

Conservation District Engineer

JOB SUMMARY: The purpose of this position is to provide engineering services, including planning, design, construction oversight and staff training to help land managers install conservation practices to decrease non-point sources of water quality impairment, primarily nutrients and sediment. This position is funded by the PA DEP Chesapeake Bay Program.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- ✓ The engineer is responsible to provide direct technical assistance for installation of conservation practices in support of local water quality action plans. The engineer will assist in the planning, design, and installation of nutrient management facilities and erosion and sedimentation control measures.
- ✓ The engineer will provide training to conservation district staff, agency representatives, and others in the management of nutrients and the control of erosion and sedimentation.
- ✓ The engineer will develop and/or review engineering inventory and evaluation reports and complex erosion and sedimentation control plans at the request of the conservation district or the Bureau of Water Quality Protection (State Conservation Commission). Efforts will be made to avoid duplication of effort with other existing services.
- ✓ The engineer will develop and review designs for installation of conservation practices that meet PA Technical Guide standards and specifications.
- ✓ The engineer will investigate and seek compliance in proper nutrient management and erosion and sedimentation control cases at the request of the conservation district or the Bureau of Water Quality Protection (State Conservation Commission).
- ✓ The engineer will assist the Department of Environmental Protection as requested in enforcement actions against violators of the Erosion and Sedimentation Control regulations (Chapter 102 of the Clean Streams Law).
- ✓ The engineer will complete and review road culvert designs in cooperation with local municipalities and PA DOT as necessary.
- ✓ The engineer will perform additional related duties as determined by the sponsoring county conservation district manager and by the State Conservation Commission.

WORKING CONDITONS:

A mixture of office and field work is required as part of this position. Occasional overnight travel is also required. In carrying out the assigned duties, the engineer will work closely with the appropriate state and federal agencies involved in Chesapeake Bay improvement efforts. Engineering guidance and/or review and approval of plans and designs will be obtained from the agency having technical responsibility for that type of work.

PHYSICAL and MENTAL REQUIREMENTS:

Capable of entering construction sites and/or rugged and remote terrain areas during various weather conditions for visual site assessment and evaluation effort.

REQUIRED KNOWLEDGE, SKILLS, and ABILITIES:

Knowledge of agricultural engineering techniques. Extensive knowledge of equipment and techniques for site survey. Extensive knowledge of engineering design calculations. Extensive knowledge of Autodesk AutoCAD Civil 3D software. Excellent communication skills to work with farmers, landowners, planners, inspectors, and contractors. Ability to teach and train others to do a practical level of engineering survey and design.

MINIMUM EXPERIENCE and TRAINING:

B.S. Degree in Engineering with an emphasis on agriculture engineering, or a related engineering curriculum awarded by an accredited college or university. Autodesk AutoCAD Civil 3D software experience. A Pennsylvania Professional Engineer license is preferred but not necessarily required. Agricultural engineering experience preferred.