

DEPARTMENT OF ENVIRONMENTAL PROTECTION
(See Issuing Division below)**PERMIT***

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to the further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit.

Permit No. 1471		Application No.	
Issuance Date OCT 30 2014	Effective Date OCT 30 2014	Expiration Date OCT 30 2016	
Name and Address of Applicant NJDOT 1035 Parkway Ave., P.O. Box 600 Trenton, NJ 08625		Name and Address of Owner	Name and Address of Operator
Location of Activity/Facility (Street Address) Lot _____ Block _____		Issuing Division Natural and Historic Resources Engineering & Construction	Statute(s) NJSA-58:4-1 et seq.
Type of Permit Dam		Maximum Approved Capacity, if applicable	

This permit grants permission to:

rehabilitate and modify the existing structure known as Newton Lake Dam. The proposed work includes, but is not limited to, the following work: remove and replace the existing primary spillway, remove and replace the existing culvert slab and fish ladder and install steel sheeting along the embankment at Newton Lake Dam, located along the Newton Creek Main Branch within the Township of Haddon, Camden County, New Jersey. PROJECT IS SHOWN ON APPROVED DRAWINGS LISTED ON PAGES 6 AND 7 OF THIS PERMIT.

Prepared by:

Marcus Roorda

See page 7 for signature

Revised Date	Approved by the Department of Environmental Protection		
	Name (Print or Type) _____	Title _____	
	Signature _____	Date _____	

*The word permit means "approval, certification, registration, etc."

(General Conditions are on the Reverse Side)

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TERMS AND CONDITIONS

1. Application for approval of plans and permit was filed on March 7, 2014 and was accompanied by the following supplementary papers as part thereof:
 - A. Dam Construction Plan Sheets
 - B. Construction Specifications – Special Provisions
2. The action of the Bureau in approving this application and issuing the permit shall not relieve the party constructing the works hereby approved from the responsibility for damage caused by such works; nor does the Bureau accept responsibility for the structural design.
3. The work shall at all times be subject to supervision and inspection by representatives of the Bureau.
4. No changes in the plans and specifications as approved shall be made except with written consent of the Bureau. The Bureau however, reserves the right to require such changes or modifications in the plans and specifications as may be considered necessary in the interest of public safety.
5. A formal construction inspection program (program) shall be required for all permitted construction activities. A copy of the program description is to be submitted and approved by the Bureau prior to the commencement of construction. The program description shall contain detailed information including but not limited to the following items:
 - A. Organization chart of the construction inspection force.
 - B. Number and specialties of inspectors proposed. Information submitted with this item, or item above, should include the number of inspectors proposed for each feature of construction. Where full-time inspection is not proposed, the schedule for part-time inspection should be described.
 - C. Duties, responsibilities, necessary qualifications, and scope of authority of the inspection staff members. This information should be supplemented on a continuing basis by submittal of qualifications of the personnel actually employed.
 - D. Field tests to be performed and frequency of testing.
 - E. Field laboratory facilities to be provided.
 - F. Planned use of commercial testing services.

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- G. Planned use of consultants during construction.
- H. Schedule of construction, showing all major features of construction.
- I. Erosion Control and Other Environmental Measures.
- J. Inspection and monitoring of erosion control and other measures that are required for the protection of the environmental integrity of streams and other areas affected by construction.

The information provided should be in sufficient detail to enable the Bureau to assure that the proposed program provides adequate construction quality control. Some items, such as safety requirements and special construction techniques, including a water diversion plan; underground and surface excavation; and production and placement of reinforced concrete work may be included in the contract specifications. If not, these items, especially those that may involve the safety of personnel during construction, should be detailed in the inspection program.

- 6. All on-site construction activities shall be performed under the direct supervision of a professional engineer, licensed in the State of New Jersey and experienced in the design and construction of dams. The Bureau will not accept an inspection program that provides for quality control to be administered or performed by the contractor.
- 7. The professional engineer responsible for inspecting the construction shall submit a report on the status of construction with color photographs to the Bureau on the first day of each month until the work has been completed.
- 8. A construction notice on a prescribed form shall be prepared and submitted to the Bureau two weeks prior to construction beginning. No material shall be placed on any portion of the foundation of the embankment or spillway until such portion of the foundation has been approved in writing by a representative of the Bureau.
- 9. The work shall be started within one (1) year from the date of this permit and completed within two (2) years from said date, otherwise, this permit, if not previously revoked or specifically extended, shall cease and be null and void.
- 10. A copy of the dam permit and one set of drawings and specifications approved by the Bureau must be available at the project site during construction.

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11. All construction activities must be undertaken in accordance with N.J.A.C. 7:20-1.10 of the Dam Safety Standards entitled: "Construction."
12. All construction work on the lands encompassed within this dam permit shall be **STABILIZED** in accordance with "Standards for Soil Erosion and Sediment Control in New Jersey" (obtainable from local Soil Conservation District Offices), or equal engineering specifications, so as to prevent eroded soil therefrom entering the waterway at any time during and after construction.
13. This permit **DOES NOT GIVE ANY PROPERTY RIGHTS**, in either real or personal property or material, nor any exclusive privileges; neither does it authorize any injury to private property, nor invasion of private rights.
14. No trees or brush shall be allowed to grow on the dam structure and, the dam embankment, spillway and appurtenances shall be maintained as described on the approved drawings.
15. After the construction of the dam has been completed, inspection reports shall be submitted to the Bureau in accordance with N.J.A.C. 7:20-1.11 of the Dam Safety Standards entitled: "Dam operating requirements and inspections, new and existing dams."
16. No flashboards or other obstruction shall be placed or permitted to remain on the crest of the spillway.
17. A complete set of 'as-built' designs, plans and specifications must be submitted to the Section upon completion of the project.
18. The professional engineer who has inspected the construction shall submit a written certification on the prescribed form that the structure has been constructed in conformance with the approved drawings and specifications.
19. In order to protect the anadromous species spawning run in this area, a timing restriction from March 1st through June 30th is recommended for any in-water disturbance, sediment generating activities which may introduce sediment into the stream or induce sediment movement downstream.
20. For downstream passage at low flow, a separate stoplog weir, slide gate or pipe section might be added to the side wall of the exit channel and stoplog slot included to divert downstream flows from passing through the steep pass section.

21. To manipulate water levels of any lake or impoundment, a current and valid Water Lowering Permit must be obtained from the Bureau of Freshwater Fisheries (BFF) [see N.J.S.A. 23:5-29]; call: 908-236-2118 for an application and/or consultation; additional timing constraints, rates of lowering/refilling and fish/aquatic biota salvage requirements, if applicable, are found in this permit; preliminary consultation with the BFF is highly recommended to avoid delays or complications with a Water Lowering Permit.
22. A general timing restriction on mechanical trimming or removal of trees from 3/15 – 7/31 is recommended to protect nesting birds covered under the Migratory Bird Treaty Act. Non-mechanical tree trimming may be permitted once the tree is checked for nesting activity.
23. The contractor should instruct all employees and sub-contractors to avoid any animals and, if possible, move any animals to the closest suitable habitat outside the work zone and release unharmed.
24. Any and all precautions must be taken to prevent raw concrete from coming in contact with the waters of the State of New Jersey; raw concrete is toxic to aquatic biota.
25. County Soil Conservation District BMP's for prevention of sediment movement should be used at all times and maintained for function.
26. The proposed design is based on a reduction in the spillway design flood (SDF) from the SDF as required by the New Jersey Dam Safety Standards, N.J.A.C. 7:20-1.9(a) for a Significant Hazard (Class II) Dam. This reduction is permitted under the Standards (N.J.A.C 7:20-1.9(b)) based upon quantitative and relative impact analysis which shows that failure of the dam concurrent with the selected SDF would not result in additional damages beyond the damages which occur as a result of the flood without the failure of the dam. Dredging within the lakebed area and/or changes in land use downstream of the dam within the inundation area may render the reduction unacceptable in the future. Future formal dam safety inspections (required once every 10 years) must reevaluate the dam, lakebed and watershed areas with respect to this reduction to assure that the reduction is still warranted. If changes in the land use render the reduction unwarranted, it will be the responsibility of the dam owner to modify their dam to provide additional spillway capacity.
27. An Emergency Action Plan for the Newton Lake Dam must be prepared and submitted to the Bureau with 60 days of the issuance of this permit.

28. Prior to the construction of the new concrete spillway slab, the timber deck/piles, downstream cut-off and subgrade must all be evaluated by an engineer to ensure that they are suitable for construction. NJDOT must coordinate with the Bureau after the extent of the voids, if any, are determined and prior to filling with I-8 aggregate.
29. The drawings hereby approved are twenty-four (24) sheets prepared by Glen E. Schetelich, P.E., Hardesty & Hanover, LLC, West Trenton, NJ, undated and unrevised, except as noted, entitled:

“ROUTE 168 NEWTON LAKE DAM CONTRACT NO. 009013230”

“INDEX OF SHEETS”, sheet 1 of 131, dated October 2014,

“CONSTRUCTION PLAN”, sheet C2 of C3,

“SPILLWAY GENERAL PLAN AND SECTION”, sheet 93 of 131,

“SPILLWAY EXCAVATION LIMITS”, sheet 94 of 131,

“DEMOLITION PLAN”, sheet 96 of 131,

“STAKEOUT PLAN AND OGEE GEOMETRY”, sheet 97 of 131,

“SHEET PILE WALL LAYOUT PLAN”, sheet 98 of 131,

“SHEET PILE WALL ELEVATIONS”, sheet 99 of 131,

“SHEET PILE WALL DETAILS”, sheet 100 of 131,

“SPILLWAY PILE PLAN”, sheet 101 of 131,

“PILE DETAILS”, sheet 102 of 131,

“OGEE SPILLWAY DETAILS”, sheet 103 of 131,

“SPILLWAY SLAB DETAILS - 1”, sheet 104 of 131,

“SPILLWAY SLAB DETAILS - 2”, sheet 105 of 131,

“JOINT DETAILS”, sheet 106 of 131,

“LADDER WALL DETAILS”, sheet 107 of 131,

“GATE WALL DETAILS - 1”, sheet 108 of 131,

“GATE WALL DETAILS - 2”, sheet 109 of 131,

“GENERAL WALL DETAILS”, sheet 110 of 131,

“FISH LADDER PLAN & DETAILS”, sheet 112 of 131,

“FISH LADDER DETAIL - 1”, sheet 113 of 131,

“FISH LADDER DETAIL - 2”, sheet 114 of 131,

“FISH LADDER DETAIL - 3”, sheet 115 of 131,


“BAR LIST 1”, sheet 130 of 131,

and construction specifications – special provisions prepared by Glen E. Schetelich, P.E., Hardesty & Hanover, LLC, West Trenton, NJ, dated October 2014 and unrevised entitled:

“SPECIAL PROVISIONS FOR NEWTON LAKE DAM #31-74 ON ROUTE 168 BLACK HORSE PIKE OVER NEWTON CREEK IN THE TOWNSHIP OF HADDON, BOROUGH OF OAKLYN AND CITY OF CAMDEN, CAMDEN COUNTY, NEW JERSEY, OCTOBER 2014”.



John H. Moyle, P.E., Manager
Bureau of Dam Safety and Flood Control



Date