



United States Department of Agriculture

Natural Resources
Conservation Service
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Huron, SD 57350
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Landowner Guide to Constructing Conservation Practices



This guide will help you understand your responsibility in all phases of conservation practice construction, from planning and design, through construction and maintenance.

By understanding your role, and providing adequate time for each phase of the project, you can avoid inconvenient and costly delays.

“Landowner” as used here is the person responsible for making decisions for the property. In most cases, that is the owner, but it may also be an operator or farm manager.

	Landowner
During Planning	<ul style="list-style-type: none"> <input type="checkbox"/> Obtain an Engineer for all phases of the project and agree on a timeline. <input type="checkbox"/> Set up a pre-design meeting with NRCS and your Engineer. <input type="checkbox"/> Propose alternatives to the designer. <input type="checkbox"/> Ask questions in order to understand the scenarios that are presented. <input type="checkbox"/> Select from the alternatives. <input type="checkbox"/> Check utility locations. <input type="checkbox"/> Consider costs and maintenance requirements. <input type="checkbox"/> Identify needed local, state, and federal permits. <input type="checkbox"/> Provide excavator for soil investigations. <input type="checkbox"/> Investigate/apply for program financial assistance, if desired.
During Design	<ul style="list-style-type: none"> <input type="checkbox"/> Be sure design meets your objectives and provide feedback. <input type="checkbox"/> Be available for consultation. <input type="checkbox"/> Obtain necessary permits/approvals. <input type="checkbox"/> Identify utility locations. <input type="checkbox"/> Review and agree to the final design.
Before Construction	<ul style="list-style-type: none"> <input type="checkbox"/> You may serve as the General Contractor. <input type="checkbox"/> Follow all federal/state/local laws, zoning regulations. <input type="checkbox"/> Be available for consultations. <input type="checkbox"/> Host site showing/pre-construction meeting. <input type="checkbox"/> Hire competent contractors. <input type="checkbox"/> Verify the contractor has contacted One-Call.
During Construction	<ul style="list-style-type: none"> <input type="checkbox"/> Authorize the contractor to start work. <input type="checkbox"/> Keep NRCS informed of progress <input type="checkbox"/> Protect cultural & historical resources. <input type="checkbox"/> Verify plans & specifications are met. (Approve changes proposed by the Engineer/Consultant and check with the funding agency(ies). <input type="checkbox"/> Comply with permit conditions. <input type="checkbox"/> Shut down job for safety reasons. <input type="checkbox"/> Stop work of contractor, when justified. <input type="checkbox"/> Pay bills. <input type="checkbox"/> Complete items in construction plan not completed by a contractor (ex. seeding, fencing). <input type="checkbox"/> Submit “as-built” plans and construction verification documentation to NRCS for acceptance.
Maintenance	<ul style="list-style-type: none"> <input type="checkbox"/> Follow the Operation and Maintenance Plan. <input type="checkbox"/> Make repairs as needed. <input type="checkbox"/> Contact NRCS for additional assistance, if needed.
	The landowner is ultimately responsible for the construction of the project in accordance with NRCS standards and specifications, complying with any permit requirements and the maintenance of the conservation system.

The "Engineer" may be engineering staff from the Natural Resources Conservation Service, or the engineering consultant hired by the landowner.

	Engineer/Consultant	Contractor
During Planning	<ul style="list-style-type: none"> <input type="checkbox"/> Attend the pre-design meeting with the landowner and NRCS. <input type="checkbox"/> Develop alternatives that solve the landowner's resource concerns, and are compatible with their operation. <input type="checkbox"/> Discuss alternatives with the landowner. <input type="checkbox"/> Conduct foundation investigations. <input type="checkbox"/> Alert owner to potential wetland, utilities, archaeological sites, and needed permits. <input type="checkbox"/> Prepare planning cost estimates. 	
During Design	<ul style="list-style-type: none"> <input type="checkbox"/> Survey the site. <input type="checkbox"/> Design the system based on the planning and site conditions. <input type="checkbox"/> Develop construction plans based on the landowner's objectives and decisions. <input type="checkbox"/> Review the design and specifications with the landowner. <input type="checkbox"/> Develop an Operation and Maintenance Plan. <input type="checkbox"/> Develop an Inspection Plan. <input type="checkbox"/> Prepare a construction cost estimate. 	
During Construction	<ul style="list-style-type: none"> <input type="checkbox"/> Assist the landowner with the site showing/ pre-construction meeting. <input type="checkbox"/> Inform the owner of safety responsibility. <input type="checkbox"/> Follow the construction Inspection Plan. <input type="checkbox"/> Observe and inspect construction and perform tests in order to determine the work meets requirements of the construction plan and specifications. (No changes without prior approval by the landowner). <input type="checkbox"/> Keep a daily job diary of construction activities. <input type="checkbox"/> Inform the landowner if the contractor is not following the construction plan, or if there is a safety hazard. <input type="checkbox"/> Prepare as-built drawings. <input type="checkbox"/> Certify components and the entire system as meeting standards and specifications. <input type="checkbox"/> Submit "as-built" plans and construction verification documentation to the landowner and NRCS field office. 	<ul style="list-style-type: none"> <input type="checkbox"/> Contact One-Call. <input type="checkbox"/> Follow OSHA requirements and practice safety. <input type="checkbox"/> Provide adequate notice to NRCS before starting job. <input type="checkbox"/> Attend the site showing/pre-construction meeting. <input type="checkbox"/> Read and follow the construction plans and specifications. <input type="checkbox"/> Have a foreman on site. <input type="checkbox"/> Have all required materials and equipment on site. <input type="checkbox"/> Use materials specified in construction plan (no substitutions without PRIOR approval by the landowner and engineer). <input type="checkbox"/> Use dimensions in construction plan (no alterations without PRIOR approval by the landowner and the engineer). <input type="checkbox"/> Keep NRCS informed of progress. <input type="checkbox"/> Document materials used. <input type="checkbox"/> Comply with plans and specifications. <input type="checkbox"/> Repair improper construction.
Maintenance		<ul style="list-style-type: none"> <input type="checkbox"/> Provides certifications, written and verbal that installations meet plans & specifications and will perform for length of design requirements.
	The engineer is responsible for attesting that project construction plans, specifications, and the constructed project meet NRCS standards and specifications.	The contractor is responsible for constructing the project according to the construction plans and specifications, for quality control and safety.

Construction Plans

Drawings

The drawings are a visual representation of the project which show the location and describe the work to be done. The drawings include plan views, sections, profile details and notes which are necessary to supplement the construction specifications for a site specific installation.

Specifications

The construction specifications describe quality of work which is to be done. The specifications may also reference a commercial standard such as the American Society for Testing and Materials (ASTM) which is identifiable for all products or procedures where referenced. If a conflict arises between the drawings and specifications, the specification governs the work or product.

Cost Estimates

The estimated cost is for comparison purposes and should not be shown or given to the contractor. The estimated cost is based on quantities calculated for this specific design. Actual construction quantities may vary if the practice is changed during construction or differing site conditions are encountered (i.e., bedrock, ground water, etc.).

It is the landowner's responsibility to contact one or more contractors and obtain a contractor's bid. Prices may vary from contractor to contractor. It is best to obtain bids from several qualified contractors before selecting someone to construct the practice. The Natural Resources Conservation Service does not guarantee that the estimated cost will be the final cost of the project.

Permits

All permits or approvals that are applicable for the construction and/or operation of this practice are the responsibility of the landowner and shall be obtained prior to the start of construction.

Any construction project involving one or more acres of land disturbance require a permit for the discharge of stormwater from construction activities. If a permit is needed the South Dakota Department of Environment and Natural Resources (SD DENR) regulates stormwater permits. SD DENR can be contacted at 1-800-737-8676.

Public and Private Utilities

If the existence of underground utilities in the vicinity of the proposed work area is known, it is your responsibility to notify the NRCS so that appropriate action can be implemented. It is the excavating contractor's responsibility to contact One-Call (1-800-781-7474) or at <http://www.sdonecall.com/> prior to start of construction.

Pre-Construction Meeting

Construction of the practice or practices shall NOT start before a thorough pre-construction meeting is held between the Owner/Operator, Contractor, engineer and the NRCS representative to go over the plans, specifications and other details of the project.

Acceptance of Construction

The final step will be an inspection and review by NRCS to ensure project meets site specific drawings and construction specifications for this practice.

Failure to install a practice according to the plans and specifications, or provide adequate supporting documentation of the construction could warrant forfeiture of any financial assistance, assessment of liquidated damages, or result in a violation of permits granted.

For more information www.nrcs.usda.gov/wps/portal/nrcs/site/sd/home/