

## **Genesee Conservation District**

### **Position Announcement: Engineer – Conservation Technical Assistance Initiative (CTAI)**

#### **Position Overview**

The work involves the planning, design, and installation of conservation engineering practices to a variety of natural resource management and conventional agricultural resource concerns. The position will provide engineering services by conducting field investigations, topographic and stakeout surveys, preparing engineering designs and drawings, preparing construction cost estimates, and providing oversight of the installation of engineering structures and practices in several counties. Examples of the types of designs and implementation projects include: agricultural practices such as agrichemical handling facilities, livestock watering facilities, grade stabilization structures, grassed waterways, water and sedimentation control basins and wetland restoration projects. The engineer will work for Genesee Conservation District, under the technical guidance of the United States Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS).

#### **Essential Job Duties**

- Work within deadlines and manage conflicting demands while successfully operating in an ever-changing work environment with minimal direction from supervisor
- Maintain knowledge of and apply the best management practices as detailed by NRCS
- Conduct and/or coordinate construction inspections to ensure project specifications are met in accordance with construction drawings and structural and regulatory standards
- Conduct site visits and perform field assessments and surveys for water quality protection and enhancement projects, fish and wildlife habitat enhancement projects, drainage management projects, and structural projects such as livestock waste storage facilities, sub-surface drains, livestock crossings, and clean water diversions and dispersions
- Prepare engineering designs and drawings in accordance with NRCS policies and procedures
- Conduct topographic and stakeout surveys as assigned in accordance with NRCS policies and procedures
- Prepare construction cost estimates and documentation of as-builts by computing earthwork, concrete, and other material volumes
- Provide construction oversight of the construction and installation of engineering practices
- Accurately complete and submit required reporting to Genesee Conservation District, its partners, and funding agencies
- Utilize guidelines in the performance of all work. These guidelines include United States Department of Agriculture, Natural Resource Conservation Service (NRCS) policy and procedure as outlined in Bulletins, National Engineering Manual and Handbooks, Engineering Field Handbook, Technical Releases, Technical Guide, Michigan Department of Transportation (MDOT) and ASTM Specifications, and various manufacturer catalogs and specifications.

## **Qualifications**

- The position requires completion of a Bachelor of Science in Civil, Environmental, or Agricultural Engineering
- Demonstrated knowledge of the Fundamentals of Engineering practices and principles; successful completion of the Fundamentals of Engineering exam is desired, but not required
- Ability to work effectively with co-workers and the general public
- Possess and maintain a valid Michigan State drivers' license
- Knowledge of or interest in a basic understanding of agricultural land use practices, common rural and urban land use practices, and the resource management issues and challenges facing the region
- Use of computers to prepare and record field and technical data, track work products, and write reports
- Use of computer programs such as AutoCAD, Arc GIS, and Microsoft Office Suite

## **Desired Knowledge and Skills**

- Experience designing and preparing site maps and plans with AutoCAD
- Experience using and managing GIS software and databases
- Experience using GPS and post-processing software
- Knowledge or understanding of a broad range of soil and water conservation principles, techniques, methods, and practices to apply and install conservation systems, which involve complex and diverse agricultural and other land uses
- Knowledgeable of land survey practices and have experience interpreting maps and aerial photography
- Knowledge or understanding of green stormwater infrastructure or low impact development stormwater management principles and design concepts
- Knowledge of local, state, and federal environmental regulatory programs and applying that knowledge to the design and permitting of water management, steep slope management, shorelines management, forest health management
- Knowledge and skill in written and oral communication techniques and public relations sufficient to explain technical engineering specifications for various projects and programs to individual landowners, various agencies, local sponsoring organizations, and other conservation partners

## **Work Environment**

Work requires personal contact with co-workers, construction contractors, and landowners for the purpose of exchanging information, providing engineering consultative services, and obtaining experience in relating engineering practices to conservation programs.

Approximately half of the work is normally performed in an office setting while seated at a desk. The normal work hours are 8 a.m. to 4:30 p.m. The employee frequently will make field visits that may involve walking on rough terrain, carrying equipment, or climbing steep banks during all weather conditions. The position requires average agility and dexterity during field visits. Protective clothing such as boots and gloves may be necessary during field visits.

## **Compensation**

The position is a full-time, 40 hours/week position. The position is grant-funded, renewed annually. Benefits include a small benefit stipend, paid holidays, and paid time off according to District policies.

**To Apply**

Submit a cover letter stating your suitability for the position based on knowledge and skills, along with a resume, and list of references to Angela Warren by email at [geneseecd@yahoo.com](mailto:geneseecd@yahoo.com). This posting will remain open until filled.

Genesee Conservation District is an equal opportunity employer and provider