NATURAL RESOURCES CONSERVATION SERVICE

DOCUMENTATION REQUIREMENTS FOR

WATER WELL

CODE 642

Design Criteria

The suitability of the well site and the type of well installed shall be based on detailed geologic investigations (including test well drilling); on groundwater assessment studies made by local, state, or federal agencies; or on reliable local experience. Requirements for well drilling, development, and installation will be strictly followed as outlined in Conservation Practice Standard 642, Water Well; Construction Specifications 642; Chapter 12 of National Engineering Handbook Part 650 (NEH 650), *Engineering Field Handbook*; and the Kansas Supplement to Chapter 12 of NEH 650. This also applies to regulations and procedures as prescribed by the Kansas Department of Health and Environment (KDHE) for well development.

Test Holes

Unless the well is in a proven area of uniform waterbearing materials, a test hole should be drilled at the well site. It should be accurately logged to determine the location, depth, and grain size of the aquifer.

In some cases, it will be desirable to run a pumping test to determine the aquifer characteristics.

Well Diameter

The diameter of the well should be adequate to meet the yield capacity of the waterbearing aquifer and to permit the installation of a pump to deliver the needed amount of water for the projected pumping head required.

Casing and Filter Materials

Casing and filter materials shall meet the requirements outlined in the “Design Criteria” section above.

Installation

The well shall be constructed by a well driller or contractor who is properly licensed by the KDHE. The well will be drilled and developed, and materials will be installed according to the criteria listed in the “Well Diameter” section above.

Documentation for Installation

Prior to installation, Form KS-ENG-10, Job Sheet, will be filled out as follows:

- Practice.
- Name of owner/operator and identification number.
- Legal description and county.
- Table of Quantities–List materials and amounts planned for use, applicable American Society for Testing and Materials (ASTMs), etc.
- Location map.

  —Show well location.

  —Show all pertinent items such as underground utilities, fences, and power lines.

  —Either the Natural Resources Conservation Service (NRCS) representative or the contractor will sign the "Designed by" block and date it. If signed by an NRCS representative, then the contractor's name should be listed immediately under the NRCS representative's signature following "Designed by." (This will indicate the type of materials and amounts planned for use in the installation and also that these will meet the necessary requirements listed in the “Design Criteria” section above.)

—A qualified individual as outlined in National Engineering Manual (NEM) KS501.05(a)(5) will sign the “Checked by” block and date it.

—The district conservationist or the responsible designated technician should sign the "Approved by" block and date it. This indicates the site is ready for development and is located correctly, the materials to be used are satisfactory, and the contractor may proceed.

Checkout

After the well is installed, the contractor will complete Form KS ENG-10 as follows:

- List the “Installed Quantity” of materials in the Table of Quantities.
- List any applicable comments under the “Remarks” section.
- Sign and date the "Checkout by" block with title written in below. (This will indicate the amount of each material installed and that each met the applicable ASTM, standard, or regulation.)
- Attach a copy of the completed well log and Form WWC-5, Water Well Record, which is available from KDHE.