

DEPARTMENT GRADE SALARY DATE OF  
RANGE ORIGINAL  
LISTING

**ENGINEERING 17A \$75,760 11/27/2017  
\$94,760**

**POSITION DESCRIPTION**

Position Summary: The Principal Hydraulic Engineer I formulates and administers overall County flood control, stormwater management, and drainage designs, programs, and standards in order to prevent loss of life and to improve, correct, and/or prevent flood and erosion damage to County roads, bridges, and property while promoting orderly land development and County growth.

Responsibilities: Incumbent supervises, trains, and develops personnel to assure efficient operation of the Hydraulic Section in accordance with Division and County policy; writes letters and reports on storm-water drainage projects to advise and communicate with various agencies. Incumbent reviews plans and specifications for conformance to County, State, and/or Federal standards; develops repair details and calculations for emergency repairs of deteriorated infrastructure. Incumbent prepares for and attends meetings to explain status of projects and solicit comments. Incumbent performs field inspection of storm drainage facilities to ascertain their integrity and capacity. Incumbent communicates overall section functioning and needs to the Assistant County Engineer on a regular basis in order to maintain optimal performance of the Hydraulic section. Incumbent troubleshoots issues and potential controversies as they arise in order to assure smooth operations. Incumbent directs employees to enable them to function as effectively as possible; coordinates activities of employees and the training of same; evaluates employee performance and recommends promotions. Incumbent prepares and approves reports, cost estimates, specifications, and plans for storm-water design and construction projects; prepares detailed reports with regard to activities and general information for distribution to Assistant County Engineer and Director of Public Works. Schedules and coordinates projects with other sections of the Engineering Division, contractors, and employees. Incumbent prepares and supervises preparation of specifications and contract documents to ensure compliance with the Local Public Contracts Law. Incumbent performs other duties as assigned by the Director of Public Works.

**Principal Engineer I - Hydraulics**

*Requirements: Bachelor of Science in civil engineering (BSCE) degree from an accredited college and a Professional*

*Engineer's License issued by the New Jersey State Board of Professional Engineers and Land Surveyors. Five years of supervisory engineering experience in the design, maintenance, and construction of projects, including the preparation and review of construction plans and specifications or an equivalent combination of education and experience. Ten years of experience in design, inspection, and construction of storm-water drainage facilities. Knowledge of State DOT and FHWA specifications. In order to effectively interact with the concerns of local citizens, municipal officials, various State and Federal agencies, the media, and conduct public hearings on proposed bridge projects, the incumbent must possess excellent oral and written communications skills, with special emphasis on conveying complex technical issues to a nontechnical audience. Knowledge of hydraulics, hydrology, cost estimating, construction financing, NJDEP regulations, laws, and permits, and meteorology. Possession of a valid New Jersey Professional Engineer's license.*

*Preferred: A thorough knowledge of County policy and procedures. Knowledge of bridge and hydraulic design, permit requirements, historic preservation. Experience obtained by working several years on multi-discipline projects. Knowledge of computer operations and applications.*