

ENVIRONMENTAL IMPACT ASSESSMENT

January 2024

**Washington Lake Park, Washington Township, NJ – Green Acres
Grant Application
Portion of Block 53, Lot 14**

Prepared For

Washington Township

Prepared by:

Remington & Vernick Engineers
2059 Springdale Road
Cherry Hill, NJ 08003
Contact: Damon T. Kline, PE, PMP
Office Phone: (856) 795-9595, Ext. 1102
RVE Project Number: 0818T432



ENVIRONMENTAL IMPACT ASSESSMENT

As part of the Green Acres funding proposal, each applicant must collect, evaluate, and present pertinent environmental information necessary to ascertain the suitability of the site for the activities proposed. Please review and consider the applicable Landscape Project maps and reports, developed by the DEP's Division of Fish and Wildlife, during the preparation of the environmental assessment. Information about the Landscape Project can be found at www.nj.gov/dep/fgw/ensp/landscape/index.htm or by emailing the Division at www.nj.gov/dep/fgw/contactform.htm.

OUTLINE

1. DESCRIPTION OF THE PROPOSED ACTION

a. Briefly describe the total development project:

Washington Township proposes to complete the follow improvements as part of the Washington Lake Park project:

- Construction of a new playground system and sensory play area with all new equipment.
- Construction of 7,630 square feet poured-in-place impervious protective surfacing to support the new playground.
- Construction of an attached picnic area with five (5) picnic tables under a 20'x36' SkyWays® Cantilever.
- Construction of a new concrete circulation path.

b. State objectives of the project:

The main objective for the project is to improve the park with the installation of a large, upgraded playground area with an attached picnic area and sensory play area. These improvements to the park's recreational facilities will help to promote a healthier lifestyle for the surrounding community and to allow multiple age groups to use the park for recreational activities. The construction proposed is expected to have a minimal impact on the environment.

c. Fully describe multi-phase projects:

The construction of the improvements is proposed to be completed in one phase.

2. DESCRIPTION OF THE ENVIRONMENT

- a. **Vegetation:** According to the New Jersey Department of Environmental Protection (NJDEP) Division of Fish and Wildlife, Washington Lake Park is located in the "Piedmont Plains Landscape" region of New Jersey. Washington Lake Park is comprised of varying landscapes including wooded, wetland, and mowed lawn areas. The project area consists of a former beach volleyball court comprised of sand within the northwestern portion of Block 53, Lot 14. A variety of mature oak and maple trees are present to the north and west of the project area. The project area is bordered by grass lawn areas to the north, south, east, and west.
- b. **Wildlife:** According to the NJDEP Division of Fish and Wildlife, Washington Lake Park is located within the "Piedmont Plains" Landscape region and there are no species of protected wildlife indicated at, or within 50-feet of, the site.

- c. **Geology, topography and soils:** According to the NJDEP Division of Fish and Wildlife, Washington Township is located in the southwestern section of the “Piedmont Plains Landscape” landscape region of New Jersey, with the “Pinelands Landscape” located to the south and southeast of the landscape region.

According to NJDEP’s NJ-GeoWeb, the surficial geology consists of Weathered Coastal Plain Formations (Qwcp), and the bedrock geology consists of the Lower Member Kirkwood Formation (Tkl). Weathered Coastal Plain Formations are comprised of exposed sand and clay of Coastal Plain bedrock formations. Includes thin, patchy alluvium and colluvium, and pebbles left from erosion of surficial deposits. The Lower Member Kirkwood Formation consists of quartz sand and clay.

The project area is relatively flat, located at approximately eighty-five (85) feet above mean sea level, and is located in an area of Block 53, Lot 14 that generally slopes to the west towards Cedar Pond and Porch Branch tributaries.

According to the United States Department of Agriculture (USDA), Natural Conservation Service, the project area soils consist of “Westphalia fine sandy loam (WeeB),” 2 to 5 percent slopes. Capacity of the most limiting layer to transmit water is Moderately high to high (0.20 to 2.00 in/hr).

Typical Westphalia fine sandy loam (WeeB) profile:

- Ap – 0 to 6 inches: fine sandy loam
- Bt – 6 to 15 inches: fine sandy loam
- BC – 15 to 30 inches: loamy fine sand
- C1 – 30 to 48 inches: fine sand
- C2 – 48 to 80 inches: stratified fine sand to loamy fine sand

- d. **Water resources/hydrology:** According to NJDEP’s NJ-GeoWeb, Washington Lake Park is located over the Kirkwood-Cohansey (kcas) aquifer system, a “B-A”-ranked aquifer (median yield of 250 to 500 gpm) composed of underground, water-saturated layers of sand, fine gravel and some clay-like material. The Kirkwood-Cohansey aquifer is highly permeable with water that is typically fresh, acidic, highly corrosive, and low in dissolved solids. Because it is so shallow, it is easily polluted by fertilizers and other chemicals spread or spilled on the ground’s surface.

Washington Township averages approximately 52 inches of rain and 6 inches of snow annually, which drains to the Lower Delaware Watershed Management Area, specifically the Lower Delaware (road to Sewell to Rt 47) sub watershed.

- e. **Historic/archeological resources:** According to NJDEP’s NJ-GeoWeb, the proposed project area is located in an “NR Eligible” Historic Archaeological Site, and the western portion of Block 53, Lot 14 is located in the “Identified Archaeological Grid: AX222.”

- f. **Transportation/access to site:** Washington Lake Park is accessible via:
- Taggart Parkway, Davis Way Park, and associated parking facilities that are located throughout Washington Lake Park.

- g. **Adjacent land uses/description of the surrounding neighborhood:** According to NJDEP’s NJ-GeoWeb and NJPropertyFax, Block 53, Lot 14 has a classification designated as “Class: 15C – Public Property” with its zoning identified as “R,” usage classified as “Park,” and owner

identified as the “Township of Washington.” Washington Lake Park is located in a mixed-use residential, recreational, rural, and forested area of Washington Township, surrounded by multi-family residential developments to the north, forested land and residential developments to the east, agricultural land to the south, and a mix of forested land, wetlands, and single-family residential dwellings to the west.

3. ENVIRONMENTAL IMPACT ANALYSIS OF PROPOSED ACTION

- a. Discuss all affected resources and the significance of each impact:** The new playground area will be impervious and built on an existing area currently comprised of sand that will not require tree clearing, thus no natural resources are expected to be impacted.
- b. Discuss short-term and long-term project impacts:** Short-term impacts to the environment from installing a new playground are not expected since construction will be taking place on a developed, unvegetated portion of land.

Long-term impacts include an increase in usage of the park by children between the ages of two (2) and twelve (12) for recreational purposes is another expected impact. The park is currently underutilized by children because existing playground areas are small and lack amenities. The park will remain open from dawn to dusk as usual.

- c. Discuss anticipated increase in recreation and overall use of site over time:** Currently, the playground areas at Washington Lake Park are underutilized due to their small size and lack of amenities. The larger, updated playground and picnic area allow for the accommodation of more guests. Once the new playground and associated amenities are installed, recreational use at Washington Lake Park is expected to increase.
- d. Identify adjacent environmental features that may be affected by the proposal:** There are no adjacent environmental features that will be affected by the proposed park improvements. Washington Lake Park is located in a mixed-use residential, recreational, rural, and forested area of Washington Township, surrounded by multi-family residential developments to the north, forested land and residential developments to the east, agricultural land to the south, and a mix of forested land, wetlands, and single-family residential dwellings to the west.
- e. List any permits required for project and brief status (i.e., waterfront development):**
 - 1. Camden County Soil Conservation District Soil Erosion & Sediment Control Permit
- f. National Heritage Data Request Forms:** The new playground area will be built on an existing beach volleyball court. The park improvements will not impact any undisturbed portions of the property and will be constructed on previously developed lands within the park.
- g. Discuss if/ how the project may be impacted by sea level rise and any related design considerations:** The project area is not expected to be impacted by sea level rise. The project area is located at approximately eighty-five (85) feet above mean sea level and is located in a mixed residential, recreational, rural, and forested area of Washington Township. The project area is located in an area of Washington Township that generally slopes to the east towards Cedar Pond and Porch Branch tributaries, approximately 1,000 feet east and upgradient of Cedar Pond.

According to review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Panel 34015C0201E, effective 01/20/2010 for Washington Township, the project area is not located within a flood hazard area.

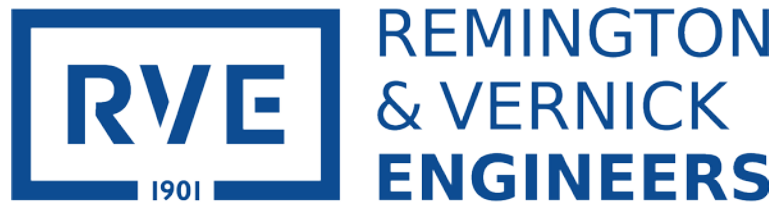
4. ALTERNATIVES TO THE PROPOSED ACTION

- a. **Identify alternate sites:** James G. Atkinson Park, located in the westernmost portion of Washington Township, is another park where redevelopment could take place. There are several smaller park properties within Washington Township where redevelopment could take place; however, there are not many parks in need of playground and amenity upgrades with enough free space to accommodate these features.
- b. **Discuss alternate levels and types of development:** The alternative for the poured rubber playground surface would be sand, pea gravel, or wood mulch/chips. The concrete sidewalk could be composed of gravel. Alternatively, a path connecting the playground and the parking lot could have been completely forgone.
- c. **Compare environmental impacts of each alternative:** Installing sand, pea gravel, or wood mulch/chip playground surface would create a more pervious surface to drain stormwater runoff. However, these alternative surfaces would require more maintenance, have less fall protection, or are susceptible to splintering.

Environmentally, the installation of a gravel parking lot would be more conducive to stormwater infiltration but would cost more to maintain due to rutting from turning movements within the drop-off area. The path connecting the playground and parking lot provides a safe walking area for park visitors traveling to the playground from the parking lot.

5. MITIGATING MEASURES

No adverse impacts are anticipated; therefore, no mitigation measures are required for this project. However, operation and maintenance manuals will be produced for this site to ensure that future adverse environmental impacts are avoided or minimized. Additionally, any disturbed areas will be restored as soon as possible and practically.



END OF REPORT