LARGE-SCALE TURF MAINTENANCE
—Care and Cost

By JOSEPH J. BAZZANI
Director of Building and Grounds
Great Neck Public Schools
Long Island, New York

The quest for excellence in the grounds maintenance program at Great Neck is literally a "grass roots" commitment. With 250 acres in buildings, woodlands, and grounds, some 80 acres are in turf grass. Operating on the basis that "if you do not intend to maintain school grounds, you should not develop them", our program to maintain these grounds is designed around the latest techniques in landscaping for utility and aesthetics and in record keeping for efficiency and economy.

A good turf maintenance program is vital to achieve this goal. It consists of seeding, fertilizing, mowing, irrigation, the use of pesticides in weed and disease control, cultivation, and trimming. In total, these things do not always conjure pictures of green grass and flowering shrubs. Those less concerned with aesthetics are, however, always interested in costs. The aesthetics and cultural care of good turfgrass are covered by the captioned picture story. The discussion is directed toward the record keeping required to evaluate costs.

Begin with the premise that qualified and interested personnel and proper tools and equipment are essential to the operation that attains a goal of excellence. It is not enough to annually ask for adequate staff and equipment. There is a responsibility to keep records and to furnish the information that will substantiate such requests. Standards should never be the least acceptable—they should be set at a professional level and the support for them must be aggressively sought.

This simple application of record keeping is recommended as a base from which the needs of each district will indicate the necessary degree of expansion of the system. It has been proved that, all other things being equal, a high quality maintenance level will be achieved, at no additional cost, where there is an efficient record keeping system. The following information is offered as a budget guide to the five major areas of turf maintenance costs. It is based on a recent study made by Economics Research Associates of Los Angeles, California, for Thompson Manufacturing Company. The percentages allow in general for the
Grounds at the Great Neck Public Schools are a study in variabilities — usefulness and aesthetics. With good turfgrass, athletic fields and playgrounds can be used under most weather conditions. Grass areas are safer for play, resulting in fewer skinned knees and elbows (below) while large athletic fields (above) are used for a variety of activities.
differences found in the various geographical areas.

**Labor** consists of wages, salaries and fringe benefits. It is the most substantial component of turf maintenance expense and it runs anywhere from 55% to 75% of the total cost. Therefore any improvements in the methods used will have a significant effect in decreasing the cost of the operation.

**Water Costs** are relatively stable and easy to record. For instance, in my school district there are two water companies which service our schools. One charges 25 cents per 1000 gallons, the other 75 cents per 1000 gallons. This usually runs 5% to 28% of the total cost.

**Supplies** for turf care include such items as fertilizer, lime, seed, herbicides and fungicides, gas, oil, and topsoil. This usually runs about 4% to 17% of the total costs.

**Equipment repair and replacement** include parts and repairs necessary to maintain equipment. Purchases of equipment should be prorated for the life of the equipment. These costs usually run from 4% to 18% of the total cost.

**Miscellaneous:** These costs are usually more difficult for a school district to assess, since they include such items as depreciation, general insurance, and utilities. They run from 1% to 5% of the total costs.

For implementation it would be necessary to identify on a per acre basis the five cost classifications as they relate to specific maintenance operations. If a “do it yourself program” is to be developed, daily records may be kept on a weekly chart for each classification by function. The charts would provide the detail needed to analyze costs of labor, equipment repair, and supplies by area. The utilities including water, insurance, taxes, equipment depreciation, and other miscellaneous items that are fixed costs can be broken down to a daily and weekly rate. From a total cost analysis such as this, an internal cost comparison can be made as well as a comparison with costs from other geographical areas.

The application of some form of simple record keeping system can be helpful in determining the true costs involved in a meaningful turf maintenance program. Armed with these figures and with the aesthetic arguments for enhancement of school environments and the appealing and functional nature of grass areas, when discussing annual budgets, it creates the proper climate allocating the necessary funds needed to do this job.

Properly cared for and adequately fed, grass can thrive in this shade or withstand heat buildup near brick and glass in other areas.

Grass can be useful in providing erosion control for sloping areas as well as an element in good landscaping design.