USDA
NRCS

Irrigation System, Sprinkler - 442
(Center Pivot)

KS-ENG-201
Rev. 1/11

Name _____ Ident. No. _____

Legal Desc. _____ County _____

Designed by _____ Date _____

Checked by _____ Date _____

Approved by _____ Date _____

System Requirements and Information

Water Right _____ gallons per minute (gpm) Irrigated Area _____ acres

Pump Design Flow Rate (Based on Pump Test)[1/] _____ gpm

Minimum Wetted Diameter of Outside Sprinkler Required _____ feet

System Length _____ feet System Capacity _____ gpm (Without End Gun or Cornering System)

Ground Elevations: Maximum _____ Minimum _____ At the Pivot _____

Location of Maximum Ground Elevation (If Not at End of Pivot) _____

Sprinkler Placement: ☐ On the Pipe ☐ Below Truss Rod and Above Canopy

☐ In Canopy Above 30 Inches ☐ 12 to 30 Inches Aboveground

Typical Sprinkler Height Aboveground _____ feet Height of the Pivot _____ feet

Mark Attached Items:

☐ Plan Map of System

☐ Form KS-ENG-22, Irrigation System, Sprinkler - 442 (Center Pivot Sprinkler Design)

☐ Form KS-ENG-394, Irrigation Water Management - 449 (Planned Crop and Water Requirement)

Remarks:

[1/] If there hasn't been a pump test run during the irrigation season within the most recent 3-year period, the design flow rate will not be greater than 80 percent of the original pump flow rate.

Supplier/dealer shall submit a computer printout showing the following items--at least 14 days prior to installation: (Mark items that are on the computer printout.)

- ☐ Sprinkler Locations
- ☐ Sprinkler Flow Rates
- ☐ Pipe Pressures
- ☐ Sprinkler Pressure
- ☐ Nozzle Sizes, Drop Heights
- ☐ Size and Pressure Rating of Regulators
- ☐ Friction Loss C Factors
- ☐ Lateral Outside Diameters
- ☐ Timer Settings
- ☐ Field Elevation Drop and Gain (in feet) to Ensure All Design Requirements Are Met Prior to Installation
- ☐ Documentation of the Coefficient of Uniformity (CU) Provided

Is the sprinkler design printout attached? ☐ Yes ☐ No

Does the sprinkler design meet required design criteria? ☐ Yes ☐ No

Failure to provide the computer printout prior to installation may jeopardize any pending cost-share assistance.

Item	Designed	As Installed
Coefficient of Uniformity (CU)	percent	
Sprinkler Type and Manufacturer		
Number of Sprinklers		
Number of Pressure Regulators		
Pressure Regulator Rating (psi)		
Sprinkler Height Aboveground (feet)		
Wetted Diameter of Outer Nozzle (feet)		
Center Pivot Manufacturer		
Number of Towers		
Length of System Lateral (feet)		
Outside Diameters (O.D.) of System Lateral (inches)		

Does the checkout of the system installation agree with the design? ☐ Yes ☐ No

If not, explain why:

Checkout by _____ Date _____

Audited by _____ Date _____