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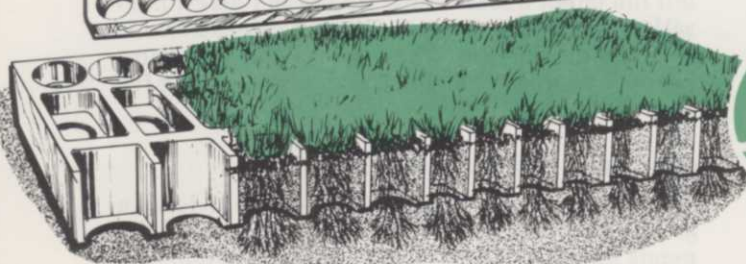
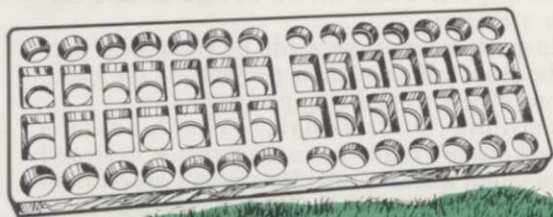
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Contractor/Architect Relationship

"By negotiating with the landscape contractor the architect can eliminate details that serve no functional benefit," Brickman says. "Too often we don't hear anything from the contractor until he is actually out there working," states William A. Behnke, president of William A. Behnke Assoc. in Cleveland, Ohio, and vice president of ASLA. At that time it is extremely difficult if not impossible to get an addendum.

Performance Delay

Two time factors work against the landscape contractor. The first is the delay of a year or more between bid acceptance and actual performance. Not only does this make estimating costs difficult, it ties up performance bonds for the period of the delay, which is longest for the contractor since he is the last to finish.

"By the time the contractor walks on the job, costs have escalated beyond the contract price and the profit is almost gone," Carpenter points out.

A task force organized by ALCA and ASLA studied performance delays and other problem areas between contractors and architects. In the report the task force recommended these methods of counteracting delays:

- contact the growers of plant materials immediately after contract award, and periodically during any delay period. Issue purchase orders immediately after contract award.
- negotiate with growers for contract growing where possible. A performance bond or insurance should be provided by the grower.
- document the cause of any delays in a letter to the owner with price increases.
- discuss partial prepayment for plant materials and storage locations with the architect and owner.
- if a retainer is held, there should be time limitations and provisions to accrue interest.

The second time factor working against the landscape contractor is the rush for completion. The contractor is on the tail end of a project and everyone is waiting to get their retainers back.

Furthermore, completion is hampered by clean-up and poor site preparation by excavators responsible for grading. These are tasks often put on the contractor but not mentioned during the bidding process. Not only do they slow the contractor down but they increase his costs and reduce his profit.

Often the contractor is pressured to install plants out of season. This complicates guarantees.

"To avoid unexpected jobs the contractor should convince the client and the architect that the landscaping should be a separate contract," Carpenter says.

"This forces the general contractor to finish his work and clean-up so he can get paid."

"The contractor often has to take care of other people's problems," Behnke states. "For instance, if there's a trench that sunk and the landscaping is already in, it's not his fault the trench sunk. It was the general contractor that trenched that. The site contractor is not going to go back to the plumbing contractor because he'll have to bring him back on

the job. He is going to try to get the landscaper to handle it."

Robert Thomas, partner in Behnke Assoc., mentions problems with turf, "If the topsoil isn't re-spread to specifications by the site contractor and the grass planted by the landscape contractor fails, usually the landscape contractor is expected to do the work over under his guarantee."

Inspection by Architects

Smooth implementation of landscape specifications can be helped by periodic inspection by the architect. The prebid conference may clarify some points, but inspection by the architect during planting phases reduces the chance of rejection of the job by the site contractor.

"Inspection procedures are not clearly enough defined to protect the architect, contractor and owner from improper bidding or execution by unscrupulous operators." Task Force.

The ALCA/ASLA task force describes the role of the architect during implementation as inspecting the quantity, quality, storage, handling, planting and maintenance of plants.

The task force said the contractor should request prompt inspection on completion of each phase of the work. The landscape architect should be prompt in his inspection and notify all parties concerned so corrective action can be taken.

"Inspection procedures generally are not clearly enough defined so as to protect the architect, contractor and owner from improper bidding or execution by unscrupulous operators."

The task force made these recommendations to help solve the problem:

- inspection procedures should be spelled out at prebid and preconstruction conferences.
- an inspection cost should be figured into bids by the architect.
- inspections must be made by competent people who are familiar with the project and the specifications of the work being performed.

According to Brickman, "The landscape architect doesn't really have the position to go and tell the client about terms. He doesn't assert himself in the bidding process. When it comes down to supervising the job when his talents are most needed, he doesn't have enough money in the fee to go to the site."

Guarantees and Maintenance

Guarantees are often required for at least a growing season. But survival of plant material depends upon the quality of the plant, location of a plant, drainage, and maintenance. The contractor

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Jacobson and Teetrum ink a sale agreement

James H. Jacobson, 81, has signed an agreement to purchase the 100-acre industrial site in Northbrook, Ill., owned by Teetrum Manufacturing Co., Inc.

The agreement calls for the purchase of the site by Teetrum, which is owned by the company's management team and operated as a joint venture.

The agreement was signed on March 15, 1988, and the purchase price is \$12 million, according to the agreement.

U.S. patent issued for new E-control equipment

United States patent for a new E-control equipment has been issued for the first time, according to the Patent Office. The patent was issued to E-control Systems, Inc., of Northbrook, Ill.

The patent covers a new method of controlling the speed of a motor, which is used in a variety of applications, including the control of a motor in a power tool.

The patent was issued on March 15, 1988, and the patent number is 4,782,111.

Lawn manufacturers association formed

Representatives of the lawn and garden industry have formed a new industry-wide association to promote the growth of the lawn care and garden industry.

The association was formed by Edward J. Teetrum, president of Teetrum Manufacturing Co., Inc., and other industry leaders. The association's first meeting was held on March 15, 1988, in Northbrook, Ill.

The association's primary objective is to establish a code of ethics for the industry and to promote the growth of the lawn care and garden industry. The association will also provide a forum for industry leaders to discuss industry issues and to promote the industry's interests.

Do you employ an agroonologist?

Lawn care companies across country get late work start due to weather

A new study has shown that lawn care companies across the country are starting their work later than they should due to weather conditions. The study found that the average start time for lawn care work is 10:30 a.m., which is later than the ideal start time of 8:30 a.m.

Minor safety standards to come by year's end

The Consumer Product Safety Commission (CPSC) has announced that it will issue new safety standards for lawn care equipment by the end of the year. The standards will cover a variety of equipment, including lawn mowers, trimmers, and blowers.

The standards will be based on the CPSC's recent recall of a number of lawn mowers that had a safety defect. The standards will require that all lawn mowers sold in the U.S. after the end of the year must have a safety feature that prevents the mower from starting if the blade is not properly installed.

The standards will also require that all lawn mowers sold in the U.S. after the end of the year must have a safety feature that prevents the mower from starting if the blade is not properly installed.

QUICK STARTS

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Contractor/Architect Relationship

may have only limited control over any of these factors.

These factors should be discussed at prebid conferences and worked out prior to contract.

If maintenance is to be performed by the contractor it should be under a separate contract.

In the case of lawns, the architect should inspect grading of topsoil, drainage, and test the soil prior to the contractor's installation. Results should be documented to the client and adjustments recommended before the contractor starts working.

Guarantees should not be given without some control over maintenance. If the client is going to do his own maintenance, his program should be checked and documented. Proof of maintenance should be required if any claim to the guarantee is made.

Installation of grass or other plant material should not be done out of season when chance of survival is low. Proper timing of installation should be discussed at prebid conferences and included in specifications.

The Landscape Architect

The basic point to remember about the landscape architect is that he sees the project as more than individual plants. He sees it as a total impact of plants, walls, sidewalks, fences, and contouring. He must take into consideration drainage, utilities, irrigation, traffic, textures, and parking. Often he will consult an arborist, horticulturist or contractor about plant selection and use.

The landscape architect takes all these points and puts them into a graphic plan and a list of specifications. His responsibility is the total package. His package must fit in with the package of the building architect too. The landscape architect must work around what the building architect has already decided.

"Too often the landscape contractor doesn't distinguish between a building architect who has very little knowledge of plants, and a landscape architect who has a respectable degree of knowledge about plants," Carpenter says. "It varies with the school, but landscape architects generally have a year of plant identification and selection. This may be taught by other architects or by the horticulture department as is the case at Ohio State University."

"Generally, the landscape architect has enough knowledge to make overall basic decisions and to know when he needs a specialist," Behnke states. "We use the extension services or an arborist when we have questions."

Nationwide, 1,100 landscape architects graduate each year. Mississippi State has developed a landscape contractor program. It includes construction and business courses as well as plant information courses.

The landscape architect sees his plans as a creation, a thing of beauty. When a contractor doesn't respect this fact, the architect gets perturbed and sees his work being defiled. The landscape architect is very possessive and proud in his design. The contractor should understand this.

"The implementation of the design affects the overall impression regardless of how good the design is," Ed Able, executive director of ASLA, points out. "If it is not implemented properly, the whole impression fails. A less than pleasing product reflects more on the architect than on the contractor who implemented the design improperly."

At the same time, architects must realize that the contractor has daily exposure to certain types of plants in their area. They may be more familiar with failures and other problems characteristic to an area. If they see the problem plant in the specifications, they will bring it up and should be listened to.

Communication

The best solution to nearly all the conflicts between landscape architects and contractors is good communication. Respecting each other's knowledge, the two professionals should discuss specifications, payment, guarantees, improper acts by other contractors in the building contract, and anything that cuts into the profit of the job.

One method of improving communication is for the contractor and architect to join together into one firm. Known as design/build companies, they work often from a single contract for both design and construction. There aren't many large design/build firms in the U.S., but they are growing in number, especially in areas where the architect is not strongly based.

Another scale of design/build is the nursery or contractor that performs simpler designs for small commercial and residential construction. As these firms grow, however, it would be wise for them to hire a trained landscape architect for bigger design projects. The young landscape architect should be paid approximately \$12,000 per year.

John Shaw, executive director of ALCA, states, "The more you integrate design, construction and planting materials, the better job you'll get because of communication. You'll also get more for the money and the least variance from specifications."

"It is sort of a construction management process which is becoming very common in the construction industry," Brickman remarks. "Design/build is growing because the client can be assured that the job will be done for the established budget and that good firms will produce a creative product."

Brickman continues, "The design/build concept goes against the old professional code that the landscape architect should not derive a financial benefit from the supplying or installation of a product he designed." The value of this idea is questionable as shown by the success of design/build.

ALCA and ASLA are working closely together to improve the architect/contractor relationship. Task force discussions are being held periodically across the country. Contractors might want to consider joining ASLA as affiliates. They can meet primary architects in their area through ASLA. They should also join ALCA to benefit from the progress it has provided its industry. Bruce Shank

WT&T
PROFILE

THE ATHLETIC FIELD MANAGEMENT MARKET



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ATHLETIC FIELD MANAGERS SAY BUDGETS ARE TOO LOW

Nearly two thirds of athletic field managers polled by Weeds Trees & Turf think their budgets for maintaining turf on athletic fields are inadequate.

Furthermore, inconsistent management structures of athletic fields and a lack of industry organization make pinpointing general characteristics difficult. Consequently, manufacturers may find it difficult to locate the person with purchasing responsibility and to better meet the needs of athletic field managers.

Pinpointing the person responsible is also a problem for trade journals trying to serve athletic field managers. This was a factor in the survey which received only a nine percent return out of 1,000 individuals polled. The 90 persons responding had 35 different titles.

According to the "Statistical Abstract of the United States", published in 1977, there are 2,700 commercial sports establishments, roughly 110,000 educational facilities with fields, and at least 19,000 municipal and county parks with fields. There should be at least 131,700 managers of athletic fields in the U.S. Using the median annual field management budget of \$10,000, the market has a conceivable value of \$1.3 billion annually!

More than 70 percent of the respondents manage park (42 percent) or university (31 percent) fields. Fifteen percent manage high school fields, 11 percent municipal stadiums, eight percent middle and elementary schools, and only two percent private stadiums.

The respondents manage from 12 to 3,750 acres, with a median figure of 173 acres. Athletic fields are one part of the total acreage managed.

The managers have an average annual budget, not including labor, of \$14,081. Figures ranged from \$275 to \$90,000. Sixty-three percent said their budgets were too small to maintain fields at a desired level. Thirty-seven percent said their budgets were adequate. Those responding negatively said they needed an average budget increase of 54 per-

Months Supplies Are Purchased.

Month	% Buying Chemicals	% Buying Equipment
January	7	8
February	12	9
March	21	16
April	18	14
May	9	9
June	5	8
July	4	8
August	7	8
September	7	5
October	5	6
November	3	4
December	3	5

Where Purchases Are Made

Item	Percent	Local Dealer	Manufacturer	Nursery
fertilizer	92%	71%	27%	2%
herbicide	82%	75%	25%	0%
seed	85%	76%	20%	4%
soil amendments	58%	76%	20%	4%

Equipment Owned by Respondents

Type	Percent	Mean	Leading Brands
Aerator	63%	2.0	Ryan, West Point, Jacobsen
backhoe	36%	1.1	Ford, John Deere, Case
broadcast applicator	77%	1.6	Lely, Cyclone, Scotts
line sprayers	38%	1.8	Hudson
mower	93%	4.5	Jacobsen, Toro, National
sprayer	60%	1.4	Meyers, Bean, Hudson, Broyhill
thatchers	26%	1.0	Ryan, Jacobsen
tractors	91%	2.2	Ford, John Deere, International Massey-Ferguson

cent to obtain desired results. One individual said he needed a 300 percent increase.

Most purchasing takes place from February through May (see table). Fall buying does not appear as common as in other Green industries. Three fourths of chemical and seed buying is done with local dealers. Five percent said bids are required.

Despite dominance of spring and

late winter buying, applications of fertilizer, herbicides, amendments and seed follow typical timing with spring and fall applications. Only six persons said they apply fungicides to athletic fields. Post-emergent herbicides are used to a far greater extent than pre-emergents.

The average amount of granular fertilizer purchased is about six tons per year. Liquid fertilizer is used in

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The Bill Voorhees Company
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(615) 242-4483

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(804) 353-7806

by less than five percent of the respondents. Managers purchase an average of only 525 lbs. or 80 gal. of herbicides.

Managers purchase an average of 900 lbs. of seed per year, with a median of 300 lbs. The same amount of amendments are purchased as fertilizer.

Forty percent said they resod their athletic fields with 20 percent resodding annually. The average expenditure for sod was \$1,200. Three persons cut their own sod.

The primary grass seed used is bluegrass (63 percent), with rye (58 percent) and fescue (51 percent) close behind. Twenty percent use bermuda, which corresponds with the percentage of managers in southern states responding to the survey. Five percent indicated use of synthetic turf.

The dominant types of equipment used to maintain athletic fields are tractors, mowers, sprayers, and broadcast applicators (see list).

Sixty-three percent also have aerators.

Quick coupling systems were the most common type (64 percent) of irrigation system used by respondents. Automatic systems are used by 36 percent. Seventeen percent indicated they had no irrigation system, although three persons said they used portable tanks for watering fields. Five percent use effluent water for irrigation.

The average size of staff under the manager is six persons, with a median of five.

Baseball fields are the most common type of field maintained. Football and soccer fields are the next most common types of fields maintained. Nearly three times as many baseball fields are maintained as soccer or football fields. A third indicated they managed stadium fields. More than 40 percent manage fields with bleachers and the same percentage manage practice fields. **WTT**

One example of the materials applied to football, soccer, and practice fields in the cool season turf area:

FOOTBALL FIELD: 2½ acres

April—1st week—Aerify four (4) times
 April—1st week—Overseed with Victa/Baron Blend—25# per acre
 April—1st week—Starter fertilizer w/Pre-Emergence—485# per year
 May—3rd week—Dry fertilizer plus dicot weed control 330# per year
 May—3rd week—Weedgrass preventer 370# per year
 June—2nd week—Aerify four (4) times
 June—2nd week—Dry fertilizer plus insecticide 450# per application
 August—2nd week—Dry fertilizer plus insecticide 450# per application
 September—2nd week—High density fertilizer 330# per application
 October—2nd week—High density fertilizer 330# per application
 November—2nd week—Overseed with Victa/Baron blend 25# per acre
 November—2nd week Aerify four (4) times
 TOTAL COST\$1,403.00

PRACTICE FIELDS—9 acres

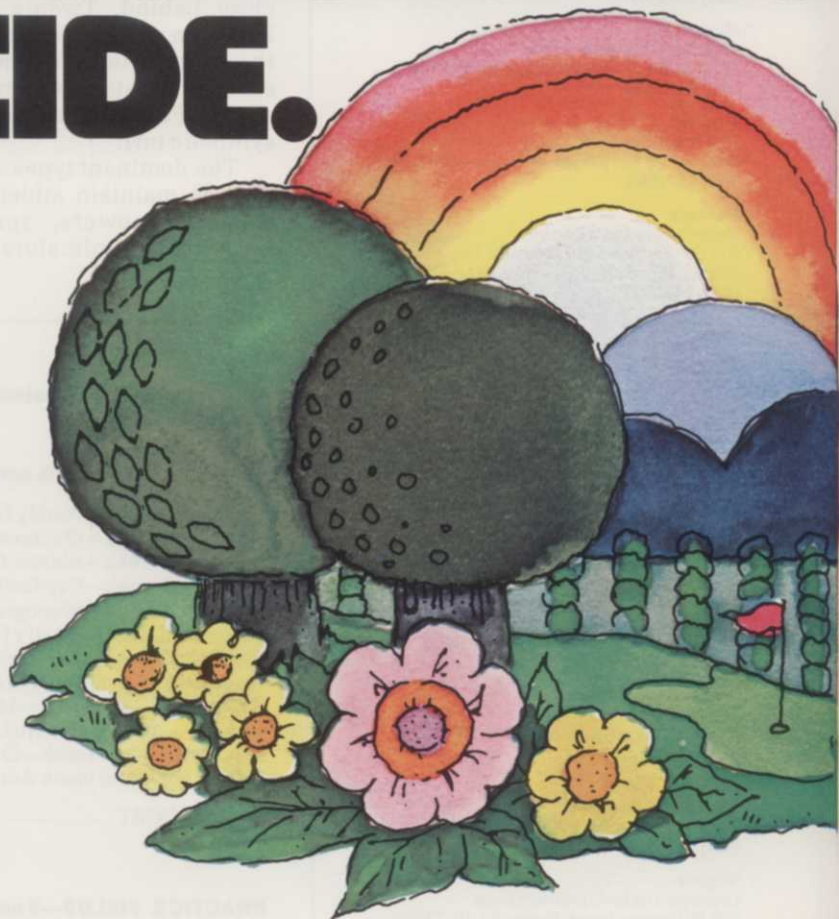
April—2nd week—High density fertilizer 1188# per application
 June—2nd week—High density fertilizer 1188# per application
 August—2nd week—High density fertilizer 1188# per application
 November—2nd week—Athletic Blend 30# per acre
 November—2nd week—Starter fertilizer 1584# per year
 TOTAL COST\$1399.00

SOCCER FIELD — 2½ acres

April—2nd week—Fertilizer with weedgrass preventer 370# per year
 May—2nd week—Fertilizer plus Dicot weed control 330# per year
 June—2nd week—High density fertilizer 330# per application
 August—2nd week—Fertilizer plus insecticide 450# per year
 September—3rd week—High density fertilizer 330# per application
 TOTAL COST\$695.00

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