

# Business

## Remodeling Without Losing Your Shirt

by Bob Kovacs

**E**stimating combines science and art. The science part is straightforward enough: The prints show the square footage or linear footage for some item, so you do a takeoff and that's how much you budget for.

The art involves looking at a set of prints and recognizing the intangibles that aren't spelled out.

### The Golden Rule

I have an old estimating manual that contains something called the Golden Rule of Estimating, which says, "Consider not only the cubic foot, cubic yard, linear foot, square foot, pound, or ton, but all of the complicating conditions encountered in putting the material in place."

Sure, the language sounds dated, but it's great advice, and the principle holds true for any project ever estimated.

In this article I will look at some typical estimating pitfalls that contractors are prone to. Most of the examples come from remodeling projects, but the same

issues apply to new construction. The point is to get you thinking about how to approach estimating so that errors don't happen. Deriving quantities is easy; it's the thinking behind the pricing process that can make or break your profits.

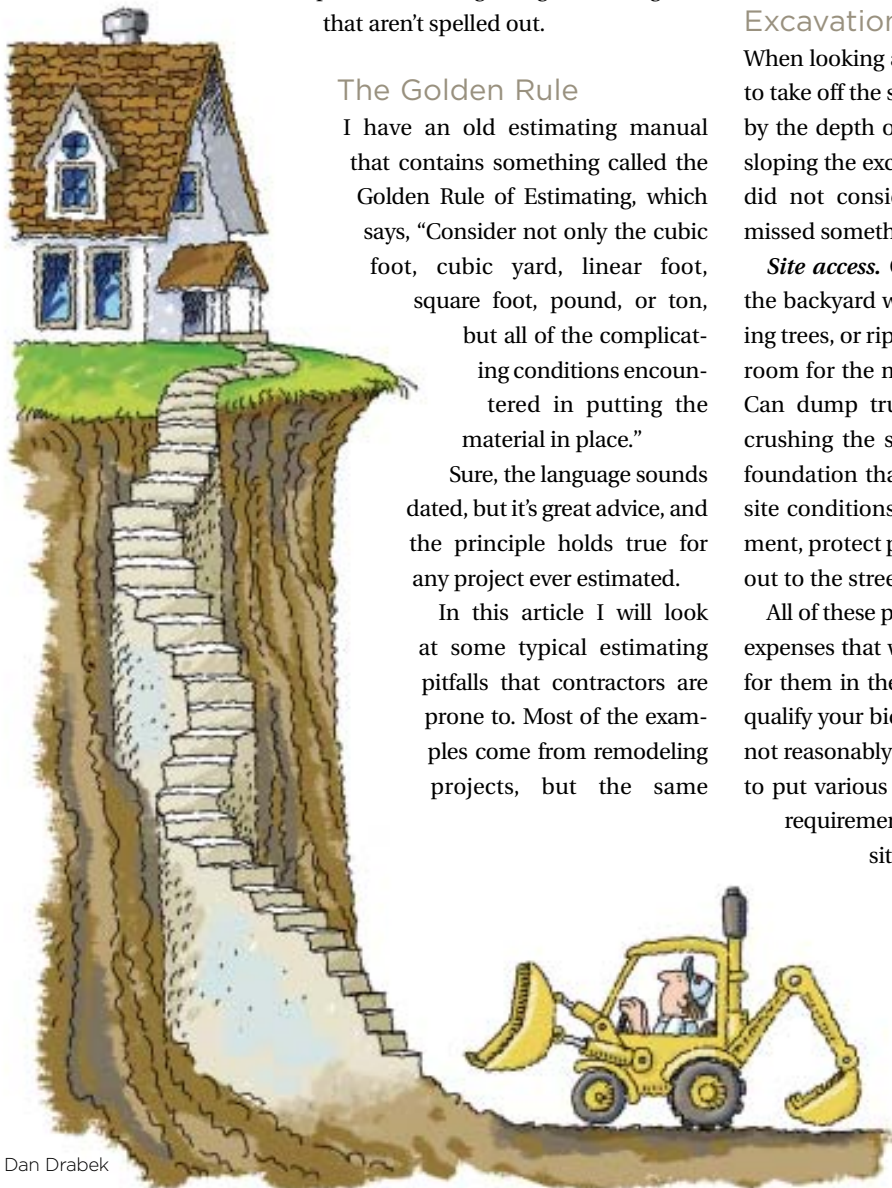
### Excavation

When looking at the plans for an addition, it's tempting to take off the square footage of the new room, multiply by the depth of the foundation, add for overcutting or sloping the excavation, and then call it good. But if you did not consider the configuration of the site, you missed something.

**Site access.** Can the excavator's equipment get into the backyard without damaging the driveway, destroying trees, or ripping down the electrical service? Is there room for the machine to maneuver once it gets there? Can dump trucks be backed into the yard without crushing the septic system or getting so close to the foundation that they collapse the basement wall? The site conditions may require you to use smaller equipment, protect parts of the yard, or shuttle excavated soil out to the street before loading it into trucks.

All of these possible complications point to additional expenses that will be yours to bear if you don't account for them in the original estimate. It's also important to qualify your bid to exclude things you can't see or could not reasonably be expected to anticipate. You may want to put various qualifications in the contract, such as a requirement providing for reasonable access to the site and a disclaimer of liability for damage to tree-root systems, buried sprinkler lines, and the like.

**Storage space.** Assuming you can get the digging machine into the yard and the excess dirt out, is there room to stockpile material for use as backfill when the foundation is completed? If not, you'd better include money for importing



Dan Drabek

material, which at \$10 to \$15 per cubic yard can quickly add up to several thousand dollars on a big addition. Plus you've got to pay to haul off the material you originally planned to use for backfill.

## Concrete

The access issues described above apply to concrete as well. If you can't get the trucks into the backyard, have you accounted for the man-hours required to wheelbarrow the mud from the street? If there's a lot of concrete and the pour is far enough from the street, you may want to rent a pump. In this area, a concrete pump rents for \$600 to \$800 per day, but that's a bargain compared with the labor cost of moving it by hand (not to mention that the workers who haul it will be shot for the rest of the day).

**Wasted material.** If you don't use a pump, be sure to factor in additional concrete, because some of it is going to get spilled on the way to the foundation or splattered down the side of the trench when the wheelbarrows get dumped.

Once the concrete is placed, the truck driver will want to wash out the chute. If the part of the yard near the street is landscaped, you may be hard-pressed to provide a washout area. It's illegal to wash this stuff down the storm drain, so you'll need to come up with some other way to dispose of it. The same goes for concrete pumps — there's often a fair amount of material left in the hose.

**Rounding quantities.** When calculating concrete quantities, keep your numbers in cubic footage, then round up to the next highest cubic yard by phase. If you round each individual section of footing to cubic yards, you may end up buying more concrete than you need. Of course, that's better than estimating low and having to pay a "short load" charge when you come up half a yard short.

## The art of estimating involves looking at a set of prints and recognizing the intangibles.

### Tie-ins to Existing

Whether it's siding, roofing, or even hardwood floors, quantifying just the "new" areas of material will leave you far short in material and labor. Any of these materials will need to be stripped back cleanly into the existing to ensure that new and old match. The labor to remove clapboards or hardwood flooring to touch the new and old together, and then reassemble it all so the transition isn't noticeable, can easily cost more than the installation labor for the entire new area. With flooring, you may have to sand and refinish half the hardwood floors in the house to get to a clean breaking point.

**Explaining a higher price.** Since carrying this extra work will bump up your bid, you need to tell the customer what you are including and why: "Mr. and Mrs. Jones, the other contractors you're talking to may plan to paint only the new siding. My bid includes repainting the entire side of your house, because otherwise the siding's not going to match. There are some other items like this in my bid as well. So, if my price is higher, it may be because I plan to do more than the bare minimum in order to provide you with a proper job."

**Breaking down the process.** Tie-ins usually eat up time and material. If you're opening up an existing structure, you'll have to consider the need for shoring and temporary walls. This may

require painstakingly selective demo and a lot of shimming to get everything to blend. To plan for this, break the process down into individual steps, assigning labor and materials to each, and then total the whole thing. The number will probably seem high, but odds are you'll need every penny of it.

### Carpet and Tile

One issue regarding flooring has to do with what size pieces the material comes in. If you need to carpet a 12-foot-by-12-foot room, you can price 16 square yards of carpet and install a single 12-foot-by-12-foot piece. If, however, the room measures 13 feet by 13 feet (mathematically 18.8 square yards), there will probably have to be a seam, because most carpet comes in 12-foot widths.

Assuming you can turn the carpet 90 degrees for seaming, you could buy a 15-foot length and use the offcuts to piece on an extra foot of width. But since some carpet has a direction to it, you might have to order a second 12-foot-by-13-foot piece to get the missing 1-foot-by-13-foot strip. The total could be as much as 35 square yards, which even at \$20 per square yard adds \$340 to your material costs.

Of course, you can always buy 15-foot-wide carpet (available only in certain lines, and at a higher cost), or hope that the flooring installer will cut you a break and use the leftover carpet for a remnant.

The same principle applies to tile flooring. If the room is 10 feet square and the tile is 12 inches square, you'd simply order 100 square feet of tile, plus a few extra pieces in case some break. If, however, the room is 10'-2" x 10'-2", you've got to order a minimum of 10 square feet of additional tile (assuming you can get two cuts from each tile). This is not a big

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deal with \$3-per-square-foot ceramic tile, but it is if you are buying \$22-per-square-foot travertine.

### Protecting Existing Surfaces

One item I rarely see on contractors' estimates is a cost for protecting existing surfaces. The added expense of covering floors with Masonite and plastic sheeting may seem high — but not if you compare it with the price of having to refinish the hardwood. As many of you know, getting drywall dust out of the cracks between hardwood floorboards isn't fun, and it's a job that can easily be avoided.

I have a category in my estimates called General Requirements, which

covers such items as scaffolding, rental equipment, trash cans, brooms, and all the other stuff every job seems to require. There are a number of items in that section for protection — plastic, Masonite, tarps, walk-off pads, self-adhesive carpet protection, and so on. To compile the estimate for these items, I plan access routes through the house and across the site, and identify any items that require special protection.

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## Caution Before Cloning

by Melanie Hodgdon

Hire  
somebody  
who will  
complement  
your skills,  
not duplicate  
them.

If your business is like most construction and remodeling companies, it started out small and is growing in response to demand. The first place you will add employees is probably in the field, since your field people actually make you money, whereas office staff is all overhead. But at a certain point, you will realize you need to consider adding office staff.

In the meantime, you yourself most likely serve as office manager, project manager, estimator, carpenter, customer-service rep, bookkeeper, and salesman. As a business grows, it retains those same tasks (though on a larger scale) and adds new ones, such as overseeing a more complex benefits program or launching a marketing effort.

Nobody can do all of this — but it takes some people longer than others to recognize or admit that. You must decide which functions you will continue to perform and which you will delegate to a new hire.

I have observed that there's a strong tendency to believe that the best hire you could make would be a clone of yourself. After all, somebody possessing all your skills could pinch-hit where necessary, would require little training, and would double your own effectiveness. Right?

Wrong.

### Complement Yourself

Your clone will possess all your strengths and all your weaknesses. If you are great at sales but stink at paperwork, why on earth would you hire somebody else who is great at sales and stinks at paperwork? Salespeople (forgive the generality) are usually outgoing, gregarious, creative, daring, and assertive. Good bookkeepers, on the other hand, usually aren't.

You may find while interviewing that you are drawn to people like yourself. This is natural. However, keep in mind that you want to choose people who will be effective employees in the role for which they were hired, not necessarily somebody you want to kick back with on the weekend.

So think hard about what tasks your new hire will be asked to perform, and take into account the applicants' personality traits, stated task preferences, and demonstrated skills. Don't assume that you have to hang on to running payroll because it's so loathsome you couldn't possibly delegate it to anybody else. Out there is somebody who would jump at the chance to do payroll, or filing, or any of those other things you're not suited for — or that you're overqualified for.

In short, it's a matter of focusing on the needs of the business, and hiring somebody who will complement — rather than duplicate — your own skills.

### Document the Procedures

One word of warning: Before you assign to another person a task you've been doing, you must go through the process of identifying and then documenting what, exactly, it is that you do. Otherwise, the recipient is doomed to disappoint you. Documented procedures allow you to fast-track the training of a new person and can become part of a comprehensive procedural manual that covers all aspects of the company. This adds value to your business, which will no longer be dependent on you for things to happen.

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