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***“Construction Prices on the Rise  
Why and How it Effects Your Project”***

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It's Summer 2004, and if you think gasoline prices are the only prices out of control, take a look at recent increases in construction costs. Both have witnessed increases in excess of thirty percent in recent months. And the rising construction prices are not just because of energy costs. There have not been such dramatic, overnight price increases in the construction industry in over twenty-five years. Many Departments, who just last year budgeted more than enough funds to build this year, are now finding themselves having to scale back their plans. If you have intentions to build or renovate in the near future, take a moment to consider what is happening and what you can do about it. Much of the data discussed herein is found in a document entitled, “*AIArchitect*”, a publication of the American Institute of Architects.

Our firm receives construction bids on multiple projects each month, most of which are fire or other public safety facilities. For several years, overall construction prices have risen annually at around three percent. For the last couple of years, due to a slumping economy, construction prices have even been somewhat stagnant. The thirty-percent increase in construction prices has predominantly occurred since Fall of 2003. We all understand that the industry has always experienced price spikes in limited portions of construction due to some sort of material or labor force issue. But current increases are almost unprecedented.

What's causing all this price escalation? There are far too many factors to discuss in this short article. So we will concentrate on a few of the major culprits.

Without doubt, the single largest price increase is due to the current state of the world-wide steel market. The last 20 years of actions taken, or not taken, by the steel industry had resulted in plummeting steel prices due to an oversupply. This drove a full generation of steel producers from the U.S. to Australia, to slow production. Now, only a fraction of the U.S steel producers are still in business. The mining of iron ore and other steel-producing elements also slowed or stopped over the last 20 years. The construction industry got accustomed to an oversupply of steel and the resulting low prices.

Then came the China explosion. No, that's not an accident at a fireworks factory. China's economy has rocketed upward in the last few years, growing 7 to 9 percent

annually. Many believe that Chinese leaders are capitalizing on the 2008 Olympics as a chance to reestablish their nation as a world power. With a booming economy comes a booming construction environment. China has gone from being a net exporter of steel and cement to a net importer. While China produces 30 percent of the world's steel, they are currently consuming 35 percent. To put China's ambitious construction plans in perspective, they will be building the equivalent of 10 cities the size of Columbus, Ohio, over the next five years. Because of supply demands in China, most of the *scrap* metal in the U.S. is even being shipped to China. I guess we're winning at least one battle of the export wars.

Another major factor in rising construction prices is the high fuel expenses. There are skyrocketing costs of moving bulk materials from mines to mills to consumers. Almost every construction material has to be transported to the site using fossil fuels. Also, many materials, such as roofing and asphalt, include petroleum products in them. If you are like me, you're crying every time you put gas in your car. Now the price trickle-down to construction becomes painfully obvious.

For decades, the U.S. took for granted a relative materials surplus and, therefore, became dependent on imports to fill their needs. However, the capacity for bulk shipping is about three years behind demand. Therefore, overseas shipping prices have doubled in a year. There is currently a three-year backlog in ship building. In a Catch-22 twist, shipyards are having trouble getting the steel to build new ships because there aren't enough ships to supply them the raw material.

This means that, even if you can get the materials you need for construction, you will pay top dollar for them and will likely wait much longer than normal for delivery of custom items. The steel situation affects more portions of normal construction than you might think. Beams, columns, reinforcing steel, metal studs, doors, window, duct, wiring and equipment are just a few items that are being adversely affected. Previously, material suppliers would quote prices good for 60 days, many now are quoting good prices for only 48 hours. Many projects already contracted at lower prices are experiencing substantial delays due to shortage induced delivery delays.

What can we expect of the construction industry over the next few years? Many experts are afraid to guess about the next few months, much less the next few years. But let's consider what those "in the know" are saying. In a teleconference sponsored recently by the National Association for Business Economics, steel industry representatives suggested that the sellers' market hit its apex in April and the price would stabilize by mid-summer. It will likely take material suppliers at least three years to catch up to projected demand. So don't expect lowering prices anytime soon.

If U.S. based materials production stagnates and world demand increases, all materials are likely to rise drastically in cost. It would take suppliers years to catch up. Since China doesn't have an "Alan Greenspan" to slow economic growth, and because Chinese decision making is so secretive, economists are generally perplexed about how to predict what will happen next. China's economy is growing so rapidly that there is some fear of

a collapse, which would mean a sudden, dramatic drop in material prices. That would probably be bad news, since it could bring with it a worldwide economic slump. A more positive option is that the Chinese would slow their growth in the coming months. Even if China does slow down, India, with 1.2 billion people, could be the next sleeping giant ready to gobble up the industry's resources.

What can you do to avoid the greatest adverse impact to a construction project during this expensive climate? Here are a few ideas that may help:

1. Consider a scope change in what you need to build now. If portions of your facility are to accommodate future growth, design the building so that those portions can be easily built additions in the future. Maybe you can “shell-in” portions of the building and “upfit” them at a later date.
2. Investigate whether a construction type change can fit your needs and program. Steel, masonry, wood, pre-cast concrete, pre-engineered metal, etc. all have their advantages and limitations. Knowing which of these construction types will fit your program needs and budget is critical.
3. Set realistic construction budgets. Projecting construction costs several months early has never been more difficult than today. Protect yourself by using high cost estimates. Very few people will be upset with you when the project comes in *under* budget. I'm sure you can find something productive to do with the extra money, if any is left over.
4. Continually educate those that will provide your building funds. Whether it is a City Council, Town or County Manager, Department Board, etc., you should regularly update them on current construction environments. Each time your designer provides an updated estimate make sure to pass the information along. Give them articles that describe the issue. Don't let the decision makers get to bid day without knowing what to expect.
5. Consider delaying your construction bids. There is no promise that prices will ever be lower than today. However, some Departments are hoping that at least the unknowns and volatility of today's bidding climate will be better controlled a few months from now.
6. Finally, design wisely. Make sure you and the rest of your design team know how to maximize your program needs in the minimum space. Every wasted square foot will cost you more money today than it did last month. It is more important than ever to select designers who know the ins-and-outs of your building type.

Don't let the current construction climate stifle your plans. Just proceed wisely and informed.