

**NATURAL RESOURCES CONSERVATION SERVICE
DOCUMENTATION REQUIREMENTS FOR
WATERING FACILITY**

CODE 614

Design Criteria

Design in accordance with the criteria listed in [Conservation Practice Standard 614, Watering Facility](#), and the standard drawings on [Form KS-ENG-429, Reinforced Concrete Storage Tank, Rectangular](#), or [Form KS-ENG-430, Reinforced Concrete Storage Tank, Circular](#). Additional design guidance is available in the [Watering Facility Spreadsheet \(WFS\)](#) that is found under Conservation Practice 614—Job Sheet.

Surveys

The extent of surveys required will vary depending on whether the watering facilities are being constructed along with a new livestock pipeline or being added at an existing water source. The locations for watering facilities should be referenced during the survey for a livestock pipeline or spring development. Watering facilities being added to existing livestock pipelines shall be located and surveyed as needed to determine adequate capacity and pressure in the existing pipeline. If the watering facility is to be located at the water source (such as a well or existing pipeline location), the required survey may be limited to providing an adequate outlet for the overflow discharge.

Layout

Generally, sufficient flags and grade stakes will be set when the design survey is made to establish the location of the watering facility. A location point taken with a handheld Global Positioning System (GPS) unit will provide information to show the location on the conservation plan map. The location of watering facilities will be in accordance with the requirements in the practice standard and may be dependent on the type of water supply or distribution system.

Complete the Layout by and Date information on [Form KS-ENG-25, Watering Facility—614](#), or equivalent job sheet. Show the location of the watering facility on the location map as required or attach a conservation plan map as appropriate.

Design and Drawings

Develop the design in accordance with the “Design Criteria” Section. Design documentation may be in the form of standard drawings, calculation sheets, [Form KS-ENG-429](#) or [Form KS-ENG-430](#), [Form KS-ENG-25](#), the [attachments in the WFS](#), or information supplied by the manufacturer or supplier. Survey notes should be included as appropriate.

The design capacity of the watering facility should be based on the volume of water that is accessible to the livestock or wildlife. The volume is determined by the depth of water accessible and should not exceed 24 inches for most installations.

The job sheet ([Form KS-ENG-25](#) or equivalent) should include the following documentation for each watering facility:

- Name of the owner and/or operator and location information.
- Daily water requirements for the livestock or wildlife being watered and the design capacity of the facility—the design capacity should be shown as gallons for tank-type facilities and as gallons per minute for manufactured waterers.
- Estimated quantities of materials needed to construct the facility.
- Estimated quantities of materials needed for protection of the areas around the facility.

Sign the Approved by block and complete the Date block on all forms.

The [attachments to Form KS-ENG-25](#) or the [standard drawings](#) should include the following information:

- The type of tank materials being used for the facility along with the installation requirements for the type of materials being used—this would include the construction specifications and manufacturer's installation recommendations
- All appurtenant features such as hydrants, overflow devices, and automatic water level control devices
- The required escape feature for wildlife watering facilities and other facilities as needed

Checkout

In the Table of Quantities on [Form KS-ENG-25 in the WFS](#), complete the Installed Quantity column and add any comments in the Notes section.

In most cases, Natural Resources Conservation Service (NRCS) personnel will be present during installation of any cast-in-place concrete and overflow outlets.

Show any as-built changes, if needed, on the [attachments to Form KS-ENG-25, standard drawings](#), or other drawing sheets.

Sign the Checked by block and complete the Date block on each sheet.