

STAFF REPORT

PLEASE REFER TO DRCC # WHEN SUBMITTING
ADDITIONAL DOCUMENTS



DRCC #: 21-5668

DATE: March 11, 2021

PROJECT NAME: Delaware and Raritan Canal State Park -- Cooley Tract Parking

Latest Submission Received: March 11, 2021

Applicant:

Department of Environmental Protection
Division of Parks and Forestry
Delaware and Raritan Canal State Park
145 Mapleton Road
Princeton, NJ 08540
Patricia.kallessen@dep.nj.gov
Stephanie.fox@dep.nj.gov

Engineer:

Erik E. Boe, P.E.
Lan Associates
445 Godwin Avenue
Midland Park, NJ 07432
erik.boe@lanassociates.com

Project Locations:

Road	Municipality	County	Block(s)	Lot(s)
2868 Daniel Bray Highway (N.J. State Highway Route No. 29)	Kingwood Township	Hunterdon	14	27

Jurisdictional Determination:

N/A	Governmental Project	Governmental
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Subject to Review for:

Drainage	Visual	Traffic	Stream Corridors
X	X		

**THIS STAFF REPORT IS ISSUED AS A GUIDE TO APPLICANTS IN
COMPLYING WITH DRCC REGULATIONS. IT IS NOT AN APPROVAL. NO
CONSTRUCTION SHALL BEGIN UNTIL A CERTIFICATE OF APPROVAL
HAS BEEN ISSUED.**

PO BOX 539

STOCKTON, NJ 08559

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www.nj.gov/dep/drcc/

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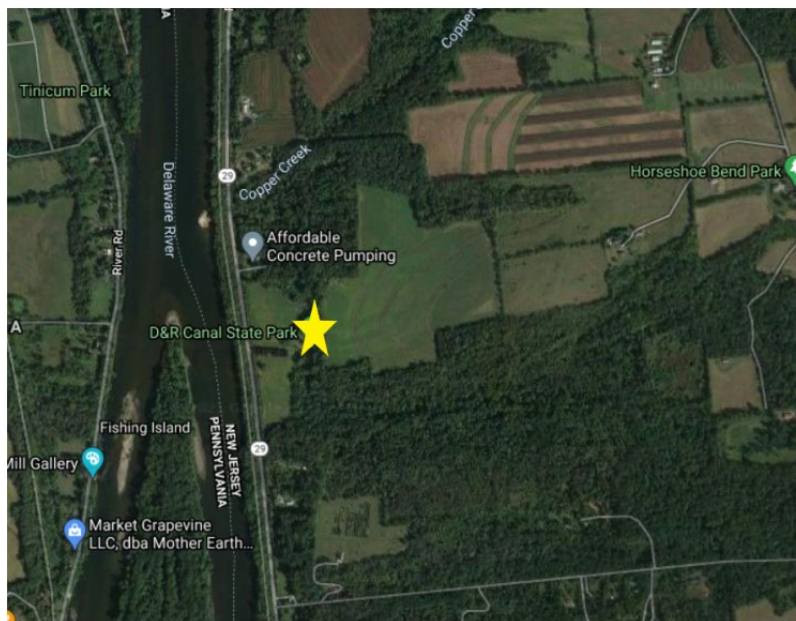
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Documents Received: Site plans (6 sheets) dated December 18, 2020 prepared by Lan Associates; Stormwater Management Report (21 pages) dated March 1, 2021, revised March 11, 2021, prepared by Lan Associates.

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Staff comments continued below.

The application is complete and shall be presented to the Commission for their action with a staff recommendation of approval at the March 17, 2021 meeting, based upon the following analysis:

Existing Conditions: The project area, known as the “Cooley Tract,” is an approximate 138.5 acre lot located on the easterly side of the Daniel Bray Highway (N.J. State Highway Route No. 29) (Route 29) and 1,775 feet north of Fairview Road in the Kingwood Township, Hunterdon County, approximately 5.8 miles north of the northern terminus of the Delaware and Raritan Feeder Canal at Raven Rock. The lot is bounded by Route 29 followed by the Delaware and Raritan Canal State Park multiuse trail approximately 131 feet to the west, residential and agricultural uses to the north, woodland, agricultural uses and preserved open space to the east, and widely-spaced residential developments on comparatively large lots along Fairview Road to the south.



In the existing condition, the lot is comprised of lands in agricultural use and woodlands, along with a gravel driveway, paved driveway apron, park gate and Department of Environmental Protection (DEP) signage at the ingress/egress point on Route 29.

The Cooley Tract property was purchased with DEP Green Acres monies and was assigned to the administrative jurisdiction of the Delaware and Raritan Canal State Park in January of 2014. Following the acquisition, the existing structures on the property that were demolished and an underground storage tank was removed from property. Prior to

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the acquisition, the land was used for agricultural purposes, and the Division of Parks and Forestry had entered into a farm lease after the land was transferred to the State Government. That lease was subsequently amended to remove the two lower fields adjacent to Route 29; but the larger upper fields remain under an active lease agreement. Since the property abuts Horseshoe Bend Park, the State Park Service currently allows for passive recreation along the sides of the farm fields, and the property is open hunting pursuant to DEP Division of Fish and Wildlife regulations.



The project is not located within the Commission Review Zone; however, the Commission has jurisdiction over the project pursuant to the provisions of N.J.A.C. 7:45-3.5(b), which states that “[a]ny State agency planning to undertake a governmental project in the Park shall submit a complete application together with all supporting information to the Commission.” A “governmental project” is defined at N.J.A.C. 7:45-1.3 as “the undertaking of a public improvement, disturbance, development, construction or land-use change by a State department or agency, county, municipality or any other governmental entity except interior alterations to an existing structure that involves no change of use” [Emphasis added].

Proposed Project: The applicant proposes to construct a parking area composed of graded aggregate which would accommodate 32 vehicles at the Cooley Tract property. The project also proposes to erect a standard 30-inch octagonal stop sign on a 7-foot high U-post in the proposed parking lot.

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The purpose of the project is to create additional parking for park patrons, who have increasingly engaged in unsafe and illegal parking along the shoulder of Route 29 during the summer months when Delaware and Raritan Canal State Park attendance peaks. The project would also create a licensee customer and employee parking area from which a qualified bidder, chosen pursuant to a request for proposal issued by the DEP, would conduct a proposed commercial operation to rent river tubes, and deliver and pick up customers from department-designated delivery and pickup sites within the park (See https://www.nj.gov/dep/parksandforests/parks/business_ops/current_leases.htm).

The proposed project would result in the creation of 17,100 square feet (0.39 acre) of new impervious surface coverage, and would result in the disturbance of 25,035 (0.54 acre) of land.

Stream Corridor: A tributary of Copper Creek runs through the northern portion of the property, and the main stem of Copper Creek is located along the northerly boundary of the property, respectively. A tributary of the Delaware River runs through the southern portion of the property. As neither of these watercourses contribute to the water transmission complex of the Delaware and Raritan Canal, being 5.7 miles north of the canal intake at Bull's Island Recreation Area, there are no Commission-regulated stream corridors on the site. Therefore, the project is not subject to stream corridor impact review pursuant to N.J.A.C. 7:45-9.1(a).

Stormwater Runoff and Water Quality: The applicant is proposing a 17,100 square foot (0.39 acre) increase in the amount of impervious area onsite which would result in an associated increase in the amount of stormwater runoff as compared to the existing conditions if unmitigated. To mitigate for these impacts, the submitted application proposes to control and collect stormwater runoff via the construction of a gravel stone runoff storage system that is designed to capture and store stormwater runoff.

The proposed parking area will be constructed of loosely-graded stone aggregate, consisting of a six-inch thick layer of uniformly graded clean AASHTO #57 coarse aggregate over non-woven geotextile filter fabric. Uniformly graded aggregate is recognized to have a void ratio of 40 percent (%). The sizing for the thickness of the gravel storage bed has been designed with the goal of collecting stormwater from the parking area so that for stormwater leaving the site the post-construction peak runoff rates for the two, 10 and 100-year storm events will be no greater than 50%, 75% and 80%, respectively, of the pre-construction peak runoff rates. The submitted calculations utilized the Rational Method and the Modified Rational Method hydrologic methodology, to compute peak runoff flow rates and volumes. Based upon the results of the analysis, the proposed stormwater management measures will provide enough peak flow attenuation to meet the specific runoff quantity standards of N.J.A.C. 7:45-8.6(a)2.

Water Quality: The Commission requires that all proposed full-depth pavement including newly and reconstructed parking and access drives that are being renewed, must meet water quality standards in accordance with Commission regulations (N.J.A.C. 7:45-8.7). This includes reduction of the post-construction load of total suspended solids

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(TSS) in stormwater runoff generated from the water quality design storm by a rate of 80 percent (%) of the anticipated load from the developed site, expressed as an annual average.

Based upon the submitted application, 17,100 square feet (0.39 acre) of new parking area is being proposed onsite. The applicant has proposed to provide mitigation for the water quality impacts as a result of this application by eliminating a greater amount of TSS producing surfaces within an area of the applicant's property located within the watershed. The applicant is also simultaneously applying for another application (DRCC #21-5669) for a similar type of parking area development project called the "Riverview" parking area, which proposes the creation of a 9,855 square feet (0.23 acre) of similar gravel parking area.

In 2020, the applicant had received a certificate of approval from the Commission which included the permanent removal of 0.93 acre of vehicular impervious cover at the nearby Bulls Island Recreation Area to create the new Inlet Trail at the northern portion of the area (See DRCC #20-3662H), which will ultimately serve as means to improve the overall water quality of surface stormwater runoff discharged within the watershed. Considering the 0.93 acre of permanent pavement removal in combination with the proposed increase in gravel parking area of 0.39 acre at the Cooley Tract site and 0.23 acre at the proposed Riverview site, will result in an overall net decrease of 0.31 acre of impervious vehicular surface area within the watershed. Therefore, the water quality requirements of N.J.A.C. 7:45-8.7 can be considered to have been met.

Groundwater Recharge: The Commission regulations require that stormwater management measures maintain 100% of the average annual preconstruction groundwater recharge volume for the site; or that any increase of stormwater runoff volume from pre-construction to post-construction for the 2-year storm is infiltrated. The applicant is proposing a 17,100 square-feet (0.39 acre) increase in the amount of impervious area onsite that will result in an associated decrease in the amount of stormwater recharge as compared to the existing conditions if unmitigated. To mitigate for this expected recharge deficit, the submitted application proposes to recharge stormwater runoff into the ground by means of the construction of a gravel stone runoff storage system the is designed to capture and infiltrate stormwater runoff. The thickness of the proposed stone storage has been designed to accommodate and infiltrate the annual groundwater recharge deficit. Therefore, the groundwater recharge requirements of N.J.A.C. 7:45-8.5 have been addressed.

Visual, Historic and Natural Quality Impact: The project area is located approximately 5.7 miles north of the boundary of Commission Review Zone A. Nevertheless, Commission staff makes the following observations regarding the project's compliance with the visual, historic and natural quality impact review standards which are otherwise applicable in Review Zone A.

The project would comply with the provisions of N.J.A.C. 7:45-10.3(a) which discourages major projects in certain canal environments, since it proposes development and circulation patterns that direct traffic away from the park, and proposes an

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improvement to an adjoining portion of the park (See N.J.A.C. 7:45-10.3(a)4 and 6, respectively.

The provisions of N.J.A.C. 7:45-10.3(b) would have been inapplicable to the project had it been located in Review Zone A.

The provisions of N.J.A.C. 7:45-10.4(c) would have been inapplicable to the project, which does not propose any structures that would be subject to a setback limit.

The provisions of N.J.A.C. 7:45-10.4(c) would have been inapplicable to the project, which does not propose any structures that would exceed 40 feet in height.

The provisions of N.J.A.C. 7:45-10.4(d)1, 3, 4 and 5 would have been inapplicable to the project, which does not propose to install public utility lines or equipment, commercial signage, or propose the planting of new vegetation.

The project would have complied with the provisions of N.J.A.C. 7:45-10.4(d)2, which directs that parking lots shall either be completely concealed from view from the Delaware and Raritan Canal State Park or designed to minimize their visual impact on the park. The proposed project would be screened from the view of a person in the Delaware and Raritan Canal State Park due to the topography of the land and intervening vegetation, located both at the western boundary of the project site and in the area between Route 29 and the park multiuse trail, which is located on the former-Belvidere and Delaware railroad bed.

The provisions of N.J.A.C. 7:45-10.4(d)6, which provide that projects located in any officially designated Federal, State or local historic district or site shall be assessed for their impact upon that district or site, are also inapplicable to the project, since a review of the site using the DEP State Historic Preservation Office "LUCY" cultural resource viewer does not indicate the presence of any historic district or Federal or State Historic Register listed property on the project site.

Staff Recommendation: Staff recommends approval.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Hutchison', with a stylized flourish at the end.

John Hutchison
Executive Director

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c. Hunterdon County Planning Board

Kingwood Township Planning Board

Robin Madden, Acting Director, DEP/Division of Parks and Forestry

William White, DEP/ORD

Jesse West-Rosenthal, Ph.D., Historic Preservation Specialist 2, DEP/SHPO