

Small plots in strip malls usually require a production rate based on hours of labor by task and a standard hourly rate for the piece of machinery used.

MATCHING BIDS WITH JOB COSTS

Northwest Landscape Industries has found that the best route to the land of profits is through efficient estimating and job-costing.

by Dick Landis

Landscape contractors know that accurate and profitable bid proposals are one of the keys to staying in business. Jim Wathey, vice president of Northwest Landscape Industries, Portland, Ore., believes the best way to make sure those numbers are valid is to integrate bidding and job costing.

Northwest feels its bidding process is what gives the company its competitive edge. Wathey's goal is a system that generates numbers at least 80 to 90 percent compatible between the

bidding and job costing.

"From the beginning, we wanted to be able to compare bid estimates with actual costs as the job progresses and learn from our experience," he notes. "Our problem was matching the actual job costs to the level of detail we used when we put the bid together. One answer was to simplify the bid proposals."

Composite vs. standard

For years, Northwest compiled its production rates and tried to break

them down by individual tasks for 700 to 800 maintenance accounts. "When we attempted to establish a production rate for a 21-inch mower, we had 70 route foremen sitting down at the end of a long, hot day figuring out how much time two or three guys spent mowing," Wathey explains. "The information just wasn't accurate, so we went to composite bids and used packaged production rates because they made more sense."

The composite rate is based on hours of labor by task and a standard hourly rate for the piece of machinery used. It is still difficult, however, to

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—Jim Wathey
Northwest Industries

match bids to actuals for the 400 Portland and 300 Seattle lawn maintenance jobs which are 45 percent of Northwest's workload. That's because the company offers a full service package and charges a monthly rate.

Northwest has to estimate the costs of all the maintenance activities, match them with the size of area to be maintained, determine the type of equipment to be used and consolidate the figures to come up with a lump sum for that job.

Business parks like the Nimbus Technology and Koll Business Centers in Beaverton, Ore., have very similar edging, string trimming and mowing requirements and are physically alike enough so that Northwest doesn't have to measure every square foot of turf. They cluster these accounts by number of areas, total square footage and the type of machine to be used.

Standard production rates don't fit the wide open mowing areas at the Fujitsu America and Centerpointe properties. Here, Northwest uses more cost-efficient reel mowers so a different production rate is required. "If you've got wide open turf areas—25,000 to 30,000 square feet—you'll have a 30,000-square-foot production

rate," Wathey says.

The mall factor

"Strip malls like those at Martinazzi Square in Tualatin, Ore., have a little patch of turf in front of each door. A standard production rate doesn't cover that situation either, so we do a composite on those. Also, when you're bidding a new account, the risk is always higher because you don't

grams for annuals and irrigation that require separate bids. The annuals program is packaged with initial bed prep installation and maintenance that includes anywhere from one to three or four plantings a year plus changing pots throughout the year.

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year."

Maintenance job costing is more subjective. Northwest found the best way to assure accuracy is to have its estimator do a study of each crew over a period of time. Wathey's department knows how much footage there is in an account; they actually go out and track the people working at that account. That way, they get an estimate based on experience.

Basically, Northwest uses turf square footage and bed square footage for measurement as opposed to, for example, tracking weed control in the beds. In addition, Northwest has a category that includes all the oddball things people want.

"If a customer wants ornamental pruning, we keep track of those hours extra," Wathey says. "You can spend a lot of time pruning roses. Then there's bark dusting and, once in a while, people want us to paint bike stands."

Fully computerized

The main office in Tigard, Ore., handles all the financial accounting, job costing and purchasing functions on a DEC mainframe computer. The Seattle branch handles its own bidding and estimating using an IBM-compatible computer and Lotus spreadsheets. Even though the estimating process is not automated in Portland, Wathey maintains compatibility by using the same system manually.

According to Wathey, the computer makes bid preparation and job costing much quicker, particularly when he is reconciling bids with the actual expenses. The spreadsheet is



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know the routine. However, it almost always evens out."

Other landscapers actually cost each of the activities to reach an estimate; some even take it farther and cost the job by size of area and type of soil. Each step incorporates labor, material, supply costs and equipment as well as the costs to transport it to the job site, but Wathey says it isn't cost-effective to develop a bid at that level of detail.

On the other hand, a "packaged" production rate is a little simpler. For example, if a project had 45,000 square feet of turf broken down into 40,000 square feet of wide open lawns and 5,000 square feet of small lawns, Northwest would bid it at 6.5 hours per "mowing visit." The "mowing visit" would be broken down into 3.0 hours on large mowers for the wide open space; 1.5 hours using 21-inch mowers on the 5,000 square feet; 1.0 hour for edging, blowing and clean-up; 0.5 hour to police the site for litter and weeds; 0.5 hour in travel time.

Month by month

Since Northwest's maintenance contracts are set up as 12 equal monthly payments, the computer bid format is designed to do the man/hour splits by month automatically as part of the estimate.

Northwest also has service pro-

grams each season," says Wathey. "Our first crunch is at the end of April. We have to be done by the end of June, which takes a lot of manpower in a short period of time. Afterwards we review the information to see how we came out. Generally, we're not off too much."

Reliable numbers

After getting the job, Northwest budgets man-hours by month, based on the type of work during that season. Wathey also developed a data collection system that yields better figures at the job cost end.

"The difficulty was in making sure employees kept track of meaningful numbers. We tried timecards and the accounts payable module of their mainframe software system, but the laborers just couldn't handle it. Now, I have the foremen fill out worksheets by the job, and the numbers are a lot more reliable."

Supervisors use the time sheet for each account to track travel time and time spent on the job. At the end of every month, they get a rundown of how many hours they used on that account, versus what they bid. "It always has to be adjusted and then averaged over the year to see if they are on target," acknowledges Wathey. "We then give them a year-to-date total so they can see how they did for the

The best way to assure accurate maintenance job costing is the study each crew over time.

also more accurate. With a maintenance contract, there are a lot of exceptions based on the type of grounds and the type of work the customer wants done. Because of the way the spreadsheet is put together, it's hard to leave anything out of the bid.

"When we match the bid with actual costs, the information from the field is broken down by hours on the job," Wathey notes. "We also incorporate overhead into an hourly rate. We keep a record of how many chargeable production hours we have every year

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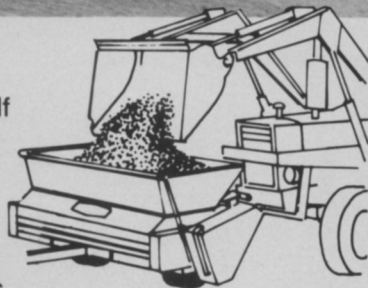


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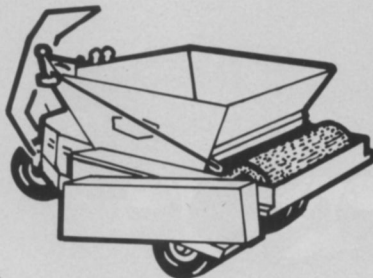
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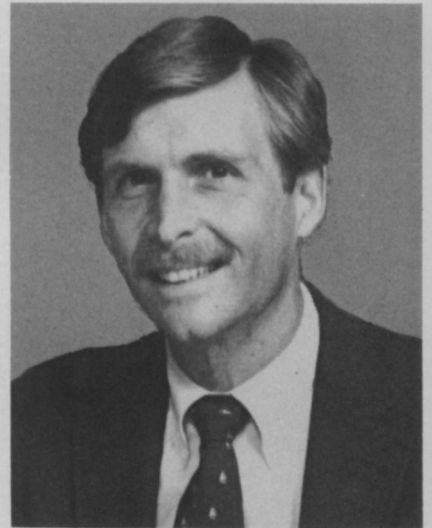
to figure out what kind of rate we need to charge to recover overhead and make a profit.

"Charges run 7, 10 and 12 percent based on the size of the account. The bigger the account, the less overhead."

Tracking material cost

Materials are kept track of separately. Every year Wathey develops an operating budget using historical records to determine square footage costs for materials. They don't keep track by account. It's all done at the fiscal budget level.

The materials management system is controlled by matching actual use against a budget prepared by supervisors when the contract is awarded. The exciting part is that the computer does all the calculations for them. "All I have to do is review it and see if it makes sense," Wathey says. "If a bid



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is way off, we go back to the customer with the numbers on a computer print-out."

Over the next year, Northwest will be converting the Dec Vax and Rainbow PCs in Portland to an IBM 386 compatible network. "When we needed a computer in Seattle, we went with an IBM compatible rather than continue to invest money in obsolete equipment. By using the computer system, composite rates and turf routes, and doing good follow-up evaluation, we've had excellent experience matching our actual costs to our budget figures. Now we want the whole system integrated so we can take advantage of MSDOS landscape programs as well as our Lotus and WordPerfect programs," Wathey concludes.

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