Impact of Deteriorating Margins on the Design Construction Industry

Executive Summary
On January 10, 2012, the Alliance for Construction Excellence (ACE) brought together eleven thought-leaders from the U.S. design construction industry in an intense all-day Think Tank to address the question: *What is the anticipated long-term impact of deteriorating margins on the U.S. design construction industry?* The purpose of the forum was to explore the industry’s current structural changes and identify the extent and impact of diminishing margins. The participants considered intensifying international competition, influence of the global economy, effect of publicly traded foreign companies, industry consolidation, and the resulting impact on union influence. The deliberation of these national thought leaders resulted in five focus areas and specific recommendations for government and industry.

Focus Areas
The design construction industry needs to communicate more effectively the fact that the sustained construction market down cycle has dramatically decreased available design and construction opportunities resulting in intensely increased competition and drastically reduced margins, thus weakening the entire U.S. design construction industry. The balance of power has shifted to a buyer’s market, thus radically reducing the selling price of design and construction services to the extent that many construction projects are not generating profits and, in some cases, producing losses. This shift has significantly weakened the once robust design construction industry—a significant portion of U.S. GDP. Educating government, owners, and industry professionals is the single most important factor in the recovery of the design construction industry and consequently the U.S. economy. The five critical ideas identified during the Think Tank are:

1. A healthy design construction industry is critical to the strength of the U.S. in terms of defense preparedness, tax revenue, and employment. Directly or indirectly, the industry has historically supplied 10% of the total US employment; and economic recovery will be difficult without ensuring the rebound of the construction market.

2. Intensifying domestic and international competition resulting in decreased margins makes the industry less attractive, particularly to small and independently owned enterprises and has the potential to reduce industry capacity, thus further weakening U.S. economic potential, increasing unemployment, and retarding U.S. economic recovery.
3. There has been a significant rise in the influence in the U.S. design construction industry by foreign companies doing business in the U.S. and buying U.S. enterprises, resulting in a formerly exclusively domestic industry becoming a source of revenue to foreign-owned enterprises. This trend may encourage vertical integration, favored by some larger global design and construction enterprises, thereby reducing opportunities for small and independently owned businesses. In this global economy, the U.S. design construction industry is not responding effectively. Additionally, the balance of trade is not reciprocal as foreign companies have a greater influence in the U.S. industry, both by doing business here and by purchasing our companies, than U.S. companies typically do abroad.

4. Industry consolidation will potentially reduce capacity, raise design and construction costs, and make the U.S. industry less competitive. The design component has already consolidated and the construction component has been consolidating for a number of years. The current market downturn will accelerate the process. As the industry becomes less attractive, succession options are reduced and diminished margins make it difficult to cover the costs of being in business. If current funding and regulations do not change, the failure rate in the construction industry will continue at a dire pace. As more firms move into liquidation or outright failure, enormous pressure is added to the already strained supply chain. With the consolidation loss of capacity that has already taken place, one firm’s failure has a ripple effect causing additional consolidation or liquidation, thus negatively affecting an already sluggish economy.

5. Union influence decreased during prior market downturns in spite of the unions’ advantages of skills training and portable welfare pension accessibility. This trend is likely to continue during this protracted downturn. As a result, the skills training and portable benefits will need to be addressed by other methods.

**Recommendations**

**Federal Government—Department of Commerce, the Administration, and Congress:** must understand the criticality of a healthy and prepared design construction industry to the defense of our nation, economic recovery, full employment, and sustained tax revenue. The federal government, as the largest buyer of design and construction services, has an enormous influence on the design construction industry. Think Tank Participants believe there are several areas in which the Department of Commerce, the Administration, and Congress can accelerate the recovery of the design and construction market at no cost to the government by streamlining regulations and rules and by simplifying the permitting process. Increases in public construction are usually followed by private investment in capital improvement and, with over a trillion dollars of private money sitting on the sidelines, improvements in Federal spending will be magnified by private investment. The Think Tank Participants recommend:

- a. The Federal Department of Commerce immediately appoint a Secretary of Construction, similar to the successful UK model, using recommendations from the design construction industry.
- b. The Federal Government assure that all currently funded federal projects are immediately reviewed for excessive regulations and permitting restrictions to accelerate their start or advance their progress.
- c. Congress review and pass delayed construction-related legislation and increase construction spending to stimulate the economy and employment.
- d. The Administration and Congress ensure existing and new federal design and construction funding legislation or regulations do not restrict the use of collaborative contracting methods, such as Construction Manager at Risk (also known as CMAR, CM/GC, ECI), Design Build (utilizing
qualifications based selection or best value selection), or Integrated Project Delivery. The use of these types of collaborative project delivery methods will accelerate the start of construction and quickly increase employment.

e. The Administration and Congress conduct a comprehensive review of regulations and tax laws concerning international enterprises entering the U.S. design and construction market and determine whether U.S. design and construction firms have the same opportunities to work in the home countries of these competitors to assure a balanced competitive market.

**State and Local Governments:** State and local governing bodies have a similar influence on construction funding and spending in their jurisdictions as the Federal government has on Federal capital improvement projects. The Think Tank Participants recommend:

a. An immediate review of all projects under state or local control for unnecessary regulations and permitting restrictions to accelerate their start or advance their progress.

b. State and local governments review and pass pending or delayed construction-related legislation and increase construction spending to stimulate the economy and employment.

c. Ensure existing and new construction funding legislation or regulations do not restrict the use of collaborative contracting methods (as identified above) in order to accelerate the start of construction and employment.

**Design and Construction Professionals:** Design and construction professionals have a responsibility to educate government and the general public about the importance of a healthy and prepared construction industry to our national defense, economic recovery, full employment, and sustained tax revenue. The Think Tank Participants recommend:

a. Design and construction professionals take a leadership role in their trade and professional associations in recognizing and announcing the importance of a robust design construction industry to our nation’s future.

b. Industry professionals should encourage buyers of design and construction services to understand that delays in construction starts or the progress of projects adversely impacts an industry critical to our nation’s economy.

c. Research and data collection at design and construction programs across America’s universities should be encouraged and should focus on documenting the significant role the design construction industry plays in the strength of the U.S.

**Design and Construction Associations:** Trade and professional associations can have significant influence and should take the lead in recognizing and announcing the importance of a robust design construction industry to our nation’s future. The Think Tank Participants recommend:

a. Associations educate their membership and constituencies about the significant role a robust design construction industry plays in securing the nation’s future.

b. Associations encourage and support research on the impact of deteriorating margins and industry consolidation on the design construction industry.

c. Industry associations should be valuable sources of data for researchers studying construction industry issues.
Design and Construction Schools: Design and construction schools across the country have an obligation to conduct research on the important issues raised in this report. Additionally, these schools enjoy a neutral platform from which to communicate to all levels of government and the general public the significant role the design construction industry plays in our nation. They also have the ability to influence owners, designers and constructors on these issues. The Think Tank Participants recommend:

a. Academic departments develop research efforts into the impact deteriorating margins are having on the design construction industry and potential long-term ramifications.
b. Universities develop and offer multi-disciplinary classes focusing on the importance of the design construction industry to our nation.
c. Universities and extension services develop and offer continuing education programs to design and construction professionals as well as project owners emphasizing the significance of the industry to the nation.
d. Design and construction programs provide research and data collection on the issues raised in this report, author white papers and publish research findings to assist in educating government and the general public about the significance of the design construction industry to our nation.
e. Create a central knowledge-base by selecting a university(s) to collect and collate the data and lessons learned in a central location and providing access to all interested parties.
f. All academic design and construction programs cooperate in the development of a peer reviewed publication for papers and articles concerning the issues raised in this report.

Think Tank Meeting Detail

Hypothesis: The unprecedented market cycle has caused deteriorating margins that are slowing growth, profitability, strength, and preparedness of the design construction industry. The balance of power has shifted to a buyer’s market in which owners have the ability to drive contracting methods and influence the level of competition. When the design construction industry is expanding, the market provides the opportunity for practitioners to positively influence and shape the industry. In the prior growing market, the industry saw advances in progressive delivery methods, balancing risk, and industry composition—all factors that strengthened the industry and the U.S. economy. In the current slower market, the industry has lost momentum which has the potential to slow and reverse advances, improvements, and preparedness.

Deliberation and Findings: Gary Aller, Director of ACE, welcomed participants to the fourth in the series of Think Tanks. Dr Schleifer lead initial discussions resulting in participants verifying that margins have in fact been impacted across the country by intense competition. The group brainstormed and dissected the issues and discussed the ramifications; speculating on future direction. Participants had the advantage of national and international experience in diverse areas of the design, construction, owner, and surety perspectives and a wealth of experience ensuring an understanding of prior market cycles. Participants concluded decreased margins are affecting all areas of the industry. Furthermore, while larger projects with sophisticated owners has seen slightly lower affects, the affects to mid-size and smaller enterprises has been dramatic and devastating. Tom Schleifer, ACE Research Professor, reiterated the purpose of the Think Tank and directed the discussion to the initial question.

Conclusion: The Think Tank accomplished its objective of testing the impact of deteriorating margins and identifying areas that may be affected by the persistent depressed construction market. The issues
were well defined and the need for continued owner education in the areas under discussion verified. It is imperative that the significance of the design construction industry to our nation be more widely understood if the industry is to continue to evolve efficiently. Participants were emphatic that government and general public education is critical and that the design construction industry needs to communicate the importance of a robust industry to our nation’s wellbeing more effectively. It is the industry’s responsibility to assure that government and the general public understand that defense, tax revenue, employment, and economic recovery rely heavily on a robust design construction industry, particularly in a down market.

Report Circulation: To have the most impact, recipients of this report are asked to circulate this as widely as possible; particularly to the groups for which specific recommendations have been made. For example, please send this with a personal note to the local and national management of all professional and trade associations you belong to.

January 10, 2012, Design Construction Industry Think Tank Participants:

- **Terry Lukow**, Executive Vice President, Retired, Travelers Bond & Financial Products
- **Phil Bernstein**, Vice President – Industry Strategy & Relations, Autodesk
- **David Crawford**, President & CEO, Sundt Construction
- **Peter Bopp**, Engineering Manager, Retired, DuPont
- **Ted Haig**, General Manager and Sr. Financial Executive, Retired, Intel
- **Carole Bionda**, Corporate VP, Nova Group Inc.
- **Barbara Wagner**, Sr. Vice President, Clark Construction Group
- **Michael Landry**, Managing Director, Engineering, FMI Capital Advisors, Inc.
- **Glenn Kmecz**, Global Practice Leader, Capital Effectiveness & Contracting, DuPont Sustainable Solutions
- **Gary Aller** – Director, ACE/ASU
- **Tom Schleifer** – Research Professor, ACE/ASU

For Further Information Contact:
Thomas C Schleifer, Ph.D., ACE Research Professor
Phone: 480-945-7680 or email: thomas.schleifer@asu.edu