BUILDING A PROFESSIONAL SHOP AT THE SCHOLASTIC LEVEL

The Grounds Maintenance Shop should be the hub of all of your daily activities. It’s where you start and end the day. The condition of your shop can set the tone for your entire operation. Whether you have a new, state of the art maintenance facility or a leftover storage room under the visitors’ side bleachers, it should be well organized, functional, and a source of pride for you and your crew. When the time comes to start thinking about a new shop, dreaming about what it could be should be the first step.

If the budget was unlimited and you could build what ever you wanted, what would your new shop look like? Would it be the size of a football field? Be heated and air conditioned? Would each piece of equipment have its own bay? How about some equipment lifts and a welding fabrication area? You could have a several large offices. How about a conference room, a locker room, and a break room with a kitchen? Why not? This may just be a dream but it should also be the first step in the process. Remember though that your “dream” shop should be based on the “wants” of your current operation. In other words, don’t dream about a shop large enough to service a fleet of trucks if your largest vehicle is a golf cart. First, you must have some concept of what you really want in this facility. From that, determine what you really need. Then you can prioritize based on what you can afford.

Convert dream into plan

You may want a shop the size of a football field, but do you really need it? If you were going to cram all of your trucks, trailers, and equipment into one room, how big would that room need to be? Now park your trucks and trailers back outside where they belong. Then cut the size of that room in half, making sure that the room is at least as wide as the length of your largest truck and trailer. Put a garage door at both ends of the room so you can drive that truck and trailer in one end and out the other. Now you have an estimate of the size of shop you need.

I realize this formula will not work for everyone, but the point is that it is an estimate based on facts rather than a number pulled from a hat. Do your homework. Put together a detailed proposal for the shop you need. Include pictures of your current shop or storage area along with pictures of any equipment that is stored outside. Although it may be inadequate, make sure that your current storage area is clean and well organized. If your current space is untidy and poorly organized, your funding request for more space will probably be denied.

Consider future growth when planning your new shop. Make sure the building is fairly easy to expand at a reasonable cost. A higher ceiling height will allow adding storage space without increasing the footprint size of the building by installing additional pallet racks or even an elevated steel mezzanine above your mowers and other equipment. At about $15 per square foot, this is the least expensive way to add floor space within an existing structure. Tour other facilities that are similar to what you want to get ideas.

Put a price on it

You must have some idea of the cost of your project before you can ask for funding. This can be more difficult if you don’t know much about building construction. According to Monte Soukup, assistant director, design and construction management for the Blue Valley School District, “Construction costs will vary greatly from state to state depending on local building code restrictions, site conditions, and proximity to utilities.”

The only way to be certain about the cost of your project is to have it professionally designed and engineered. Generally the fees for this service are based on a percentage of the overall cost of the project and would likely have to be contracted...
up front. This may not be possible especially if you just want a “ballpark” figure.

Based upon the actual costs to build the Blue Valley Grounds Maintenance Facility in 1999 and inflated to 2004 at 3% annual inflation rate, Monte was able to break the costs into general unit costs that may help you to place a “ballpark” cost figure on your plan.

Building. 7,200 square foot clear span wood structure building, insulated and clad inside and out with metal, 16-ft. ceiling height, two 14' x 14' foot overhead doors, ventilation, concrete floor slab, and approaches is approximately $30 per sq. ft.

Power. Electrical service, interior and exterior metal halide lighting, fourplex outlet every 10 feet, connections for a welder, power washer, equipment lift, etc., adds approximately $7 per sq. ft.

Plumbing. Floor drains, large volume water service for tank filling, power washer, hand wash, emergency eye wash/shower, multiple hose bibs, plumbing for tank rinseate recovery, etc. adds approximately $2.50 per sq. ft.

Heating. Forced air heat capable of modulating outside air to maintain acceptable indoor air quality will add about $6 per sq. ft.

Parking. The cost to add asphalt paving around the outside of the building will vary depending on the need for excavation or an engineered base, but the average cost for paving on grade is about $45 per square foot of paved surface.

Offices/restrooms. Generally, air conditioned office and restroom space costs much more per square foot than the shop space. A more economical way to add this space is to construct it inside the shell of the original 7,200 square feet. By doing this, air conditioned space for offices, restrooms, conference room and locker room could be added for about $45 per sq. ft. of air conditioned space only.

Miscellaneous. General conditions, overhead, and profit are not figured into the square foot costs. In general this would run 8-10 percent of the construction cost on this type of project.

The total cost for our building was around $75 per square foot. For comparison purposes, a pole barn with a concrete floor would cost approximately $25 per square foot. Every grounds maintenance operation is different and you must determine what a “reasonable” maintenance facility would be for your situation.

Justifying the funding

Be patient. This process could take several years because you’re ask-
around the grounds

equipment, thus lowering your monthly payments. These are examples of real cost savings and if you add them up over time, it could be a significant amount of money that could really help you to justify the initial cost of your new shop.

Dave Hill, Blue Valley executive director of facilities and operations, has determined the fate of many facilities and equipment funding requests. "When reviewing requests for capital funding, sometimes I am looking for a return on the investment or a payback within a reasonable amount of time. Sometimes the funding is needed to maintain current levels of quality or to continue to meet the expectations of the patrons," he says.

There are some things you can do to increase your chances for funding approval. "It is important to articulate exactly how the organization will benefit if the request is funded. The amount of effort you put into the request should be equal to the amount of funding you are requesting," Dave says. "Never be unreasonable, request an amount that is within the limits of the organization's ability to fund."

There will always be times when no matter how thorough your homework or how urgent the need, the answer is no. In that case, Dave offers this advice. "Don't ever give up. Don't lose the passion. Keep asking and continue to demonstrate excellence in everything you do as a sports turf manager."

The sports turf managers I know in Kansas City are very talented and competitive. If they were given a push mower and a rake they would use those tools to make their fields the very best they could be. That is exactly the attitude you need to have toward building a new shop. Make your current maintenance shop the best it can be. Keep it clean, organized, and functional but continue to document how a new facility would increase the productivity and efficiency of your operation.

Jody Gill is the Grounds Coordinator for the Blue Valley School District in Overland Park, KS.

COOLING PAD

The Chilly Pad is made from a new hyper-evaporative material that retains water while remaining dry to the touch. When wet, the towel becomes considerably cooler than the outside air, thereby keeping workers cool. Machine washable. When effectiveness lessens, you re-wet the towel in either warm or cold water and wring it out. frogg toggs/800-364-1835 For information, circle 103 or see http://www.oners.ims.ca/2909-103

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Jody Gill is the Grounds Coordinator for the Blue Valley School District in Overland Park, KS.
MANAGE TIME & ATTENDANCE

The Jobclock system is a hardware and software package that provides remote time and attendance management. The time clock is about the size of a padlock and can be affixed to and left at a jobsite. Self-contained, the product enables employees to clock in and out by using keytabs they carry on their keychains. Then you can go anytime to site and collect attendance records by using infrared port of Palm Pilot.

Exaktime Inc/888-798-8443
For information, circle 115 or see http://www.oners.ims.ca/2909-115

MONSTER BROOM

Midwest Rake's 7-ft. Double Play Monster Broom is two tools in one. The short triangular tooth works great to loosen up compacted soils. Simply flip the broom over and the bristles are excellent for final finishing. The aluminum head comes with 2 rows of replaceable bristles.

Midwest Rake/800-815-7253
For information, circle 113 or see http://www.oners.ims.ca/2909-113

POLESAW

The new, patented Remington PoleSaw Wizard does away with the danger of climbing a ladder with a chain saw to cut limbs. This 2-in-1 tool cuts branches 15 ft. high, and easily converts to a conventional chain saw for other jobs.

Remington/800-858-8891
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**PRUNER**

The Remington Branch Wizard is an alternative to manual pole pruners. This tool has a 6.0 amp motor that cuts through branches up to 6-in. thick. It can reach branches up to 12 ft. high while you’re on the ground. It comes with a lightweight, rust resistant fiberglass pole along with limb gripping teeth.

Remington/800-858-651
For Information, circle 111 or see http://www.oners.ims.ca/2909-111

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**MODULAR TURF DVD**

Michigan State University pioneered modular turf, creating the playing field for the 1994 Soccer World Cup. Researchers brought the technology home in 2002 for a new natural grass surface in Spartan Stadium.

To help football fans, turf industry insiders and others understand the technology involved in the field’s transformation, “Back to the Roots,” a 40-minute DVD was produced. Copies are available.

MSU Extension Educational Materials Distribution
517-353-4744
For information, circle 104 or see http://www.oners.ims.ca/2909-104

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**POND CIRCULATORS**

SolarBee solar powered floating pond circulators eliminate blue green algae blooms and increase the water clarity without the use of chemicals or grid energy. The new small model, the SB1250 with 1250 gpm of flow rate, has a brushless motor and battery power storage for 24-hour/day operation. For ponds and lakes up to 5 acres or more.

SolarBee/866-437-8076
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Airlessco FIELD STRIPE piston powered airless striper/sprayers are capable of spraying undiluted paint at up to 3000psi to put down solid straight lines on sports fields and spray paint field stencils, backstops, buildings, or cover graffiti. With models starting at $1795, their flexibility makes them a smarter investment for universities, schools, parks departments, and sports programs.

**SAFETY GLOVES**

SilverBack magnetic powered gloves are now being offered by Compliance Safety. The brand features magnets mounted on the back of each glove that are strong enough to hold parts, fasteners and tools for on-the-job accessibility. Also feature a half finger design that provides the user increased flexibility and accuracy.

Compliance Safety/800-340-3413
For information, circle 107 or see http://www.oners.ims.ca/2909-109

**FLOOR COATING**

Garon Products has Concord, a general-purpose floor coating that provides a dense seal that is abrasion and dirt resistant. Product seals and coats traffic areas and protects against yellowing, and resists mild acid and alkali fumes, oil and grease, gases, and steam.

Garon Products/866-621-6386
For information, circle 105 or see http://www.oners.ims.ca/2909-105

**ELECTRONIC RAT TRAP**

Victor has introduced an electronic rat trap (ERT) that is easy to use, easy to bait and easy to clean. The trap activates when the rat completes the circuit by touching the metal plates inside the plastic housing; voltage applied by the trap will break through the rat's callused skin, claws and dirt, and will prevent even large male rats, from escaping.

Woodstream Corp/ 866-800-1819
For information, circle 108 or see http://www.oners.ims.ca/2909-108

**TRANSITION ZONE MANAGEMENT**

"Turf Management in the Transition Zone" is a new book from John Wiley & Sons written by John Dunn and Kenneth Diesburg. Helps managers understand growth cycles of cool-and warm-season grasses, discusses cultural practices, as well managing climate-specific diseases and insects.

John Wiley & Sons/800-225-5945
For information, circle 109 or see http://www.oners.ims.ca/2909-109