

PART 505 - NON-NRCS ENGINEERING SERVICES

SUBPART B – USE OF NON-NRCS ENGINEERING SERVICES

§ WI 505.10 Non-project Activities

- (a) Non-NRCS Engineering Services (Non-Technical Service Provider)
 - (1) Non-NRCS engineering services may be used to provide site-specific assistance in the planning, design, or construction inspection of conservation practices in NRCS programs. It applies to all programs except WF-08 and RC&D-11 projects. Each practice standard contained in the Field Office Technical Guide is followed by a “Statement of Work” which provides guidance for the documentation required in the design, installation, and checkout of the practice. Procedures stated below will apply for engineers registered in Wisconsin and for Technical Service Providers (TSP) retained by a landowner when no TSP payments are included in the program contract.
 - a. NRCS staff with appropriate job approval or NRCS certified individuals will perform any required program, feasibility, or eligibility determinations.
 - b. A pre-planning or pre-design conference with NRCS staff and the registered professional engineer shall be conducted for all jobs to avoid misunderstanding and promote efficiencies. Other meetings during design may be desirable based on complexities of the job.
 - c. The registered professional engineer provides for the necessary foundation investigations and laboratory testing of soils for planning and design of the project.
 - d. A copy of all computations necessary for the job will be provided to NRCS for acceptance before construction begins. The computations will include design loadings, design assumptions, storm frequencies and runoff data, structure capacities, flow rates, and references used. These will be retained for documentation purposes.
 - e. The registered professional engineer submits a signed statement indicating specifically what standards in the Field Office Technical Guide have been met for each job similar to the following: "To the best of my professional knowledge, judgment, and belief, this design and these construction plans meet NRCS standards (list standard numbers and titles)."
 - f. The registered professional engineer signs and seals the planning documents, design computations, construction drawings and specifications.
 - g. One copy of a reproducible set of construction drawings and specifications will be provided to NRCS. Other copies shall be

PART 505 - NON-NRCS ENGINEERING SERVICES

reproduced for the landowner, contractor, and other agencies as needed.

- h. The registered professional engineer will prepare a construction inspection plan stating the items requiring inspection, documentation requirements, and the qualifications of the personnel performing the inspections.
 - i. The registered professional engineer will prepare an operation and maintenance plan.
 - j. After the planning details, design, construction plans, specifications, inspection plan, and operation and maintenance plan have been received, a functional review will be performed by a person with appropriate job approval authority.
 - k. A registered professional engineer shall provide practice construction documents to include an as-built plan, all supporting documentation detailed in the construction inspection plan, and a job diary providing a chronological record of work performed will be submitted to NRCS. A signed statement similar to the following: "To the best of my professional knowledge, judgment, and belief, this practice is installed in accordance with the construction plans and specifications and meets NRCS standards (list standard numbers and titles)" shall also be submitted. These will be retained for documentation purposes.
 - l. NRCS staff will make a field visit to the site as needed to verify completion. An individual with appropriate job approval will accept completion of the project.
- (2) Changes approved by the registered professional engineer during construction that alter the design or structural aspects of components will be accepted by NRCS prior to implementation of the changes. Modifications such as location or extent of a component (such as length of a concrete wall) that do not alter compliance with standards need not be accepted by NRCS.
 - (3) A sample letter to landowners using registered professional engineers for engineering services is included in Subpart E, WI 505.43, Exhibit 1.
- (b) Non-NRCS Engineering Services (Technical Service Providers)
 - (1) A landowner may hire a Technical Service Provider (TSP) to perform planning, design, or construction inspection of conservation practices. A TSP is certified by NRCS and listed on the Technical Service Provider Registry (Tech Reg). The policy in this section applies when a TSP has been retained by the landowner and funds for TSP payments have been included in the program contract. Procedures in WI 505(a) will be used when a TSP is retained by the landowner but no TSP payments are included in the program contract.

PART 505 - NON-NRCS ENGINEERING SERVICES

- (2) NRCS staff will not perform a functional review of planning details, design computations, specifications, or construction plans prior to practice installation.
 - (3) NRCS staff may provide guidance on practice standard criteria if requested by the TSP.
 - (4) Each practice standard contained in the Field Office Technical Guide is followed by a "Statement of Work" which provides guidance for the documentation required in the design, installation, and checkout of the practice. The TSP is to provide the required documentation for the services provided to the landowner and the NRCS District Conservationist.
 - (5) Review of work performed by a TSP will be performed to the extent stated in the Wisconsin NRCS Quality Assurance Plan.
 - (6) A sample letter to landowners using a TSP is included in Subpart E, WI 505.43, Exhibit 2.
- (c) Technical Services Provided by Conservation Contractors
- (1) Technical services provided by non-NRCS sources are encouraged. Individuals other than partnership employees, such as conservation contractors, may become involved in the design, layout, or construction checking of conservation practices. Partnership employees are defined as NRCS, LCD, and WDATCP employees who are working under the NRCS delegated Engineering Approval Authority or the NRCS and WDATCP jointly delegated Engineering Approval Authority, Agricultural Engineering Practitioner Certification (Joint Certification).
 - a. Technical services may be accepted from conservation contractors for design and for use as supporting documentation to certify that a practice meets NRCS standards and specifications. However, these technical services must be reviewed and approved by an employee with appropriate Job Approval Authority or Joint Certification before the practice is certified complete.
 - b. Technical services that can be accepted from conservation contractors include:
 - (1) Design surveys
 - (2) Design
 - (3) Construction layout
 - (4) Construction checkout
 - c. Documentation of technical services can be in any form chosen by the conservation contractor, as long as it provides the minimum documentation required by NRCS to certify that the practice meets NRCS standards and specifications. Contractors may use their own forms or standard forms and drawings provided by NRCS. As-built information can be documented in red ink on the construction drawings or provided on individual job sheets. NRCS Service Center Staff will provide guidance on the minimum documentation required for each practice and technical

PART 505 - NON-NRCS ENGINEERING SERVICES

service.

- d. Technical services addressed herein do not include any items of work which are part of the conservation planning process.
 - e. A sample letter to landowners using a conservation contractor to provide technical services is included in Subpart E, WI 505.43, Exhibit 3.
- (2) Review and approval procedure for technical services provided by conservation contractors:
- a. NRCS is technically responsible for all practices. This includes certifying to all cost-sharing agencies that construction has been completed according to NRCS standards and specifications.
 - b. Conservation contractors are strongly encouraged, but not required, to attend any formal, organized training prior to NRCS accepting their technical services as documentation. However, the conservation contractor must attain an acceptable level of competency before their technical services will be accepted by NRCS.
 - c. The minimum requirements provided in paragraph 3 below will establish the acceptable level of competency for technical services provided by conservation contractors. The District Conservationist will make the determination that the quality of technical services provided meets the established level of competency with concurrence by an NRCS Engineer.
 - d. Technical services submitted by conservation contractors must be checked and approved by an employee with Job Approval Authority or Joint Certification.
- (3) Minimum requirements for conservation contractors to demonstrate competency for the delivery of technical services are as follows:
- a. DESIGN SURVEYS
Design surveys will consist of profiles and cross sections and/or topographic surveys, and other information necessary to adequately describe a site. Survey information will be adequate to define the extent of the proposed practice's cross section and profile, drainage areas, percent slopes, downstream stability and capacity, property line and utility locations, locations of public works, and locations of all homes and other structures which may be impacted by the proposed practice. All surveys shall reference an identifiable benchmark, and will close vertically and horizontally, when applicable, within ordinary survey accuracy, as defined in Chapter 1 of the NRCS National Engineering Handbook Part 650, Engineering Field Handbook, (EFH).
Contractors will have demonstrated their ability to perform design surveys when, for each practice for which they seek qualification:

PART 505 - NON-NRCS ENGINEERING SERVICES

- (1) Two (2) surveys adequate for design have been submitted to the NRCS Service Center, and
- (2) An employee with appropriate Job Approval Authority or Joint Certification has confirmed that surveys were accurate and adequate for practice design.

b. DESIGN

Practice design shall consist of documented design data, construction plans, specifications and/or job sheets, developed per procedures in the EFH and in compliance with the Standards and Specifications in Section IV of the Field Office Technical Guide. NRCS will provide data, design sheets and standard drawings, when applicable.

Contractors will have demonstrated their ability to provide a practice design when, for each practice for which they seek qualification:

- (1) Two (2) complete construction plans are submitted to an NRCS Service Center, along with all supporting documentation, including surveys and computations, and
- (2) An employee with appropriate Job Approval Authority or Joint Certification confirms that the design computations are accurate and consistent with NRCS standards and specifications.

c. CONSTRUCTION LAYOUT

Construction layout consists of surveys to mark offset or centerline stakes for cuts and fills, locating practice components, and setting elevations specified in construction plans. NRCS will provide minimum staking, which will include centerline locations and benchmarks, along with adequate practice construction plans.

Contractors will have demonstrated their ability to perform construction layout when, for each practice for which they seek qualification:

- (1) Two (2) surveys showing computed cuts and fills, practice component locations and grades are submitted to an NRCS Service Center, and
- (2) Review of the work by an employee with appropriate Job Approval Authority or Joint Certification confirms the layout to be accurate and adequate.

d. CONSTRUCTION CHECKOUT

Construction checkout documentation will consist of survey notes, inspection notes, and all other items necessary to document that a practice was constructed in compliance with the plans and specifications. This includes preparation of an as-built construction

PART 505 - NON-NRCS ENGINEERING SERVICES

plan.

Contractors will have demonstrated their ability to document construction checkout when, for each practice for which they seek qualification:

- (1) Two (2) sets of checkout documentation and as-built construction plans have been submitted to an NRCS Service Center, and
- (2) An employee with appropriate Job Approval Authority or Joint Certification confirms that the surveys and other items submitted adequately and accurately document the constructed practice.
- (3) A field review of the work by an employee with appropriate Job Approval Authority or Joint Certification confirms the checkout to be accurate.

(4) Contractor Qualification

- a. Contractors who provide adequate documentation described previously may receive a written statement of their qualifications to survey, design, layout or checkout practices from the District Conservationist in their county of residence.
- b. The District Conservationist will submit the documentation to an NRCS Engineer, along with a statement from an employee with appropriate Job Approval Authority or Joint Certification that surveys and other documentation were adequate and accurate.
- c. The NRCS Engineer shall review the documentation and concur in the recommendation for job qualification, or return the recommendation to the District Conservationist with an explanation for rejection.
- d. Upon notification from the NRCS Engineer, the District Conservationist shall send a Letter of Competency to the conservation contractor detailing the practices and technical services they have been qualified to provide. See Subpart E, WI 505.42, Exhibit 4, for an example of a contractor Letter of Competency.
- e. The contractor will be required to demonstrate ability in only one county. A Letter of Competency, signed by the District Conservationist, will serve as proof of demonstrated ability in counties other than the one issuing the letter.
- f. Contractor qualifications, listed in the Letter of Competency, will be reviewed annually by the issuing office, according to the spot checking requirements listed below.
- g. Contractors are encouraged to retain their level of qualification, by assisting with surveys, designs, layout or construction documentation. Contractors will not maintain qualification for any

PART 505 - NON-NRCS ENGINEERING SERVICES

technical service that they have not performed for that practice in the previous three (3) years.

- (5) Spot Checking Contractor-Documented Practices
- a. A minimum of 10%, and not less than one of each type of the practices documented by any contractor, will be spot-checked by the Service Center each year. Spot checks shall include surveys, and shall be adequate to assure the accuracy of survey notes and other items submitted by the contractor.
 - b. A Letter of Competency will not be maintained for any practice when:
 1. Two (2) or more instances of inadequate documentation are noted for any one type of practice in any one year, or
 2. The number of instances of inadequate documentation reported is more than 20% of the installations of that type of practice documented by that contractor in the past year.

"Inadequate documentation" shall be defined as documentation that fails to indicate the true condition of the applied practice and whether or not the construction meets the requirements of the construction plans and specifications.
 - c. Service Centers shall maintain a list of all practices for which contractors provided documentation in each calendar year and shall indicate which practice applications were spot-checked. The list of practices completed by contractors and results of the spot check will be provided to the Service Center that issued the Letter of Competency.
 - d. The Service Center that issued the contractor's Letter of Competency will evaluate the spot check results in consultation with an NRCS Engineer. Based on the spot check results, the Letter of Competency may remain unchanged or practices may be rescinded based on criteria contained in 5.b. above. The Service Center shall inform other counties where the contractor is performing technical services of any actions taken.