

Solar Powered Irrigation System Design

UT Lady Bird Wildflower Center Project

Materials List

Required Materials

- 96 Hunter MP2000 90Degree (Black)
- 96 36" Shrub Risers MPT x MPT (Male Pipe Thread x Male Pipe Thread)
- 96 3' 3/8" Rebar Steaks (Can be made by purchasing large rods and cutting to size)
- 96 3/4" x 1/2" PVC S x FPT Reducing Bushings
- 72 3/4" PVC S x S x S T's (Slick x Slick x Slick)
- 120 3/4" PVC S x S 90Degree Elbows (Slick x Slick)
- 12 1"x1"x1 1/4" PVC S x S x S Reducing T's
- 24 1"x 1/2" PVC S x S Reducing Bushings
- 48 3/4" PVC SxS Couplers
- 12 1 1/4" PVC S x S x S T's
- 12 1 1/4" PVC S x S 90Degree Elbows
- 6 1 1/2" Hunter Valves PGV (FPT x FPT)
- 12 1 1/2" PVC Male Adapters
- 12 1 1/2" x 1 1/4" PVC S x S Reducer Bushings
- 1 LEIT XRC Controller (6 Zone)
- 1 MCLOXS Mounting Column
- 6 LEMA 1600HE Solenoids
- 6 30-922 Solenoid Adapters (For Hunter Valves)
- 1 RKIT-RKIT8810S (Pump Start Relay)
- 100' 18 AWG Mult-Strand Colored Cable
- 1 1 1/4" x 1/2" PVC S x FPT Reducer Bushing (Slick x Female Pipe Thread)
- 1 Liquid Filled Pressure Gauge (0-60PSI) 1/2" MPT (Male Pipe Thread)
- 1 1 1/4" PVC Isolation Valve
- 250' 1 1/4" Class 200 PVC Pipe
- 2300 3/4" Schedule 40 PVC Pipe
- 10' 4" Class 299 PVC Pipe

- 1 PS600-HR14-X Pump, Motor & Control
- 2 LA-175-24M Solar Panels
- 2 Panel EZ Steel Galvanized Fixed Rack-Pole Mount
- 1 Dry Well Probe Sensor
- 10' M x F Solar Cable Connector

- 16 Water Proof Wire Connectors
- 96 12" Plastic Zip Ties
- PVC Solvent (Cement-Glue)
- PVC Colored Primer

Thread Tape

Saw for cutting PVC Pipe

Not Included Above: Pipe and fittings to connect pump to valves (need dimensions of tank and distance from tank to plots)