

## Part 505 – Non-NRCS Engineering Services

### Subpart B – Use of Non-NRCS Engineering Resources

#### TN505.11 Non-Project Activities

##### A. Non-NRCS Engineering Services

- (3) The Landowner Use of a Consultant – Tennessee’s Sample Letter (Title 210, National Engineering Manual (NEM), Part 505, Subpart E, Exhibits, TN505.44) shall be used to ensure that the landowner and consultant understand the responsibilities of all parties involved, especially if the practice involves cost sharing.
- (4) Use of non-NRCS engineering services for jobs beyond Area and Field Office capabilities and resources.
  - (i) It is NRCS policy in Tennessee to encourage the use of non-NRCS engineering services in planning and applying soil and water conservation measures for more complex, higher risk, and time consuming practices and practices requiring energy/electrical component design or evaluation. Customers have the option to utilize outside services where NRCS standards and specifications will be followed. Non-NRCS engineering services include the use of qualified contractors, technical service providers (TSPs) and consultants. (Refer to the Technical Assistance Flow Chart (210-NEM, Part 505, Subpart E, TN505.45)
  - (ii) The Area Conservationist (AC) may set the limits of NRCS assistance to an engineering job class below that of the Area Engineer’s (AE’s) engineering job approval authority (EJAA). This will allow NRCS to work on jobs within available resources and to further encourage the use of non-NRCS engineering services.
  - (iii) Non-NRCS engineering services should be considered for jobs that exceed the engineering job approval authority of the Area Engineer. Requests for engineering assistance exceeding the AE’s engineering job approval authority will be submitted to the State Conservationist by the AC for approval prior to committing resources beyond a preliminary investigation.
  - (iv) Non-NRCS engineering services will be used for design and construction certification of roof spans exceeding forty (40) feet.
  - (v) Non-NRCS engineering services will be used for jobs that exceed the engineering job approval authority of the State Conservation Engineer (SCE) (Class VI and higher), unless specifically authorized by the STC or SCE. Unless additional assistance is authorized, NRCS assistance on these jobs shall be limited to conservation planning assistance, environmental evaluations, preliminary investigations, furnishing design criteria, and consultative assistance. Requests for NRCS assistance on these complex jobs will be in writing from the AC to the State Conservationist. The request shall include, but not be limited to, the following information:
    - A written description of the location of the proposed job.

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- Aerial photo with proposed treatment area delineated.
  - General description of the proposal and brief discussion of its complexities.
  - Purpose of the proposed work.
  - Landowner or operator, group, or organization requesting assistance.
  - Estimated cost of the job.
  - Availability of non-NRCS engineers.
  - Engineering assistance needed that cannot be provided at the Area level such as geology, structural design, etc.
  - Assurance that interested landowners or operators will install the facility in accordance with the plans and specifications.  
NOTE: Unless approved by the appropriate Program Manager, landowners or operators will be required to pay for necessary soil mechanics laboratory tests.
  - Area staff's recommendation on the type of assistance that NRCS should provide.
- (vi) The State Conservationist and SCE will evaluate the request and decide the extent of assistance that NRCS will provide and inform the AC.
- (5) Utilizing Engineering Services – Consultant (A&E firm)
- (i) Landowners may select a consultant (non-technical service providers [TSP] or non-NRCS individuals) to provide engineering services for Tennessee NRCS programs.
  - (ii) During the planning phase, NRCS will contact the landowner to determine if they plan to use a consultant to provide engineering services.
  - (iii) Upon notification that the landowner intends to use a consultant, the NRCS District Conservationist (DC) will send a letter (210-NEM, Part 505, Subpart E, TN505.44) to the landowner, with a courtesy copy (cc) to the consultant, outlining their responsibilities in providing engineering services and the required documentation in accordance with the conservation practice standard statement of work (SOW) design, installation, and checkout to support NRCS certification for cost shared practices. The DC will also provide the landowner and consultant with the applicable Tennessee NRCS Field Office Technical Guide (FOTG) conservation practice standards and SOWs, all applicable sections of Title 450, General Manual (GM), Part 407, Subpart B, Section 407.10, "Supporting Data," and associated Tennessee supplement, TN407.10, and the brochure, "Landowner's Guide to Constructing Conservation Practices."
  - (iv) At the request of the landowner or consultant, the DC will arrange for appropriate pre-design technical assistance.

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- (v) The consultant providing engineering services must adhere to State laws for practicing engineering (see *Tennessee Board of Architectural and Engineering Examiners, TN Code Annotated Title 62*, and *Rules of the State Board of Architectural and Engineering Examiners, Chapter 0120-02, Rules of Professional Conduct*) which may require the consultant to be a registered professional engineer (PE) licensed in Tennessee for the engineering services provided to the landowner.
- (vi) The consultant will provide the identified items in the conservation practices' SOWs, meet NRCS standards and specifications, and certify the work (planning, design, and/or construction).
- (vii) Prior to the start of construction, the landowner will provide the following to NRCS:
  - A copy of the site specific design documentation, construction plans, and specifications. The cover sheet of the drawings shall include the following statement and the consultant's signature:

To the best of my professional knowledge, judgment, and belief, the design, construction drawings, and specifications meet applicable Tennessee NRCS standards and specifications. Furthermore, to the best of my knowledge, judgment, and belief, the proposed work complies with all local, State, and Federal laws, rules, and regulations.

\_\_\_\_\_  
Signature of Consultant

\_\_\_\_\_  
Date

*Note: Include professional engineer's license number and seal.*

- Documentation of all identified items in the appropriate SOW (operation and maintenance plan, quality assurance plan, etc.).
- (viii) NRCS will not check or approve engineering designs or calculations prepared by others. An NRCS employee with the appropriate engineering job approval authority (EJAA) must perform a functional review of the consultant's design documentation, drawings, and specification to ensure at a minimum that the work:
- Achieves the objectives of the plan and program.
  - Is compatible with the conservation plan and applicable Tennessee FOTG standards and specifications.
  - Includes a quality assurance plan (QAP), engineer's cost estimate, and operation and maintenance plan.
  - Complies with all local, State, and Federal laws, rules, and regulations.
  - Complies with the applicable Tennessee and Federal programs.

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- Does not require a technical review as defined in 210-NEM, Part 511, Subpart A, Section 511.5, “Design Checking and Review.”
- (ix) If the functional review indicates inconsistencies with the conservation plan and applicable Tennessee FOTG standards and specifications, NRCS will bring these to the attention of the landowner for resolution by the consultant. If there are apparent design discrepancies or deviations from the standards, the landowner will bring these to the attention of the consultant.
- (x) The NRCS representative performing the functional review shall place the following statement and signature on the cover sheet of the approved drawings or in a letter.

NRCS is accepting these construction drawings and specifications on the basis that they have been signed by _____ and certified that the design is in accordance with Tennessee NRCS standards and specifications. Based on the information provided by the consultant, the design, construction drawings, and specifications appear to meet applicable Tennessee NRCS standards and specifications. Any deficiencies in the design, construction drawings, or specifications are the responsibility of the consultant whose name appears on the construction drawings.	
_____ Signature of NRCS Representative	_____ Date

- (xi) During construction, NRCS will monitor the performance of quality assurance responsibilities by the consultant and record it in the CONS-6 or other written documentation and place it in the landowner’s file.
- (xii) Upon completion of construction, the landowner must submit to NRCS:
- A copy of any construction documentation as required in the QAP, the 450-GM, Part 407, Subpart B, Section 407.10, “Supporting Data,” and the associated Tennessee supplement, TN407.10, for the practices certified.
  - Quantity calculations for work completed that will be submitted for cost share payment.
  - A copy of the “as-built” drawings with design changes approved by the consultant.
  - The “as-built” drawings shall include the following certification statement and the consultant’s signature:

To the best of my professional knowledge, judgment, and belief, the installed practices meet the engineering plans and specifications, and applicable NRCS standards.	
_____ Signature of Consultant	_____ Date
<i>Note: Include professional engineer’s license number and seal.</i>	

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- (xiii) NRCS staff with the appropriate engineering job approval authority will review the supporting documentation provided by the consultant and make a field visit to the site to determine certification for program payments. The field visit for certification and the review of the documentation provided by the consultant shall be documented in the CONS-6 notes or other written documentation and inserted into the landowner's file.
- (6) Utilizing Engineering Services – Technical Service Providers (TSPs)
- (i) Section 1242 of the Food Security Act of 1985, as amended by the Farm Security and Rural Investment Act of 2002, Public Law 107–171, May 13, 2002 (referred to as the 2002 Farm Bill) greatly expands the availability of technical assistance to producers by encouraging other non-USDA potential providers of technical assistance to assist in the delivery of technical services to implement farm bill programs. Title 440, Conservation Programs Manual, Part 504, “Technical Service Provider Assistance,” provides detailed policy, roles, and responsibilities related to TSP assistance.
  - (ii) NRCS should encourage landowners to use TSPs for design, installation, and checkout of conservation practices (450-GM, Part 407, Subpart B, Section 407.11, “Checking Completed Work”) and also provide appropriate information on the use of TSPs. NRCS should refer landowners to the list of certified TSPs on the TechReg website: <https://techreg.sc.egov.usda.gov/>.
  - (iii) Participants may select either NRCS or a TSP to perform engineering services needed in conjunction with their conservation program contract or agreement. (Refer to the Technical Assistance Flow Chart [210-NEM, Part 505, Subpart E, TN505.45] for the process to request a TSP.) Payment to participants for TSP engineering services is subject to availability of funds and payment rates published on the TechReg website.
  - (iv) The TSP providing engineering services is responsible for the accuracy of the survey, design, supporting data, etc. The survey, design, and supporting data do not need to follow the format used by NRCS but must be legible and understandable and include all information outlined in the SOW for the conservation practice or activity.
  - (v) The TSP will certify the practices or activities they accomplished within the field office service area. The TSP will furnish to the DC the documentation as outlined in the SOW for the conservation practice or activity. This documentation must be on file before payment is made to the landowner for cost share practices.
  - (vi) TSPs utilized in providing engineering services will be spot checked in accordance with 450-GM, Part 407, Subpart C, Section 407.20, E – “Spot Checks of Qualified Contractors and Other Qualified Individuals (Non-TSPs).” If it is determined that the TSP is performing unacceptable work, appropriate action shall be taken in accordance with 440-CPM, Part 504, Subpart C, Certification Policy.
- (7) Utilizing Engineering Services – Architectural and Engineering (A&E) Services
- (i) A&E firms will be selected through a request for qualifications (RFQ) in accordance with the Federal Acquisition Regulations (FAR). (210-NEM, Part 505, Subpart D, Section 505.30, “Engineering Services, Contracts, and Agreements.”)

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- (ii) The use of A&E firms for preparing engineering plans, specifications, and construction oversight is at the discretion of the applicable NRCS Program Manager, based on workload and available funding.
- (iii) A SOW shall be developed for each A&E engineering services contract. The SCE will review and concur the SOW.
- (iv) A certified contracting officer's representative (COR) shall be assigned to each A&E engineering services contract.
- (v) The A&E firm represents NRCS with the landowner receiving the engineering services.
- (vi) The COR will provide a cursory review of the completed tasks as outlined in the SOW; however, the A&E firm bears the responsibility for the soundness and adequacy of engineering services provided.

### B. Technical Services

#### (7) Utilizing Technical Services - Qualified Contractors and Individuals

- (i) Laws and Regulations. – Individuals providing technical services need to be aware of State laws and regulations contained in *Tennessee Board of Architectural and Engineering Examiners, TN Code Annotated Title 62*, and *Rules of the State Board of Architectural and Engineering Examiners, Chapter 0120-02, Rules of Professional Conduct*. The practice of engineering must be performed under the responsible charge of or by a Tennessee registered professional engineer (PE). Compliance with State law is the individual's responsibility and NRCS acceptance of an individual's work does not suggest or imply compliance with State engineering registration requirements.
- (ii) The DC will inform the landowner and other qualified individuals providing technical services that they are responsible for the accuracy of the survey and supporting data. The survey, design, and supporting data do not need to follow the format used by NRCS but must be legible and understandable.
- (iii) The DC will inform the individual of the documentation required for providing technical services. The individual providing the technical services shall provide the documentation as described in 450-GM, Part 407, Subpart B, Section 407.10 and associated Tennessee supplement, TN407.10.
- (iv) The DC will certify the practices by non-NRCS personnel within the field office service area. The DC may accept the final checkout and quantity documentation provided by individuals providing technical services as supporting data for certifying performance of a practice. The individual will furnish signed statements, sketches, design data, and notes that provide appropriate information and measurements to show that standards and specifications have been met and design quantities have been installed. The supporting data does not need to follow the format used by NRCS but must be legible and understandable. Before certifying the practice, the information must be checked and approved by NRCS personnel with appropriate engineering job approval authority.

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- (v) Where persons supplying technical services are utilized in providing construction documentation, a complete construction check (spot check) will be made on at least one (1) job but not less than ten (10) percent of the jobs designed and/or installed by each individual during the year. Spot checks for engineering practices will be conducted by a NRCS engineer. The spot check notes will be recorded and filed in the field office. If it was determined that the individual performed unacceptable work, additional jobs will be checked; and, the AC will determine if a misunderstanding exists and if the individual can be depended upon to perform to the quality expected. If the individual produces poor quality plans, designs, or checking of completed installations, then the individual's documentation will not be utilized in certifying practices.
- (vi) Qualified conservation contractors and other qualified individuals should be encouraged to design, layout, and provide construction checkout of conservation practices. To facilitate this, the District Conservationist (DC) should determine the training needs of local contractors and arrange for training when needed.

Training may include such items as how to:

- Perform design surveys.
- Use NRCS standards and specifications.
- Perform construction layout surveys from bench marks and reference stakes or lines.
- Prepare engineering designs.
- Perform construction checks.