

RED RIVER VALLEY CONSERVATION SERVICE AREA ENGINEERING TECHNICIAN

The Red River Valley Conservation Service Area (RRVCSA) provides engineering assistance to 16 Soil and Water Conservation Districts (SWCDs) in or near the Red River Valley of Minnesota. The Engineering Technician provides assistance to the following core SWCDs: Kittson, Marshall County, Pennington, West Polk, Red Lake County, and Roseau. Occasionally assistance may be provided to the following non-core SWCDs on a contract for services basis: Becker, Clay, East Otter Tail, Grant, Mahnomon, Norman County, East Polk, Traverse, West Otter Tail and Wilkin. Administrative offices are located at the Becker SWCD.

The implementation of best management practices that improve, enhance, conserve and protect water and soil resources is the main function of this position. A variety of support through all phases of project implementation will be provided. The following practices are commonly surveyed, designed and constructed: Grade Stabilization Structures, Grassed Waterways, Streambank and Shoreline Protection, Stream Channel Stabilization, Waste Management Systems and Water & Sediment Control Basins.

Basic Qualification Requirements

Candidates must have a two year vocational engineer certification or equivalent post-secondary education, must be proficient in the use of survey and drafting equipment, and able to use programmable calculators and computers, and must possess a valid state issued driver's license. A minimum of 5 years of field experience in soil conservation engineering and design is required for this position. A minimum of two years' experience using ArcGIS, AutoCAD and related design software is also required. Applicable experience in soil conservation engineering and design may be substituted for basic qualification requirements.

The essential job duties for this position are regular and timely work attendance, ability to establish and maintain working relationships with co-workers, agencies, and clients; ability to work under stressful conditions, and items under "Duties and Responsibilities" listed below.

Physical Requirements

The assigned work requires occasional recurring prolonged walking, bending, lifting, and stretching on varying landscapes during all types of weather.

PRINCIPAL RESPONSIBILITIES AND TASKS

- 1. Provide project engineering support**
 - a. Investigate project sites, evaluate feasibility, and prepare preliminary design and cost estimates.
 - b. Conduct topographic surveys and data collection needed for feasibility, design and installation.
 - c. Prepare design calculations, develop plan drawings and construction specifications.
 - d. Analyze technical problems and formulate effective solutions at a para-professional level.
 - e. Provide construction inspection and management assistance to landowners and SWCD staff.
 - f. Prepare post-construction documentation.
 - g. Supervise field staff when given project responsibly.
- 2. Cooperate effectively with SWCD staff and other agencies**
 - a. Develop full project timelines and schedule with SWCDs.
 - b. Attend RRVCSA board meetings and submit reports as necessary.
 - c. Documents current engineering projects, prepares monthly progress report and submit to SWCDs.
 - d. Provide training on the survey, design and installation of conservation practices.

- e. Ability to know when and how to find additional expertise needed to solve problems.
- f. Assist with educational activities, demonstrations, workshops, tours, newsletter articles, and press releases.
- g. Fully understand Federal, State and other financial assistance programs in an effort to describe these programs.

3. Office and Equipment Management

- a. Survey equipment shall be inventoried and kept in good working condition and operation.
- b. Vehicles shall be maintained in good working condition, have regular maintenance performed and cleaned.
- c. Make recommendations for office and field equipment updates and/or repairs to the RRVCSA Board.
- d. Maintain a current and accurate library of pertinent technical references
- e. Organize and maintain office files and reference materials to retain and have available upon request.

4. Professional Development

- a. Acquire and maintain the appropriate Ecological and Engineering Job Approval Authority (JAA) through NRCS for the installation of conservation practices listed above at a minimum.
- b. Attend workshops and training sessions to improve overall capabilities
- c. Meet as needed with NRCS, SWCD and other TSA technicians to exchange information and ideas.

5. Other Requirements

- a. Knowledge of computers. Proficient in the use of MS Office products such as Word, Excel, Outlook, etc.
- b. Proficient use of AutoCAD, associated design software, ArcGIS and GPS (Trimble) equipment and operation.
- c. Knowledge of surveying operations and procedures, such as: survey grade GPS, total station and laser level.
- d. Must possess and maintain a valid driver's license and successfully pass a criminal background check.
- e. The physical capability to carry equipment over rough terrain, perform work during all seasons of the year and capable of lifting over 50 lbs.

SUPERVISION

The RRVCSA Engineering Technician is supervised by and reports directly to the District Manager of the position's office location.