

STATEMENT OF WORK
Stream Crossing (578)
Tennessee

These deliverables apply to this individual practice. For other planned practice deliverables refer to those specific Statements of Work.

DESIGN

Deliverables:

1. Design documentation that will demonstrate that the criteria in the NRCS practice standard have been met and are compatible with other planned and applied practices.
 - a. Type of stream crossing and practice purpose(s) as identified in the conservation plan
 - b. Impacts on adjacent properties and structures
 - c. Compliance with NRCS national and state utility safety policy (NEM part 503-Safety, Subpart A – Engineering Activities Affecting Utilities 503.00 through 503.06)
 - d. List of facilitating practices.
 - e. Practice standard criteria related to computations and analyses to develop plans and specifications, including, but not limited to:
 - i. Geology/Soil Mechanics
 - ii. Hydrology/Hydraulics
 - iii. Structural
 - iv. Vegetation/Soil Bioengineering
 - f. Evaluation and completion of NRCS-CPA-52, Environmental Evaluation Worksheet
2. Written plans and specifications include sketches and drawings, shall be provided to the client that adequately describes the requirements to install the practice and obtain necessary permits. The plans and specifications should include the following:
 - a. Drawings such as NRCS STR-578-1 and STR-578-2 or other NRCS approved drawings
 - b. Material and Construction Specifications
 - c. Width of crossing
 - d. Total length of crossing
 - e. Grade or percent of slope of the approach ramps
 - f. Planned elevations of excavated subgrade and surface elevation of crossing in center portion of the stream crossing
 - g. Type and dimension of geotextile fabric
 - h. Dimensions of the trench and the method of securing the ends of the geotextile
 - i. Type, size, and number of anchoring pins used to secure the geotextile fabric to the soil surface of the crossing
 - j. Gradation, type, and quantity of gravel or other surfacing materials
 - k. Location and extent of fencing required
 - l. Location and quantities of seed, lime, fertilizer, and mulch needed to vegetate disturbed areas
 - m. Method of surface water diversion during construction
 - n. Method of surface water diversion and drainage adjacent to approach ramps
 - o. Gradation, type, quantity, location, and dimensions of any base rock needed in unstable soil conditions
 - p. Method of stabilizing the toe of the approach ramps where bedrock is encountered
3. Design Report and Inspection Staffing Plan, as appropriate (NEM 511, Subpart B, Documentation, 511.11 and Part 512, Subpart D, Quality Assurance Activities, 512.30 through 512.32).
4. Operation and Maintenance Plan.
5. Certification that the design meets practice standard criteria and complies with applicable laws and regulations, including all permit requirements, Threatened and Endangered Species requirement, construction date restrictions, and Cultural Resource requirements (NEM Subpart A, 505.03(b)(2)).
6. Design modifications during installation, as required.

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INSTALLATION

Deliverables:

1. Pre-installation conference with client and contractor.
2. Staking and layout according to plans and specifications, including applicable layout notes.
3. Installation inspection (according to inspection staffing plan, as appropriate).
 - a. Actual materials used
 - b. Inspection records
4. Facilitate and implement required design modifications with client and original designer.
5. Advise client/NRCS on compliance issues with all federal, state, tribal, and local laws, regulations and NRCS policies during installation.
6. Certification that the installation process and materials meet design requirements.

CHECK OUT

Deliverables:

1. As-built documentation.
 - a. Extent of practice units applied
 - b. Drawings
 - c. Final quantities
 - d. Slope of approaches
 - e. Profile of stream channel to show crossing and streambed are on a uniform grade
 - f. Type and quantity of geotextile used
 - g. Gradation, quantity and type of gravel and base stone (if required)
 - h. Adequacy of vegetation
 - i. Other pertinent data
 - j. Statement that practice meets NRCS plans and specifications by person with adequate NRCS Engineering Approval Authority
 - k. Signature and date of person making certification
2. Certification that the installation meets NRCS standards and specifications (NEM Subpart A, 505.03(c)(1)).
3. Progress reporting.

REFERENCES

- NRCS Technical Field Office Technical Guide (e-FOTG), Section IV, Conservation Practice Standard – Stream Crossing (578).
- NRCS National Engineering Manual (NEM).
- NRCS National Environmental Compliance Handbook.
- NRCS Cultural Resource Handbook.