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# Automatic Lawn Sprinkler

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# AUTOMATIC LAWN SPRINKLER

submitted to:  
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For: MET 497, Senior Project  
Date: April 12, 1982

## ABSTRACT

This report describes the design, fabrication and testing of an automatic lawn sprinkler. This system uses existing exterior water supply coupled with underground piping and pop-up sprinkler heads. A sensor and a relay control a solenoid valve, which in turn regulates the water supply. The sensor uses stepped down house voltage to sample the soil moisture content. A computer program was used to determine that the residential city water pressure was adequate. A mock-up fabrication is described along with the material list. Testing was done to determine that the sensor and relay would open and close the solenoid valve. This report also includes the cost of the mock-up fabrication and a cost for the production system.

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