

STATEMENT OF WORK
Streambank and Shoreline Protection (580)
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 NRCS practice standard have been met and are compatible with other planned and applied practices.
 - a. Practice purpose(s) as identified in the conservation plan.
 - b. List of required permits to be obtained by the client.
 - c. Impacts on adjacent properties and structures.
 - d. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06).
 - e. List of facilitating practices
 - f. Practice standard criteria related computations and analyses to develop plans and specifications including but not limited to:
 - i. Geology/Soil Mechanics
 - ii. Hydrology/Hydraulics
 - iii. Structural
 - iv. Environmental Considerations
 - v. Vegetation/Soil Bioengineering
 - vi. Safety Considerations (NEM Part 503-Safety, Subpart A, 503.10 through 503.12)
 - vii. Evaluation and completion of NRCS-CPA-52, Environmental Evaluation Worksheet
 - viii. Field Data-Entry Form for Streambank Erosion Severity (if required by the designer).
2. Written plans and specifications including sketches and drawings shall be provided to the client that adequately describes the requirements to install the practice and obtain necessary permits.
 - a. Drawings that show the site location, plan view, all section views that are needed, and other NRCS approved drawings approved by NRCS engineer.
 - b. Material and Construction Specifications.
 - c. Lengths and widths of various structures.
 - d. Grade or percent slope of the subgrade, keyways, and constructed surface of all structures.
 - e. Grade or percent slope of stream channel upstream and downstream of planned structure.
 - f. Planned elevations of excavated subgrade and surface elevations of structures at keyways, tops of revetments, other key locations in the profile of the structures.
 - g. Type, dimensions, and locations of geotextile fabric.
 - h. Types, dimensions, and locations of other bedding materials.
 - i. Types dimensions, and locations of erosion control blankets, turf reinforcement mats, and coir rolls.
 - j. Method of securing the geotextiles, erosion control blankets, turf reinforcement mats, coir rolls, and tree revetments.
 - k. Type and size of anchoring pins used to secure the geotextile fabric, erosion control blankets, and turf reinforcement mats to the soil surface.
 - l. Gradation, type, and quantity of rock riprap, sand bedding, gravel bedding, or other stabilization materials.
 - m. Location of all excess excavated spoil material.
 - n. Location and extent of fencing required.
 - o. Location and quantities of seed, lime, fertilizer, and mulch needed to vegetate disturbed areas.
 - p. Location and quantities of shrub and tree seedlings needed to vegetate riparian areas.
 - q. Method of surface water diversion during construction.
 - r. Location of silt fence and any other required erosion control methods.
3. Design Report and Inspection Plan as appropriate (NEM Part 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 (NEM Subpart A, 505.03 (a) (3)), 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. Verification that client has obtained required permits.
3. Staking and layout according to plans and specifications including applicable layout notes.
4. Installation inspection (according to inspection plan as appropriate).
 - a. Actual materials used
 - b. Inspection records
5. Facilitate and implement required design modifications with client and original designer.
6. Advise client/NRCS on compliance issues with all federal, state, tribal, and local laws, regulations and NRCS policies during installation.
7. Certification that the installation process and materials meets design and permit requirements.

CHECK OUT

Deliverables

1. As-Built documentation.
 - a. Extent of practice units applied
 - b. Drawings
 - c. Final quantities
 - d. Slopes and elevations of all constructed subgrades, constructed surfaces, slopes, and keyways
 - e. Thickness of all rock riprap revetments, rock weirs, and rock jetties
 - f. Profiles and cross sections of stream channel to show structures and streambed are on the correct grade
 - g. Type and quantity of geotextile used
 - h. Gradation, quantity and type of rock riprap, sand bedding, gravel beddings, and other materials that may be needed (If required)
 - i. Adequacy of vegetation
 - j. Adequacy of fencing
 - k. Other pertinent data
2. Certification that the installation meets NRCS standards and specifications and is in compliance with permits (NEM Subpart A, 505.03 (c) (1)). Signature and date by person with adequate NRCS Engineering Approval Authority making certification.
3. Progress reporting.

REFERENCES

- NRCS Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard - Streambank and Shoreline Protection, 580.
- NRCS National Engineering Manual (NEM).
- NRCS National Environmental Compliance Handbook.
- NRCS Cultural Resources Handbook.