What works to avoid disputes on design-build projects is what works to avoid disputes on traditional projects - a fair allocation of risk, reasonable interpretation of the contract, a clear scope of work, acknowledgement of responsibility, acceptance of change and good faith cooperation between the parties. The design-build method of project delivery is not a panacea for the perceived ills of the construction marketplace, nor is it a substitute for adequate design and sound construction management. The design-build method is simply an alternative manner of providing the owner with a high quality project, on time and within budget. Design-build projects are successful where the project participants are willing to commit the necessary time and resources to project definition, definitization and actualization. The owner and design-builder need to work together as a team in order to maximize the probability of success, although each will approach the project from its own perspective.

The owner and design-builder must clearly communicate their respective expectations, and create contract documents that accurately reflect the responsibilities and risks of each party.

I. The Owner's Viewpoint: Design-Build - Guaranteed Success?

To the owner, there is no better method of project delivery than design-build. Since the design-builder is responsible for both design problems and construction defects, the owner can avoid the traditional trailer battles between its design professional and its contractor. Free at last of the dreaded Spearin doctrine and its implied warranty of fitness of the plans and specifications, the owner can sit back and enjoy a voyeur's perspective on its project as it moves from design through construction to completion. Finally, a method of designing and constructing a project that permits the owner to avoid the three dreaded plagues of projects -- changes, claims and litigation.

The design-build method is so enticing that the dollar volume of design-build projects has nearly tripled in the last five years. An increasing number of public and private owners have elected to go design-build because it allows for the fast-tracking of projects without the risk of cost and time impacts due to defective or untimely completion of design elements. Design-build works! Sometimes.

Design-build works when the owner knows what the desired end product is and adequately communicates that information to the design-builder. The single most important aspect of a successful design-build project is the
preparation of the scope of work for the project. The owner must adequately define the project. If a comparable project can be identified, the owner should specify this in the scope of work in order to give the design-builder a better idea of the owner's project definition. Although this description is too general for construction, it allows the design-builder to obtain an understanding of the nature of the project.

If the owner does not have the in-house capability or consulting professionals, the required clarity of scope may be lacking. The owner must have pre-established and definitive design criteria identifying the project requirements before the project can evolve towards design and construction. Adequate project definition at this stage represents the best opportunity for the owner to protect itself on the project. If the owner is going to obtain competitive proposals on the design-build project, it must establish a clear program of requirements and performance specifications. This is commonly done through a Request for Proposals ("RFP"). Guidelines should be established which allow an apples-to-apples comparison of the proposals received. The RFP should set out the scope of work and the criteria to be used for selection of the design-builder. It helps both the owner and design-builder if the RFP includes: the size and character of the project; the technical scope of work; budget and financial considerations; schedule requirements; requirements and timing for establishing the price; provisions for value engineering and alternates; performance standards and guarantees; quality control/quality assurance requirements; operations, maintenance and life cycle considerations; requirements in the areas of liability, warranty, licensing and bonding; clarification of the consequences of non-performance or late delivery; and clear guidelines for selection of the successful proposer.

Inadequate or erroneous information in the RFP is one of the more common sources of disputes. Thoroughness in the preparation of the RFP allows the owner to define the project and to develop overall priorities in terms of spatial and system requirements, cost, design excellence, size, construction quality, schedule and life cycle costs. The more specifically the scope of work and priorities are set out in the RFP, the better the completed project. The evaluation criteria should be clearly set out in the RFP. If the evaluation criteria are weighted or are set up in priority order, make sure the proposal is structured to emphasize the owner's priority items. Make sure a clear scope of work is provided to the design-builder.

**Design-Build Project Checklist for Owners**

- Exculpatory language and risk-shifting clauses are potentially helpful to the owner. However, the best way for an owner to protect itself on the design-build project is through complete and precise project definition. Develop that definition with input from design professionals, construction professionals, operational personnel, maintenance personnel, tenants and users.
- If there are no statutory restraints, prequalify the potential design-
builders and develop a short list of the most qualified teams. Establish clear guidelines for selecting the design-builder and adhere to those guidelines.

- Structure the RFP so that the proposers can understand the project definition including all important elements of the project.
- Include the contract documents in the RFP. Inform the proposers that selection will be based on qualifications, technical quality of proposal and responsiveness to invitation (including proposed contract documents).
- Tailor the contract documents to the particular project. Each project is unique and this should be recognized during contract formation. Do not use any standard form contract without modification.
- There is no justifiable reason for the design professional to disclaim its professional responsibility to the owner on a design-build project, yet AIA A191 purports to extinguish any professional obligation of the designer to the owner. Modify this standard form language to specifically provide that the owner is an intended third-party beneficiary of all contracts for design or engineering services, all subcontracts, purchase orders and other agreements between the design-builder and third parties.
- Limit the owner's obligations under the contract. Modify the contract, if practical, to require that the design-builder obtain all permits, conduct all geotechnical testing and perform any environmental assessments. If the owner retains responsibility for the site conditions, the old problems, extra costs and delays caused by inaccurate information can again plague the design-build project. The design-builder is supposed to be the single point of responsibility. Therefore any responsibilities, aside from payment, that remain with the owner tend to vitiate the desired one-stop shopping.
- Require adherence to the contract timetable, including milestones established by the owner. Eliminate any standard form language inconsistent with the design-builder's obligation to complete in strict accordance with the contract requirements.
- Structure the payment terms so that the owner is given an adequate time to verify, process and fund any application for payment. Establish the procedures that will be used for payment and allow for any anticipated slippage in payment due to lender, grantor or third-party involvement. Also, specify the rate of interest that will be charged for any late payments.
- Set out the owner's termination rights, specifically establishing the owner's right to terminate the design-builder for default or at the owner's election. Limit the owner's liability in the circumstances of a termination even if a default termination is later determined to have been improper.
- Require the design-builder to include all its costs within the guaranteed maximum price or lump sum price. Eliminate separate reimbursable items, contingencies or allowances that are not included within the contract price.
• Design-build projects are scope driven. Tailor exculpatory language to the particular project. Include a no damage for delay clause for general application, but also specifically tie anticipated delays to any remaining owner responsibilities. Similarly, clearly establish the design-builder's obligation for the performance of equipment, process and components. Require the design-builder to verify the appropriateness of any equipment, process or component to achieve the desired performance criteria.

• Do not allow the design-builder's proposal to become a contract document unless it contains no qualifications, no exceptions, no ambiguities, no exclusions, no limitations and no language contrary to the contract documents. Instead, set out the specific scope of work, i.e., technical specifications, drawings by drawing number and date and other pertinent equipment, material, component and finishes information. Too often the proposal and killer contract documents which have so lovingly been created will be contradictory or create ambiguities in the owner's desired contractual scheme.

• Require the design-builder to provide all insurance including payment and performance bonds and a design professional project policy with an extended discovery period. The advantage of the project policy is that it reserves coverage for that particular project, so that coverage will not be reduced by other claims or be subject to cancellation when the project is completed.

• Set out a procedure for any change orders on the project. Establish a strict timetable for notice to the owner and require contemporaneous submission of cost and time impact documentation. Control the change order process with procedures that are actually implemented.

• Do not allow the design-builder to limit its liability, disclaim guarantees or warranties or otherwise vitiate its responsibility as the single source responsible party. If anything, the design-builder's responsibility (and liability) should be greater than the sum of the contractor's construction responsibility and the designer's design responsibility.

• Do not meddle with the design after the guaranteed maximum price is established unless absolutely necessary. After the guaranteed maximum price is established, any modification of the design puts the owner at risk in terms of cost and time to complete.

• Do not allow the owner's program consultant, staff personnel or users to alter or modify the scope of work. To the extent the program consultant requires any change in quantity, quality, means, methods, techniques, sequences or procedures, the owner is potentially liable.

• Do not provide any equipment, materials or components. If the owner does, then to the extent late deliveries are experienced, the single source responsibility of the design-builder is lost and potential exposure to changes, claims and litigation returns.

• Once the owner has the design-builder indeed performing as the single source responsible entity, the owner should provide some incentive to the design-builder. Shared savings with 25% going to the design-builder and/or bonuses for early completion should be considered. That way
owners can demonstrate that they're being fair, not just owner(ous).

II. The Design-Builder's Perspective: Is the Level of Risk Acceptable?

The "master builder" is again becoming prominent on the construction scene. An increasing number of owners, both public and private, are turning to the design-build method of project delivery in order to fast-track the project and reduce overall project costs. Although the traditional checks and balances that come with using a separate designer and builder are sacrificed to some extent, the design-build method provides the owner with a single point of responsibility for project design and construction. In addition, the owner is relieved from responsibility for the potential delays and costs associated with design errors and omissions. To this extent, the method protects the owner, but where does it leave the design-builder?

The design-builder is liable for both design problems and construction defects. The design-builder warrants the adequacy of the design and agrees that the finished project will meet certain performance specifications. At first glance, this level of risk would seem unacceptable to most contractors and design professionals, but through careful project selection and definition, contract formation, and project control the risks can be minimized and managed.

Obviously, projects must be selected that are within the expertise of the design-builder. There are specialized design-build firms as well as contractors and design firms owned by the same companies that work as a team on design-build projects. However, a contractor without design capabilities should not automatically shy away from design-build opportunities. Design-builders take a variety of forms and often the design professional part of the organization is a subcontractor or joint venture partner of the contractor. Similarly, the design professional can retain the contractor as a subcontractor or both the design professional and the contractor can act as subcontractors to the construction manager.

Regardless of the form chosen by the design-builder, the single most important step in the project is arriving at a mutually understood and agreed definition of the project with the owner. Once the project definition, parameters and requirements are established, the contract documents must be prepared consistent with the mutual expectations of the owner and the design-builder. The design-builder can then limit its risk with contract clauses limiting or fixing damages to a specific amount, say the amount of the design-builder's fee, or excluding certain types of damages like lost revenues, consequential damages, etc. In addition, a contingency fee can be used as a component of the guaranteed maximum price to be used to absorb unanticipated cost growth. Cost overruns or savings can be addressed in such a way that all parties have an incentive to ensure cost effective results.

If the design-builder is composed of different design and construction entities, it is important that the respective roles, responsibilities and liabilities are clearly established. Oftentimes, a breakdown of the design-builder costs and
fees between designer and contractor will be necessary for licensing and insurance purposes. The design professionals will want to limit their risk to the design portion of the work, where they can obtain errors and omissions insurance. Likewise, the contractor will need to restrict its exposure to completion of the project in accordance with the design so it can obtain any necessary performance bonds. Finally, design-build team members may wish to provide for cross-indemnification of each other for any claims arising out of other team members' work.

Careful contract formation with anticipation of the possible areas of exposure allows contractors or design professionals to again assume the role of master builder. An understanding of what design-build is, how it works and how the various parties can protect their interests can result in more, and hopefully more profitable opportunities.

Every proposed project should be methodically reviewed in order to assess the proposed possible risk. Issues to be addressed by the design-builder include:

a. Selection of the owner  
b. Project definition and performance expectations  
c. Qualifications and experience of team members  
d. Contractual relationship of team members  
e. Licensing concerns  
f. Insurance and bonding  
g. Responding to the RFP  
h. Innovativeness of the proposal  
i. Flexibility of contract with owner  
j. Design review  
k. Handling of tenant or user input  
l. Scheduling  
m. Trade contractors  
n. Cost control  
o. Quality control  
p. Changes to the contract  
q. Differing site conditions  
r. Contingencies  
s. Allowances  
t. Shared savings  
u. Responsibility for cost overruns  
v. Design errors and omissions  
w. Construction defects  
x. Limitations of liability  
y. Delay damages  
z. Preventing and resolving disputes

The design-builder and owner should review the understanding of the other party as to each element of risk. Only then can a contract be crafted that represents the agreement of the parties. The perfect contract is the contract
that captures the essence of the understanding of each party and allows the project to be executed without surprises.