CONSTRUCTION SPECIFICATION

NATURAL RESOURCES CONSERVATION SERVICE

IRRIGATION SYSTEM, MICROIRRIGATION

SCOPE

This item shall include all plans, instructions, and specifications for the installation and efficient application of water for irrigation by means of irrigation systems.

SPECIFICATIONS

Design

All plans for microirrigation systems shall be in accordance with Alabama NRCS conservation practice standard Irrigation System, Microirrigation, Code 441.

Installation Requirements

Vendors for microirrigation equipment will assume full responsibility for the proper installation of the system.

Pumps and power units shall be set on a firm base and care shall be taken to keep the pump and the motor or engine in proper alignment.

Wiring and starting equipment for electrically operated plants shall comply with approved standards. Electric motors shall be provided with overload and low-voltage protection.

Internal-combustion engine shall be provided with protective devices. Thermostats shall be supplied that will stop the engine when water or oil temperatures exceed the safety point. Where conditions are such that a failure of the water supply might result in the pump loosing prime, the pumping plant shall be protected by a device that stops the engine. These devices are not needed where probability of water supply failure is minimal, or the pumping plant is constantly attended.

The irrigation system will be checked for installation and completing in accordance with plans and specifications.

Operating Instructions

The owner shall be furnished with a plan of the system and on-site instructions required to operate the system to attain the design objective.

The plan shall include a map of the water supply and pumping plant; location of the supply lines, main lines, and lateral lines; filtration system; the number of applicators; the spacing of applicators; and the operating pressure.

Equipment specifications furnished to the owner should include operating pressures, wetted diameter of the trickle applicators, capacity of the pump needed, and horsepower requirement of the power unit.

Equipment Warranty

Vendors assuming responsibility for the installation of the system shall furnish warranties covering the quality of material and workmanship of each piece of equipment furnished in accordance with the original manufacturer's quarantee, and shall replace defective parts shown to have failed due to poor material quality or workmanship.