- STOP 7 -

DEVELOPING LOW ENERGY MANAGEMENT SYSTEMS FOR LAWN TURFS Joseph Vargas, Jr.

As the cost of energy and water continue to rise, it becomes critical to search for management systems that will substantially reduce costs yet maintain stress tolerant functional turf. There are numerous individual areas where maintenance costs can be reduced. Some areas would be:

- 1. Use of slow-growing, drought-hardy pest resistant turfgrass species.
- 2. Find effective chemical growth retardants to reduce mowing costs.
- 3. Determine minimum acceptable fertility levels and continued evaluation long-lasting slow-release nitrogen formulations.
- 4. Use of curative pest control programs where applicable.
- 5. Use of environmental monitoring to predict application timing for preventive pest control programs.
- 6. Determine irrigation frequency and timing that maintains healthy turf with minimum water use.

This research area is 1 year old Adelphi Kentucky bluegrass. It covers nine 40x40 foot areas each with independent water control. The area will be used to evaluate minimum irrigation needs of lawns using improved Kentucky bluegrasses.