

060126-DEP1

STATE OF NEW JERSEY
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. 0000-03-0004.1-03001 WFD IP in-water, GP10B; 030002 WFD IP upland, GP 11; 030003 TAW Linear Development Application No.

Issuance Date **MAY 26 2003** Effective Date Same as issuance date Expiration Date **MAY 26 2008**

Name and Address of Applicant	Name and Address of Owner	Name and Address of Operator
NJ Department of Transportation Attn: Joseph Sweger 1035 Parkway Avenue P.O. Box 600 Trenton, NJ 08625-0600	Applicant	Applicant

Location of Activity/Facility (Street Address) Route 1 & 9 Cities of Rahway and Linden, Union County Woodbridge Twp., Middlesex County Waterway: Rahway River	Issuing Division Land Use Regulation Program	Statute(s) NJSA 13:9-1 NJSA 13:9B-1 NJSA 12:5-3 NJSA 13:9A-1
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Type of Permits: Waterfront Development and Freshwater Wetlands General Permits No. 10B and 11 Maximum Approved Capacity, if applicable

This permit grants authorization to: construct a new bridge over the Rahway River at a location approximately 300 feet east (downstream) of the existing Route 1 & 9 bridge to facilitate the mainline Route 1 & 9 roadway for north and southbound traffic. The existing 65-foot wide Route 1 & 9 bridge will be replaced with a narrow 40-foot wide structure to carry a one-lane southbound entrance ramp via the intersection of Lawrence Street and existing Route 1 & 9. The existing East Hazelwood Avenue ramp will be eliminated. A northbound entrance and exit ramp for Route 1 & 9 will be constructed to connect with the proposed Randolph Avenue extension. A southbound Route 1 & 9 access, south of the Rahway River, will be provided with the addition of a signalized left turn lane at a T-intersection of the Randolph Avenue extension and Route 1 & 9.

An 800-foot-long mechanically stabilized earth (MSE) wall five feet tall is proposed to support the bridge approach roadway to minimize impacts. A Water Quality Certification is provided as part of this authorization.

Issuance of this permit is in no way construed as a relinquishment by the State of New Jersey of any tidelands right, title or interest in the subject property or in any land surrounding it.

This permit is authorized under and in compliance with the applicable Rules on Coastal Zone Management (N.J.A.C. 7:7E-1.1 et seq.), and subsequent amendments up to January 1, 2003 (Town Centers), provided permit conditions contained herein are met.

The Permittee shall allow an authorized representative of the Department of Environmental Protection the right to inspect construction pursuant to N.J.A.C. 7:7-1.5(b)4.

In association with this authorization, the total amount of permanent impacts shall not exceed 0.212 acres and the total amount of temporary disturbance shall not exceed 0.009 acres of wetlands and State open waters. The total impact to intertidal and subtidal shallows shall not exceed 0.134 acres. Transition area impacts shall not exceed 0.099 acres in association with the road widening.

The plans hereby approved consist of the set of twenty-three (23) sheets of drawings entitled, "Plans of Route U.S. 1 & 9 Section 1K & 3M From the Vicinity of Production Way to the Vicinity of East Lincoln Avenue Environmental Permitting Plans" and the set of forty-five (45) sheets of drawings entitled, "Plans of Route U.S. 1 & 9 Section 1K & 3M From the Vicinity of Production Way to the Vicinity of East Lincoln Avenue Stream Encroachment Permit Application," prepared under the direction of Gregory Milakovic, N.J.P.E. for Gannet Fleming, Inc. and dated 1/31/03.

Environmental Permitting Plans

Sheet 1 is further identified as "Key,"
Sheets 2-3 are further identified as "Plan Sheet Index,"
Sheet 4 is further identified as "Legend and Abbreviations,"
Sheet 5 is further identified as "General Notes and Details,"
Sheets 6-18 are further identified as "Permitting Plans,"
Sheet 19 is further identified as "Route U.S. 1 & 9 General Plan and Elevations,"
Sheet 20 is further identified as "Route U.S. 1& 9 Northbound Profile,"
Sheet 21 is further identified as "Route U.S. 1& 9 Southbound Profile,"
Sheet 22 is further identified as "Ramp 'C' General Plan and Elevation,"
Sheet 23 is further identified as "Ramp 'C' Profile."

Stream Encroachment Permit Application

Sheet 1 is further identified as "Key,"
Sheet 2 is further identified as "Plan Sheet Index,"
Sheet 3 is further identified as "Legend and Abbreviations,"
Sheets 4-8 are further identified as "Plans,"
Sheets 9-10 are further identified as "Culvert Profiles,"
Sheets 11-12 are further identified as "Stream Profiles,"
Sheets 13-15 are further identified as "Roadway Profiles",
Sheet 16 is further identified as "Method of Cross Sections – Prison Run,"
Sheets 17-23 are further identified as "Stream Cross Sections."
Sheet 24 is further identified as "Method of Cross Sections – 20% Net Fill,"
Sheet 25-34 are further identified as "Cross Sections – 20% Net Fill,"
Sheets 35-39 are further identified as "Construction Details,"
Sheets 40-42 are further identified as "Bridge Plans,"
Sheets 43-45 are further identified as Drainage Plans."

Prepared by: _____
William Mc Laughlin, Project Manager

Revised Date	Approved by the Department of Environmental Protection
	Name (Print or Type): <u>Robert N. Cubberley</u> Title <u>Environmental Scientist 2</u>
	Signature <u>SEE FINAL PAGE</u> Date _____

*The word permit means "approval, certification, registration, etc." (General Conditions are on Page Two)

Coastal Permit General Conditions

This permit is revocable, or subject to modification or change at any time, pursuant to the applicable regulations, when in the judgment of the Department of Environmental Protection of the State of New Jersey such revocation, modification or change shall be necessary.

The issuance of the permit shall not be deemed to affect in any way action by the Department of Environmental Protection of the State of New Jersey on any future application.

The works, facilities, and/or activities shown by plans and/or other engineering data, which are this day approved, subject to the conditions herewith established, shall be constructed and/or executed in conformity with such plans and/or engineering data and the said conditions.

4. No change in plans or specifications shall be made except with the prior written permission of the Department of Environmental Protection of the State of New Jersey.
5. The granting of this permit shall not be construed to, in any way, affect the title or ownership of property, and shall not make the Department of Environmental Protection or the State a party in any suit or question of ownership.
6. This permit does not waive the obtaining of Federal or other State or local government consent when necessary. This permit is not valid and no work shall be undertaken until such time as all other required approvals and permits have been obtained.
7. A copy of this permit shall be kept at the work site, and shall be exhibited upon request of any person.
8. In cases of conflict, the conditions of this permit shall supersede the plans and/or engineering data.

ADMINISTRATIVE CONDITIONS

Prior to initiation of site preparation for the following conditions:

1. This permit shall be RECORDED in the office of the County Clerk (the REGISTRAR OF DEEDS AND MORTGAGES in the applicable counties) in the county wherein the lands included in the permit are located within (10) days after receipt of the permit by the applicant and verified notice shall be forwarded to the Land use Regulation program immediately thereafter.
2. This permit is NOT VALID until the permit acceptance form has been signed by the applicant, accepting and agreeing to adhere to all permit conditions, and returned to the Land Use Regulation Program at P.O. Box 439, Trenton, NJ 08625.
3. PRIOR TO ANY CONSTRUCTION ACTIVITIES, the Permittee must obtain a Department of the Army authorization. You are advised to contact the New York District at (215) 656-6728.

4. ~~PRIOR TO ANY CONSTRUCTION ACTIVITIES~~, the Permittee must obtain approval for the project from the U.S. Coast Guard or FHWA for work temporarily affecting the navigation channel.

5. This permit does not authorize the temporary use of any wetlands or transition areas beyond the limits of the proposed work for the storage or staging of construction materials (including debris, spoil piles), equipment, and workers vehicles. The applicant shall direct the contractors to locate all staging and storage areas outside of wetlands and wetland buffers. Any creosote treated timbers shall be specially handled to protect wetlands or transition areas during removal for proper disposal.

6. In order to avoid degradation of the water quality in the streams receiving stormwater runoff from the roadway, the stormwater management system shall require periodic inspections and maintenance. The Permittee is advised to conduct additional inspections, and maintenance of inlets as necessary following major storm events.

7. The project must meet Soil Erosion and Sediment Control Standards and be approved by the Soil Conservation District. The applicant shall be responsible for daily inspections of the project area to determine if the erosion control measures are functioning as intended.

8. Any acid soils encountered must be stockpiled separately from non-acid soils as excavation proceeds. Acid soils, if present must be handled in accordance with the NJDEP Stream Encroachment Technical Manual, Section 3.6, and the requirements of the local National Resource Conservation District.

9. Construction vehicle traffic shall be minimized in wetlands and wetlands transition areas to be temporarily disturbed. No storage of chemicals, oil, fuel or refueling of equipment shall occur within 100 feet of the wetlands along the project route.

10. Prior to construction below mean high water, the application for a tidelands conveyance must be completed for file application 02-0487-T.

11. The following is required for compliance with Historic and Archaeological Resources (N.J.A.C. 7:7E-3.36).

a) **Recordation** The NJDOT shall record the Route 1 Bridge over the Rahway River consistent with Historic American Engineering Record (HAER) Standards. The focus of the recordation will include an understanding of the historic relationship(s) among Route 1, the physical setting, any navigation on the Rahway River, and the architecture, engineering, and construction of the bridge. A goal of the recordation should be an understanding of why the historic structure was built using the chosen structural and architectural elements, how the bridge compares to other contemporary state highway bridges over New Jersey inland waterways, how the physical setting and anticipated highway (and if appropriate navigational) needs influenced the technology, structural type, and engineering and architectural design.

employed, and the character defining features of both the sub- and superstructures. Resources to be used in this effort should include historic engineering literature (for example Engineering News-Record, Civil Engineering [American Society of Civil Engineers], and United States Army Corps of Engineers Reports regarding navigation on the Rahway River), and original State Highway Commission documents and reports.

As part of this recordation, NJDOT, in consultation with the SHPO, shall solicit from the public and obtain from other accessible sources printed, graphic, and photographic information regarding the Route 1 Bridge and any previous bridges at this specific location. The compiled information will be evaluated and (as deemed appropriate during consultation) archivally duplicated as part of the recordation document. NJDOT will also, in accordance with archival standards and in consultation with the SHPO, photo-duplicate selected contract plans for the Route 1 Bridge, as well as review, catalog, and archivally duplicate historic photographs and other documents in the NJDOT files related to the Route 1 Bridge over the Rahway River and the segment of Route 1 within the immediate project area.

The SHPO shall receive a draft copy of the recordation document for review and comment. Completion of the recordation will occur within two (2) months of letting the construction contract and prior to the initiation of any demolition or construction activity. The format, quality, and specific content of the written and photographic documentation shall be determined through consultation among FHWA, NJDOT, and the SHPO. An archival copy of the complete recordation document will be provided to the SHPO, Rutgers University Special Collections Library, and the _____ [[insert appropriate local repository or repositories]].

b) Design Treatments NJDOT, during consultation with the SHPO and consistent with Context Sensitive Design principles, shall determine the historically appropriate and compatible design for the Route 1 Bridge over Rahway River replacement structure based upon:

- 1) **Design Documentation** - the accumulation of information about the original design and construction and the historic appearance of the Route 1 Bridge over the Rahway River. Resources to be used in this effort will include the HAER recordation documentation compiled as a result of Stipulation 1, historic photographs and as-built plans, and any relevant historic engineering literature (for example Engineering News-Record, Civil Engineering [American Society of Civil Engineers], etc.). The design documentation will describe and/or illustrate the engineering and architectural design and character of the historic structure.

- 2) Design Recommendations - In order to construct a historically appropriate and compatible replacement structure, consultation regarding design recommendations will consider the following elements:
- a) the original design, character, and appearance of the bridge (as compared to the features which remain) including the form, design, and material used in the original light fixtures,
 - b) the design parameters for the replacement structure (including the relationship of structural and roadway design parameters to bridge design treatments),
 - c) how original character defining features of the historic bridge could be visually replicated or evoked using modern structures, materials, and technologies.
- 3) Design Treatments - considering the information examined under Design Recommendations, prepare design treatments for a replacement structure that physically and visually conveys the character of the historic bridge. This will include, but not be limited to, consideration of the mass and form of the replacement structure, the sub- and superstructure materials, form, configuration, tint, texture, and/or color, and the design of the parapets, railings, lighting, and landscape (as appropriate). The proposed light standards shall duplicate, as closely as possible, those originally in the project Area of Potential Effects (APE). Should the light standards be damaged in the future they will be replaced in kind by NJDOT. Temporary substitute light standards will be utilized until the manufacturer can supply the needed replacement should there be a safety concern or a lengthy delay in procuring the replacement. NJDOT shall also replace the balustrades using a design that mimics the original design while meeting current safety standards.
- c) **Historic Signage** NJDOT, in consultation with the SHPO, shall develop and install interpretive signage that describes and illustrates the architectural character defining features of the historic bridge and the historic relationship(s) among Route 1, the physical environment of the Rahway River, and the engineering and construction of the historic bridge (how the physical setting and anticipated highway and navigational needs influenced the technology, structural type, and engineering and architectural design employed). The format, content, number, and placement of signs shall be developed in consultation with all consulting parties and be responsive to the quantity and quality of the available information.
- d) **Project Plan Review** NJDOT shall submit the design recommendations to the FHWA and SHPO for their information and review prior to convening one or more meetings, as needed, to consult on the final design treatments. The SHPO shall have an opportunity to review and comment on final plans (and specifications as relevant) prior to seeking federal authorization to advertise the project.

TURBIDITY AND SEDIMENTATION CONDITIONS

12. PRIOR TO COMMENCEMENT OF DEMOLITION OF ANY PORTION OF THE EXISTING BRIDGE AND ITS SUPPORT STRUCTURE INCLUDING THE PIERS, the Permittee is required to provide the following: (1) a shield to prevent falling material from entering the water during removal of the superstructure; (2) pier and pile removal shall be done in a manner that minimizes disturbance of the stream bottom; (3) A turbidity barrier/silt curtain will be placed around all work areas. The barrier shall not restrict the flow of the Rahway River by more than 50% of its cross-section. (4) Coordination with NJDEP (Bill Figley 609-748-2020) to determine what, if any, construction debris may be appropriate for disposal at sea as part of NJDEP's Artificial Reef program.
13. Unless directed otherwise by the NJDEP Bureau of Hazardous Site Remediation, dewatering of pier and abutment construction areas shall use filter bags to trap sediments in addition to the use of land-based temporary dewatering basins that are sized appropriately to provide retention of water for a duration sufficient to ensure settling of suspended particulates prior to return discharge. The return water will be discharged to an area of the stream that is encompassed by turbidity barrier as an additional precaution.
4. Heavy-duty silt fence with wire backing shall be used to encompass work activities on land and shallow water areas. Deep water areas of construction shall be encompassed by floating turbidity barrier.
5. The amount of riprap or other energy dissipating material used shall be the minimum necessary to prevent erosion, and shall not exceed 200 cubic yards of fill below the top of bank or high water mark, unless a larger amount is required in order to comply with the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90.
16. The amount of riprap or other energy dissipating material placed shall be the minimum necessary to prevent erosion, and shall not exceed 10 cubic yards of fill per outfall, unless a larger amount is required in order to comply with the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90.


PHYSICAL CONDITIONS

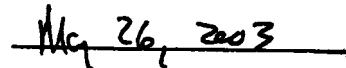
17. In association with this authorization, the total amount of permanent impacts shall not exceed 0.212 acres of wetlands and State open waters and the total amount of temporary disturbance shall not exceed 0.009 acres of wetlands. The total impact to intertidal and subtidal shallows shall not exceed 0.134 acres. Transition area impacts shall not exceed 0.003 acres in association with the stream crossing activities and 0.099 acres for Route 1 & 9 southbound acceleration lane widening.

18. Temporarily disturbed areas must be restored through grading and landscaping as necessary to include:
 - (a) The area of temporary disturbance to transition areas must be replanted with native, indigenous species. The areas should be planted with native trees that are known to grow to sufficient height to provide partial shade for open water areas in the vicinity. This replanting shall be performed immediately after activities that temporarily disturb the environment are completed.
 - (b) All temporarily disturbed areas shall include plantings with a mixture of warm and cool seasonal grasses containing at least 20% warm season grasses. The use of one of these mixtures will permanently stabilize the soil and enhance the environment.
 - (c) Water quality swales must be vegetated using species appropriate to variable conditions of saturation and inundation and include at least 20% warm season grasses.
19. The stream bank must be restored with native vegetation and stabilized with the use of bioengineering materials, such as biologs, fiber matting, etc., except where riprap is required.
20. In order to protect the anadromous fish run during migration and spawning down stream within the Rahway River, any proposed grading or construction activities within the banks of this or any other stream on site are prohibited between **April 1 and June 30** of each year. In addition, any activity within the 100-year flood plain or flood hazard area of this watercourse, which could introduce sediment into said streams or which could cause an increase in the natural level of turbidity, is also prohibited during this period. The Department reserves the right to suspend all regulated activities on site should it be determined that the applicant has not taken proper precautions to ensure continuous compliance with this condition.
21. All excavated materials must be disposed of at an approved site. Under no circumstances is excess material to be disposed of in wetlands, transition areas to wetlands, stream corridors, or other environmentally sensitive areas.
22. The Permittee shall maintain all soil erosion and turbidity controls for the life of the project and these controls shall be put in place prior to any construction activities. The silt fence with wire backing shall be placed at the limits of land disturbances.
23. The Permittee shall monitor for suspended sediments in the water column on a daily basis when construction/demolition is taking place. If a large sediment plume is detected, then the project must cease until more appropriate preventative measures are put in place.
24. Raw uncured concrete is toxic to fish and other aquatic organisms, therefore raw uncured concrete must not come in contact with the waters of the Rahway River.

25. Areas where existing piers are to be removed from within the Rahway River must be backfilled with native substrate from areas of excavation to mimic contiguous natural stream bottom contours.
26. The upper-most 18-inches of any temporary excavation is backfilled with the original soil material if feasible, and otherwise with clean suitable material free from toxic pollutants (see 40 CFR 401) in toxic amounts, and shall comply with all applicable Department rules and specifications regarding use of dredged or fill material.
- a) Excavations must be backfilled to the preexisting elevation.
 - b) The area above the excavation must be replanted with native, indigenous species.
 - c) The activity is designed so as not to interfere with the natural hydraulic characteristics of the wetland and watershed.

With adherence to the above permit conditions, this project is considered to be consistent with the Coastal Zone Management Rules (N.J.A.C. 7:7E 1.1 et seq.).


Robert N. Cubberley, Environmental Scientist 2
Land Use Regulation Program


Date

- C: Ken Sass, Bureau of Tidelands
Bureau of Enforcement
Section Chief, Middlesex County
City of Rahway Municipal Clerk
City of Rahway Planning Board
City of Linden Municipal Clerk
City of Linden Planning Board
Woodbridge Township Municipal Clerk
Woodbridge Township Planning Board
Union County Planning Board
Middlesex County Planning Board