA accessible restrooms, universal moonbounce, and adaptive see-saw. However, the estimated cost for these upgrades made it financially unfeasible.

The proposed project scope focuses on essential upgrades, including improving the walking paths and public restrooms for ADA compliance, updating field house facilities to reduce the likelihood of flood related damage claims, and upgrading existing playground equipment to meet modern safety standards. These improvements align with community needs while remaining within budget constraints. Future phases may incorporate additional features such as expanded parking or new facilities as funding becomes available.

c. *Compare Environmental Impacts of Each Alternative*

No Action Alternative

Under the No Action Alternative, no new environmental impacts would occur since no redevelopment would take place. However, this option would perpetuate the current issues at Sabella Park, including deteriorating infrastructure, limited accessibility, and potential safety hazards due to uneven terrain and exposed tree roots. Over time, this neglect could exacerbate soil erosion, increase the presence of invasive vegetation, and diminish the usability of the park. This option does not align with the Township's goals of enhancing recreational equity and access.

Proposed Plan (Preferred Alternative)

The proposed redevelopment of Sabella Park involves moderate construction activities with temporary environmental impacts such as noise and dust. Key improvements include the installation of a new 8' wide concrete sidewalk connecting the parking lot to the playground, addressing tripping hazards caused by uneven terrain and storm damage, installation of a new inclusive/universal playground equipment, demolition of the existing field house building onsite and construction of a new building. The replacement of removed trees and other plantings are included in the preferred plan to maintain a healthy tree canopy and mitigate flooding effects of the Six Mile Run creek at the park. Impacts to the environment from tree planting are temporary in nature and include ground disturbance in previously undisturbed portions of the park, fencing



of tree saplings and irrigation while saplings take root. Best management practices will be employed to mitigate short-term construction impacts, ensuring minimal disturbance to the park's natural features. This plan provides long-term benefits, including improved accessibility, better recreational opportunities, and alignment with the Township's sustainability goals.

Development of an Alternative Nearby Site

Executing a similar plan at an alternate site, such as Babbage Park or Veterans Park, would result in comparable construction-related environmental impacts. However, these parks already have facilities that do not face the same level of deterioration or accessibility challenges as Sabella Park. Redirecting resources to an alternative site would fail to address the specific needs of Sabella Park and its surrounding community. This alternative also does not align with the goal of addressing the recreational deficits in this area or supporting environmental justice considerations.

d. ***Conclusion***

The Proposed Plan (Preferred Alternative) represents the most balanced and effective approach, addressing both environmental and community needs. By focusing on Sabella Park, the Township can achieve its goals of enhancing recreational equity and accessibility while ensuring environmental stewardship.

5. MITIGATING MEASURES

The Township of North Brunswick has developed a comprehensive plan to mitigate potential adverse impacts resulting from the rehabilitation of Sabella Park. While the project will generate short-term disturbances such as noise, ground disturbance, and dust during construction, the following measures will minimize these impacts:

1. **Compliance with Environmental Standards:**

All activities will adhere to the Division of Land Use Regulation (DLUR) and New Jersey Department of Environmental Protection (NJDEP) standards, including air emission and water quality regulations.

2. **Erosion and Sediment Control:**

A permit from the Freehold Soil Conservation District will be obtained to ensure proper soil erosion and sediment control measures are implemented during construction. Best management practices, such as silt fencing and sediment traps, will be used to prevent runoff and protect nearby water resources.

3. **Noise Abatement:**

Construction activities will comply with the New Jersey Noise Control Regulations under N.J.A.C. 7:29-1.2. Noise levels will be monitored and maintained within allowable limits. Measures such as restricting work hours, using noise-dampening equipment, and maintaining machinery to reduce noise output will be enforced to minimize disturbances to park users and nearby residents.

4. **Dust Control:**

Dust suppression techniques, such as periodic watering of exposed soil and limiting construction traffic, will be implemented to minimize airborne particulates during construction.

5. **Protection of Riparian Areas:**

Construction near wetlands and riparian zones will include protective measures to limit impacts on water quality and nearby ecosystems. If required, permitting for freshwater wetlands or buffer zones will be obtained, and activities will be planned to minimize disruption to these sensitive areas.

These mitigating measures ensure the project proceeds with minimal disruption to the environment, park users, and surrounding communities while achieving its goals of enhancing the park's accessibility and usability.

6. **AUTHOR(S) AND QUALIFICATIONS**

See attached resumes for BRS, Inc staff Dhruv Jaitly and Jennifer Taylor, P.E. for their qualifications.

